



JIPPEL

NYU Journal of Intellectual Property
& Entertainment Law

ARTICLES

Immoral or Scandalous Marks:
An Empirical Analysis *Barton Beebe and Jeanne C. Fromer*

What Remains of Fair Use For Software
After *Oracle v. Google* *Simon J. Frankel and Ethan Forrest*

I “Think,” Therefore I Create:
Claiming Copyright in the Outputs of Algorithms *Samantha Fink Hedrick*

NOTES

Speaking About Politics, a Fireable Offense? The Legality of
Employee Speech Restrictions in the Entertainment Industry *Chloe L. Kaufman*

Trademark Law in the Virtual Realism Landscape *James Yang*

NEW YORK UNIVERSITY
JOURNAL OF INTELLECTUAL PROPERTY
& ENTERTAINMENT LAW

VOLUME 8

NUMBER 2

CONTENTS

Preface..... v

ARTICLES

Immoral or Scandalous Marks: An Empirical Analysis 169
Barton Beebe and Jeanne C. Fromer

What Remains of Fair Use For Software After *Oracle v. Google*..... 310
Simon J. Frankel and Ethan Forrest

I “Think,” Therefore I Create: Claiming Copyright in the Outputs of Algorithms 324
Samantha Fink Hedrick

NOTES

Speaking About Politics, a Fireable Offense? The Legality of Employee Speech
Restrictions in the Entertainment Industry 376
Chloe L. Kaufman

Trademark Law in the Virtual Realism Landscape 409
James Yang



Statement of Purpose

Consistent with its unique development, The New York University Journal of Intellectual Property & Entertainment Law (JIPEL) is a nonpartisan periodical specializing in the analysis of timely and cutting-edge topics in the world of intellectual property and entertainment law. As NYU's first online-only journal, JIPEL also provides an opportunity for discourse through comments from all of its readers. There are no subscriptions, or subscription fees; in keeping with the open-access and free discourse goals of the students responsible for JIPEL's existence, the content is available for free to anyone interested in intellectual property and entertainment law.

The *New York University Journal of Intellectual Property & Entertainment Law* is published two times per year at the New York University School of Law, 139 MacDougal Street, New York, New York, 10012. In keeping with the Journal's open access and free discourse goals subscriptions are free of charge and can be accessed via www.jipel.law.nyu.edu. Inquiries may be made via telephone (212-998-6101) or electronic mail (law.jipel@gmail.com).

The Journal invites authors to submit pieces for publication consideration. Footnotes and citations should follow the rules set forth in the latest edition of *The Bluebook A Uniform System of Citation*. All pieces submitted become the property of the Journal. We review submissions through ExpressO Bepress (<http://law.bepress.com/expresso/>) and through electronic mail (submissions.jipel@gmail.com).

All works copyright © 2019 by the author, except when otherwise expressly indicated. For permission to reprint a piece or any portion thereof, please contact the journal in writing. Except as otherwise provided, the author of each work in this issue has granted permission for copies of that article to be made for classroom use, provided that (1) copies are distributed to students free of cost, (2) the author and the Journal are identified on each copy, and (3) proper notice of copyright is affixed to each copy.

A nonpartisan periodical, the Journal is committed to presenting diverse views on intellectual property and entertainment law. Accordingly, the opinions and affiliations of the authors presented herein do not necessarily reflect those of the Journal members.

The Journal is also available on WESTLAW, LEXIS-NEXIS and HeinOnline.

NEW YORK UNIVERSITY
JOURNAL OF INTELLECTUAL PROPERTY &
ENTERTAINMENT LAW

VOL. 8 BOARD OF EDITORS – ACADEMIC YEAR 2018-2019

Editor-In-Chief

PHILIP SIMON

Senior Articles Editor

MADELINE BYRD

Managing Editors

ALEXANDER KOSTER

BRETTE TROST

Senior Editors

RACHEL BROOKE

JARED GREENFIELD

NICHOLAS LO

ERIC LOVERRO

Senior Notes Editor

JAMES YANG

Executive Editor

DANIEL EMOFF

Senior Web Editor

MICHAEL DeSTEFANO

Staff Editors

ENOCH AJAYI

FLORE BRUNETTI

GABRIEL B. FERRANTE

PAIGE GEIER

STEPHEN GRAY

SHAINA HOURIZADEH

HANA MONICA HUTABARAT

ZHIKUN JIANG

JOSH KIM

KENNETH KIM

SARAH SUE LANDAU

KATHRYN LEICHT

YANG LI

DANIEL LIFTON

SAMUEL LIM

TALIN MARKARIAN

JAMES MERESMAN

ELINA MILSHEIN

ROBERT MINN

PEDRAAM MIRZANIAN

AIDAN MURRAY

DANIEL PAXTON

CALEIGH PERELMAN

JOSHUA PERKINS

ENID QIN

MAGGIE A. REINFELD

GERALD O SHALAM

MICHELLE SHAMOULIAN

ALEC SHAPIRO

MARYAM SOFIA SONBOLI

CHRISTINE SONG

OREN STEVENS

WHITNEY THOMPSON

NICHOLAS G VINCENT

JACKIE ZACHARIADIS

YUNING ZHOU

LAURA ZHU

Faculty Advisors

AMY ADLER

BARTON BEEBE

PREFACE

This spring, *JIPeL* is proud to present our readers with five cutting edge pieces. From ongoing litigation challenging our intellectual property laws, to cutting edge technology doing the same, our Spring Edition covers both the forefront of the law and the forefront of human innovation challenging. In what follows, you will find a pieces that combine scrupulous legal reasoning with insightful forward-minded reasoning.

First, Professor Barton Beebe and Professor Jeanne Fromer provide compelling arguments for holding the prohibition on immoral or scandalous remarks unconstitutional. Among their most powerful is an argument that is borne out of an empirical study they conducted on all word marks between 2003 and 2015 to assess the way the United States Patent and Trademark Office was applying the ban. Their study shows that the ban is applied in an arbitrary manner, and they identify numerous examples of word marks rejected as immoral or scandalous for one applicant yet allowed for another. The reader is advised to approach this article with caution, as the authors include the word marks uncensored to demonstrate their argument.

Next, Attorneys Simon J. Frankel and Ethan Forrest provide a practitioner's review of the Federal Circuit's decision in *Oracle v. Google* in March 2018. Their Article marches through the four statutory factors for fair use to meticulously demonstrate how the Federal Circuit departed from prior treatment of software under the doctrine. In doing so, they point out that if other courts adopt the Federal Circuit's reasoning, it will be nearly impossible for any use of software to qualify as fair use.

Remaining in the world of high-tech, Samantha Fink Hedrick turns the reader's head towards cutting edge technology and asks how the rise of artificial intelligence will impact copyright law. In particular, she asks whether the use of AI presents a barrier to humans claiming copyright in the outputs and emphatically concludes it should not. Like a human using the preset mode on a camera, a human using AI remains in control of inputs and parameters under which an AI operates. That control is legally sufficient to give rise to a copyright claim.

In our fourth piece this spring, Chloe L. Kaufman takes a look at our freedom of speech in the context of the private employment sector. Through a number of palpable modern examples, she demonstrates how a private employer's unrestricted power to regulate speech disproportionately effects employees in the entertainment industry. Given the constant broadcast of our lives in the modern era, the private employer's power is a constant threat against entertainment employee's ability to speak and convey opinions. That threat cuts starkly against our democratic values.

Finally, James Yang turns the reader to the future in an imaginative piece about the way intellectual property laws will apply to the realms of virtual reality, augmented reality, and location based services. He argues that what laws do exist to analogize from (e.g., cases that considered open world video games) are not well suited to handle this new medium. While the virtual space of the past was firmly separated from reality and the core functions of intellectual property, the virtual space growing up around us is instead aimed at total integration and a blending of realities.

I hope the reader finds these pieces as compelling, thought provoking, and fun to read as they were to edit. As always, thank you for reading.

Sincerely,
Philip Simon

NEW YORK UNIVERSITY
JOURNAL OF INTELLECTUAL PROPERTY
AND ENTERTAINMENT LAW

VOLUME 8

SPRING 2019

NUMBER 2

IMMORAL OR SCANDALOUS MARKS: AN EMPIRICAL
ANALYSIS

BARTON BEEBE* AND JEANNE C. FROMER**

* John M. Desmarais Professor of Intellectual Property Law, New York University School of Law.

** Professor of Law, New York University School of Law. This article is based on an amicus brief we submitted to the U.S. Supreme Court in *Iancu v. Brunetti*, 139 S. Ct. 782 (Jan. 4, 2019) (No. 18-302). Thanks to Joshua Bone and William Jay for appropriately extensive comments on drafts of that brief, many of which have been incorporated into this article. For comments on the brief and this project, thanks also to Amy Adler, Rochelle Dreyfuss, Michael Frakes, Scott Hemphill, and Chris Sprigman, and to participants in workshops at the Duke University School of Law and the Engelberg Center on Innovation Law & Policy at NYU School of Law. Tim Keegan and Christina Wang provided excellent research assistance.

INTRODUCTION.....	170
I. THE LEAD-UP TO IANCU V. BRUNETTI.....	173
A. <i>Matal v. Tam</i>	173
B. <i>Iancu v. Brunetti</i>	175
II. DATASETS.....	177
III. DESCRIPTIVE STATISTICS.....	178
IV. THE PTO’S ARBITRARY APPLICATION OF SECTION 2(a).....	182
A. <i>Combined Section 2(a) and Section 2(d) Refusals</i>	182
B. <i>Applications That Overcame a Section 2(a) Immoral-or-Scandalous Refusal</i>	189
C. <i>Applications for Immoral or Scandalous Marks That Never Received a Section 2(a) Refusal</i>	193
V. VIEWPOINT DISCRIMINATION AT THE PTO UNDER SECTION 2(a).....	196
VI. FIT AND VAGUENESS UNDER THE FIRST AMENDMENT.....	197
A. <i>High Value Speech</i>	198
B. <i>Fit</i>	200
C. <i>Vagueness</i>	202
CONCLUSION.....	203
<i>Appendix 1: International Classification of Goods and Services</i>	204
<i>Appendix 2: Word-Mark Applications That Received Both a § 2(a) Refusal and a § 2(d) Refusal</i>	209
<i>Appendix 3: Trademark Applications That Overcame a § 2(a) Refusal</i>	223
<i>Appendix 4: Word-Mark Applications That Matched a Mark or Term Determined to Be Immoral or Scandalous that Received No Refusal</i>	235
<i>Appendix 5: Trademark Applications Consisting of Variations on FUCK CANCER That Received a Refusal</i>	308

INTRODUCTION

The Lanham Act sets forth which trademarks may be registered at the Patent and Trademark Office.¹ It contains a number of limitations on registrability. Section 2(a) prohibits among other things the registration of a mark that “[c]onsists of or comprises immoral, deceptive, or scandalous matter; or matter which may disparage or falsely suggest a connection with persons, living or dead, institutions, beliefs, or national symbols, or bring them into contempt, or disrepute.”² This provision originally came into force in 1946 with the enactment of the Lanham Act, but the

¹ See 15 U.S.C. § 1052 (2012).

² *Id.* § 1052(a).

prohibitions it sets forth have been in effect since the late nineteenth century, when the federal government first began to register trademarks.

Recently, these prohibitions have come under constitutional scrutiny. In the 2017 case of *Matal v. Tam*,³ involving Simon Tam's application for the registration of the term THE SLANTS for entertainment services in connection with an Asian-American dance-rock band, the Supreme Court ruled that § 2(a)'s prohibition on "matter which may disparage ... persons, living or dead, institutions, beliefs, or national symbols" was unconstitutional under the Free Speech Clause of the First Amendment.⁴ Currently before the Court in the case of *Iancu v. Brunetti*⁵ is the question of the constitutionality of the neighboring prohibition on the registration of "immoral ... or scandalous matter."⁶ Brunetti seeks registration of the term FUCT for use in connection with apparel.⁷

This Article reports the results of a systematic empirical study of how the United States Patent and Trademark Office (PTO) has applied the immoral-or-scandalous prohibition in practice. For reasons we explain below, we focus on the 3.6 million trademark registration applications filed at the PTO for marks that include text (which we refer to as "word-mark applications") from 2003 through 2015.⁸ The PTO refused to register 1,901 of these marks on the basis that they

³ 137 S. Ct. 1744 (2017).

⁴ *Id.* at 1765.

⁵ *In re Brunetti*, 877 F.3d 1330 (Fed. Cir. 2017), *cert. granted sub nom. Iancu v. Brunetti*, 139 S. Ct. 782 (Jan. 4, 2019) (No. 18-302).

⁶ The prohibition of "immoral ... or scandalous matter" has traditionally been applied as a unitary provision, so that neither the courts nor the PTO distinguish between marks that are "immoral" and those that are "scandalous." *See In re Brunetti*, 877 F.3d 1330, 1335-36 (Fed. Cir. 2017).

⁷ *See* U.S. Trademark Application No. 85/310,960 (filed May 3, 2011).

⁸ In previous work, Megan Carpenter and Mary Garner searched 40 terms on the PTO's Trademark Electronic Search System to develop a dataset of 232 trademark records filed between 2001 and 2011 that contained an immoral-or-scandalous refusal. Megan M. Carpenter & Mary Garner, *NSFW: An Empirical Study of Scandalous Trademarks*, 33 *CARDOZO ARTS & ENT. L.J.* 321, 332, 334 (2015). Their study focused in detail on the reasoning that PTO examiners used as the basis for their immoral-or-scandalous refusals. *Id.* at 334-64. They also reported "some measure of inconsistency" in the PTO's treatment of a set of words they studied closely: BITCH, POTHEAD, SHIT, SLUT, and WHORE. *Id.* at 359-62. On the whole, our results are consistent with Carpenter and Garner's results. In other work, Anne Gilson LaLonde and Jerome Gilson studied a dataset of forty-one applications to register marks that include the term MILF. Anne Gilson LaLonde & Jerome Gilson, *Trademarks Laid Bare: Marks That May Be Scandalous or*

consisted of immoral-or-scandalous matter, though 140 applications eventually overcame that refusal and 91 proceeded to registration. We show that the PTO applies the immoral-or-scandalous prohibition in an arbitrary and viewpoint-discriminatory matter. Specifically, we show that the PTO routinely refuses registration of applied-for marks on the ground that they are immoral or scandalous under § 2(a) and confusingly similar with an already registered mark under § 2(d). In other words, the PTO routinely states that it cannot register a mark because the mark is immoral or scandalous and in any case because it has already allowed someone else to register the mark on similar goods. Furthermore, the PTO arbitrarily allows some applied-for marks to overcome an immoral-or-scandalous refusal while maintaining that refusal against other similar marks. The PTO also often declines even to issue immoral-or-scandalous refusals to applied-for marks that are closely similar to other marks to which it has issued such refusals. Finally, the PTO uses the § 2(a) immoral-or-scandalous bar to refuse registration of marks whose viewpoint on such practices as drug-taking it finds objectionable.

On the basis of these empirical findings, we conclude that the § 2(a) bar on the registration of immoral-or-scandalous matter violates the Free Speech Clause and is unconstitutional. As a preliminary matter, many of the marks subject to an immoral-or-scandalous refusal are instances of high-value speech. Section 2(a)'s immoral-or-scandalous-marks provision fails to satisfy even the "intermediate scrutiny" applied to commercial speech under *Central Hudson Gas & Electric Corp. v. Public Service Commission of New York*⁹ because it is not narrowly drawn and is arbitrarily applied. Furthermore, the provision is unconstitutionally vague and has been applied in a viewpoint-discriminatory manner.

Part I provides background on *Tam* and *Brunetti*. Part II describes the datasets we used for our study. Part III presents various descriptive statistics. Part IV shows from a number of perspectives the degree to which the PTO's application of the immoral-or-scandalous bar is arbitrary. Part V focuses on how the PTO has engaged in viewpoint discrimination in applying the immoral-or-scandalous bar. Part VI analyzes the implications of our findings under the First Amendment. In conclusion, we briefly raise some thoughts about the use of big data in litigation to show inconsistent application of laws.

Immoral, 101 TRADEMARK REP. 1476, 1478 (2011). They too find inconsistencies in the PTO's treatment of the term. *See id.* at 1478 (reporting that twenty of the applications containing MILF that they studied received an immoral-or-scandalous refusal, while twenty did not, and concluding that "[c]learly, the USPTO cannot make up its mind").

⁹ 447 U.S. 557 (1980).

Before we proceed, we note (and caution the reader) that many of the trademark applications we discuss contain offensive language. But we think including them, unfiltered, is necessary to report the specifics of these applications to properly convey just how arbitrary and viewpoint-discriminatory the PTO's enforcement of the immoral-or-scandalous bar has been.

I

THE LEAD-UP TO *IANCU V. BRUNETTI*

A. Matal v. Tam

In November 2011, Simon Tam, the founder, bassist, and frontman of The Slants, applied to register the mark THE SLANTS on the Principal Register in connection with “[e]ntertainment in the nature of live performances by a musical band.”¹⁰ The PTO refused registration on the ground that the term was disparaging of Asian persons.¹¹ On appeal to the U.S. Court of Appeals for the Federal Circuit, Tam explained that he “select[ed] the name ‘The Slants’ to ‘reclaim’ and ‘take ownership’ of Asian stereotypes. The band draws inspiration for its lyrics from childhood slurs and mocking nursery rhymes, and its albums include ‘The Yellow Album’ and ‘Slanted Eyes, Slanted Hearts.’”¹² He argued, among other things, that the § 2(a) prohibition on “matter which may disparage” violated the Free Speech Clause.¹³ Reasoning that it was bound by precedent, the Federal Circuit initially rejected his constitutional challenge.¹⁴ Judge Kimberly Moore joined the opinion but added a lengthy opinion of her own under the heading “additional views,” in which she urged the Federal Circuit to reconsider its precedent on the issue.¹⁵ In a subsequent en banc decision, the Federal Circuit adopted Judge Moore’s reasoning and found the § 2(a) disparagement bar to be facially unconstitutional under the Free Speech Clause.¹⁶

The Supreme Court affirmed by an eight-member court, unanimously finding the provision to be unconstitutional.¹⁷ In a plurality opinion joined by Chief Justice

¹⁰ U.S. Trademark Application No. 85/472,044 (filed Nov. 14, 2011).

¹¹ *See In re Tam*, 108 U.S.P.Q.2d 1305, 2013 WL 5498164 (BNA) (T.T.A.B. 2013).

¹² *In re Tam*, 785 F.3d 567, 575 (Fed. Cir. 2015).

¹³ *Id.* at 569.

¹⁴ *Id.* at 572 (“We here follow our precedent.”).

¹⁵ *Id.* at 572 (Moore, J., stating additional views).

¹⁶ *In re Tam*, 808 F.3d 1321, 1358 (Fed. Cir. 2015) (en banc), *as corrected* (Feb. 11, 2016).

¹⁷ *Matal v. Tam*, 137 S. Ct. 1744 (2017).

Roberts, Justice Thomas, and Justice Breyer, Justice Alito found that “the disparagement clause” of § 2(a) failed to satisfy even intermediate scrutiny under *Central Hudson*.¹⁸ This determination allowed him to avoid the question of whether trademarks, as commercial speech, should be subject to either intermediate or strict scrutiny.¹⁹ Justice Alito focused on *Central Hudson*’s requirement that a restriction of speech be “narrowly drawn.” He explained:

[T]he disparagement clause is not “narrowly drawn” to drive out trademarks that support invidious discrimination. The clause reaches any trademark that disparages *any person, group, or institution*. It applies to trademarks like the following: “Down with racists,” “Down with sexists,” “Down with homophobes.” It is not an anti-discrimination clause; it is a happy-talk clause. In this way, it goes much further than is necessary to serve the interest asserted.²⁰

Justice Alito further expressed a concern that

[t]he commercial market is well stocked with merchandise that disparages prominent figures and groups, and the line between commercial and non-commercial speech is not always clear. If affixing the commercial label permits the suppression of any speech that may lead to political or social “volatility,” free speech would be endangered.²¹

However, Justice Alito did not elaborate on the contours of this concern.

In a concurring opinion joined by Justice Ginsburg, Justice Sotomayor, and Justice Kagan, Justice Kennedy found that § 2(a) constituted viewpoint discrimination and failed strict scrutiny.²² Justice Kennedy explained: “[A]n applicant may register a positive or benign mark but not a derogatory one. The law thus reflects the Government’s disapproval of a subset of messages it finds offensive.

¹⁸ *Central Hudson Gas & Elec. Corp. v. Public Serv. Comm’n of N.Y.*, 447 U.S. 557 (1980).

¹⁹ *Tam*, 137 S. Ct. at 1764 (plurality opinion).

²⁰ *Id.* at 1764–65.

²¹ *Id.*

²² *Id.* at 1765 (Kennedy, J., concurring in part and concurring in judgment). Indeed, Justice Kennedy’s concurrence suggested that this is essentially what Justice Alito’s opinion for the Court held: “As the Court is correct to hold, § 1052(a) constitutes viewpoint discrimination—a form of speech suppression so potent that it must be subject to rigorous constitutional scrutiny.”

This is the essence of viewpoint discrimination.”²³ As for the commercial speech issue, “[t]o the extent trademarks qualify as commercial speech, they are an example of why that category does not serve as a blanket exemption from the First Amendment’s requirement of viewpoint neutrality.”²⁴

Justice Thomas wrote a separate concurrence to register his view that strict scrutiny should be applied “whether or not the speech in question may be characterized as ‘commercial.’”²⁵

B. Iancu v. Brunetti

Erik Brunetti founded the clothing line “fuct” in 1990.²⁶ In May 2011, two individuals applied to register the mark FUCT in connection with apparel on the PTO’s Principal Register. They subsequently assigned the application to Brunetti. The PTO refused registration on the ground that the mark consisted of “immoral . . . or scandalous matter” under § 2(a).²⁷ The examining attorney and Trademark Trial and Appeal Board applied the standard test to determine if an applied-for mark is immoral or scandalous.²⁸ This test “asks whether a substantial composite of the general public would find the mark scandalous, defined as shocking to the sense of truth, decency, or propriety; disgraceful; offensive; disreputable; . . . giving offense to the conscience or moral feelings; . . . or calling out for condemnation.”²⁹

On appeal, the Federal Circuit found in favor of Brunetti.³⁰ Writing six months after the Supreme Court decided *Tam*, Judge Moore ruled that the PTO had not erred in concluding that FUCT is immoral or scandalous but found that the immoral-or-scandalous prohibition violated the Free Speech Clause. Specifically, she held that the prohibition targeted the expressive content of applied-for marks, constituted content-based discrimination, and did not satisfy strict scrutiny.³¹ She further held that the immoral-or-scandalous bar failed to pass even intermediate

²³ *Id.* at 1766.

²⁴ *Id.* at 1750.

²⁵ *Id.* at 1769 (Thomas, J., concurring in part and concurring in judgment) (quoting *Lorillard Tobacco Co. v. Reilly*, 533 U.S. 525, 572 (2001)).

²⁶ *In re Brunetti*, 877 F.3d 1330, 1337 (Fed. Cir. 2017).

²⁷ *Id.*

²⁸ *Id.* at 1336.

²⁹ *Id.* at 1336 (citations omitted).

³⁰ *Id.* at 1357.

³¹ *Id.* at 1335.

scrutiny under *Central Hudson*.³² The *Central Hudson* analysis of the constitutionality of governmental restrictions on commercial speech has four prongs:

At the outset, we must determine whether the expression is protected by the First Amendment. For commercial speech to come within that provision, it at least must concern lawful activity and not be misleading. Next, we ask whether the asserted governmental interest is substantial. If both inquiries yield positive answers, we must determine whether the regulation directly advances the governmental interest asserted, and whether it is not more extensive than is necessary to serve that interest.³³

With respect to the second prong of the *Central Hudson* test, she found that the government's interest in protecting citizens from profanities was not "substantial."³⁴ With respect to the third prong, she found that the immoral-or-scandalous bar did not directly advance this interest because firms can still use applied-for marks in commerce even if their application is refused.³⁵ Finally, and we think most importantly, Judge Moore also found that the § 2(a) immoral-or-scandalous prohibition failed the fourth prong of the *Central Hudson* test ("whether [the provision at issue] is not more extensive than is necessary to serve that interest"³⁶). She explained:

[N]o matter the government's interest, it cannot meet the fourth prong of *Central Hudson*. The PTO's inconsistent application of the immoral or scandalous provision creates 'an uncertainty that undermines the likelihood that the provision has been carefully tailored.' Nearly identical marks have been approved by one examining attorney and rejected as scandalous or immoral by another. . . . Although the language in these marks is offensive, we cannot discern any pattern indicating when the incorporation of an offensive term into a mark will serve as a bar to registration and when it will not.³⁷

³² *Id.*

³³ *Central Hudson Gas & Elec. Corp. v. Public Serv. Comm'n of N.Y.*, 447 U.S. 557, 566 (1980).

³⁴ *Brunetti*, 877 F.3d at 1350-53.

³⁵ *Id.* at 1353.

³⁶ *Central Hudson*, 447 U.S. at 566.

³⁷ *Brunetti*, 877 F.3d at 1353-54 (quoting *Reno v. Am. Civil Liberties Union*, 521 U.S. 844, 871 (1997)); *cf. Matal v. Tam*, 137 S. Ct. 1744, 1756-57 (2017) (acknowledging that that "the huge volume of [trademark] applications have produced a haphazard record of enforcement" of

II DATASETS

We used two datasets to analyze how the PTO has applied the § 2(a) immoral-or-scandalous prohibition. The first is the PTO's Trademark Case Files Dataset, which provides detailed information about all 7.3 million trademark applications for registration on the Principal Register filed from 1982 through 2017. This dataset includes data on applicant and mark characteristics, as well as applications' prosecution history.³⁸ Unfortunately, although the dataset indicates if the PTO refused registration of an application, the dataset does not indicate the PTO's grounds for its decision.

To establish on what basis the PTO refused registration, we used a second dataset of all office actions issued by the PTO from 2003—when the PTO first began to post its trademark office actions online—through 2017. We developed this dataset in connection with a previous study, and have since updated it.³⁹ This entailed systematically downloading some 3.1 million office actions from the PTO website. We then used keywords and key phrases to autocode the office actions for certain characteristics. Most relevant for our purposes here, we autocoded the office actions for whether the PTO refused registration on the basis that the applied-for mark was immoral or scandalous under § 2(a) or on the basis that the applied-for mark was confusingly similar to an already-registered mark under § 2(d) of the Lanham Act.⁴⁰

Because of the significant computational challenges presented by the analysis of trademark applications for marks consisting only of images, we restrict our analysis here only to word-mark applications. During the period studied, 97% of trademark applications submitted to the PTO were for marks that consisted in whole

the disparagement provision, and that “today, the principal register is replete with marks that many would regard as disparaging to racial and ethnic groups”). The Supreme Court has elsewhere made clear that when “[t]he operation of [a law] is so pierced by exemptions and inconsistencies . . . the Government cannot hope to exonerate it” under the fourth prong of *Central Hudson*. *Greater New Orleans Broadcasting Ass'n v. United States*, 527 U.S. 173, 190 (1999); *cf.* *Rubin v. Coors Brewing Co.*, 514 U.S. 476, 489 (1995) (“[E]xemptions and inconsistencies [in an alcohol labeling ban] bring into question the purpose of the labeling ban.”).

³⁸ U.S. PATENT & TRADEMARK OFFICE, TRADEMARK CASE FILES DATASET (2018), <https://www.uspto.gov/learning-and-resources/electronic-data-products/trademark-case-files-dataset-0>.

³⁹ See generally Barton Beebe & Jeanne Fromer, *Are We Running Out of Trademarks? An Empirical Study of Trademark Depletion and Congestion*, 131 HARV. L. REV. 945 (2018).

⁴⁰ 15 U.S.C. § 1052(d) (2012).

or part of text. Furthermore, even though we have data through 2017, we study the thirteen-year period from 2003 through 2015 because applications filed after that period may not been fully processed by the end of 2017.

III DESCRIPTIVE STATISTICS

As stated above, of the 3.6 million word-mark applications filed at the PTO for registration on the Principal Register from 2003 through 2015, 1,901 applications were issued refusals to register on the basis that the applied-for mark was immoral or scandalous. For context, Figure 1 shows the number of word-mark applications filed at the PTO by year from 2003 through 2015.

Figure 1:
Number of Word-Mark Applications filed at the
Patent and Trademark Office for Registration on the
Principal Register, 2003-2015

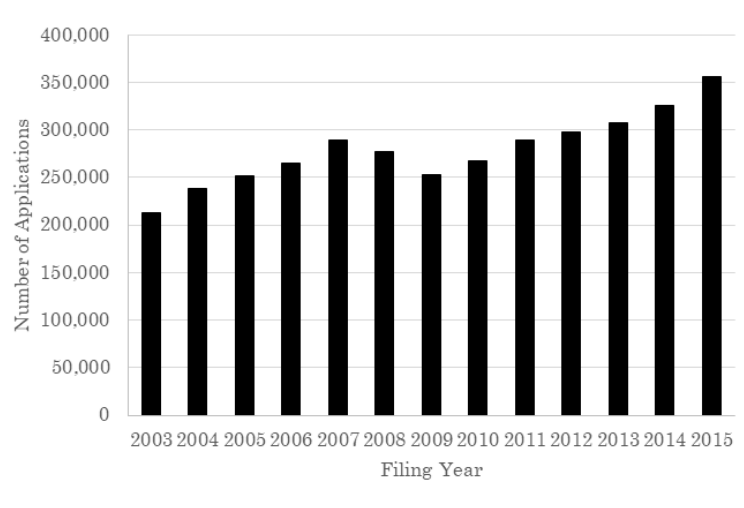


Figure 2 shows, by filing year, the number of word-mark applications that received a § 2(a) immoral-or-scandalous refusal⁴¹ and the number that overcame that refusal during the period studied.⁴²

⁴¹ An initial rough analysis of correlations between the frequency with which specific examiners issued an immoral-or-scandalous refusal and examiner characteristics, such as gender and seniority, shows no appreciable correlations. For example, for the period 2003 through 2015, we were able to estimate examiners' gender (based on first names) for 3,503,978 (or 96.5%) of the 3,631,515 word-mark applications filed. Female examiners evaluated 57.3% of these 3.5 million applications and issued 59.7% of the 1,854 immoral-or-scandalous refusals, $r=-0.001$, $n = 3,503,978$, $p = 0.038$.

⁴² The trademark registration process begins when the applicant files an application identifying, among other things, the mark for which the applicant seeks registration and the goods or services with which the applicant currently uses the mark or intends in the future to use the mark. The PTO then examines the application for compliance with formalities and to determine if there are any grounds for refusal to register the mark, such as that the mark is immoral or scandalous under § 2(a) or that the mark is confusingly-similar to an already-registered mark under § 2(d). If the PTO determines that the application complies with all formalities and that there are no grounds for refusal, the PTO then publishes the mark in the Trademark Official Gazette. At this stage, the PTO has essentially declared that as far as it is concerned, the mark is ready to be registered (though in rare instances, the PTO will sometimes issue a refusal even after the mark has published). Any party which believes it may be harmed by registration of the mark then has thirty days to oppose registration of the mark. With respect to applications based on the applicant's current use of the trademark, if no opposition is filed or if the mark is unsuccessfully opposed, the mark then proceeds to registration. With respect to applications based on the applicant's intent to use the mark, the applicant must then submit evidence that it is using the mark in commerce. Upon receipt of such evidence, the PTO then registers the mark. *See* U.S. PATENT & TRADEMARK OFFICE, TRADEMARK PROCESS, <https://www.uspto.gov/trademarks-getting-started/trademark-process#step1> (providing an overview of the trademark registration process); BARTON BEEBE, TRADEMARK LAW: AN OPEN-SOURCE CASEBOOK 269-73 (5th ed. 2018), <http://tmcasbook.org/wp-content/uploads/2018/07/BeebeTMLaw-5.0-Full-Book.pdf>.

Figure 2:
Number of Word-Mark Applications Receiving a § 2(a)
Immoral-or-Scandalous Refusal and Number of Such Applications
That Overcame That Refusal, by Filing Year, 2003-2015

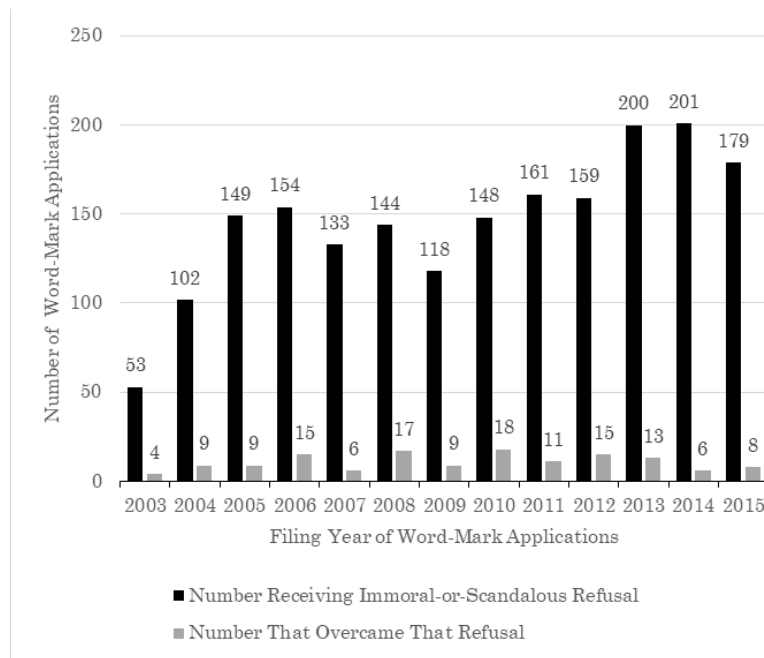


Figure 3 sets forth the international classes of goods or services claimed by all word-mark applications filed from 2003 through 2015 that received a § 2(a) immoral-or-scandalous refusal.⁴³ As Figure 3 indicates, a very large proportion of applications receiving a § 2(a) immoral-or-scandalous refusal claimed the applied-for mark for use in connection with apparel goods (Class 25). Entertainment services (Class 41) and printed matter (Class 16) also show significant levels of applications

⁴³ A trademark applicant must specify the goods and services in connection with which the applicant claims the exclusive right to use the mark. See 15 U.S.C. § 1051(a)(2) (2012). The applicant must do so in the form of a written description of the goods and services and also by reference to one or more of the forty-five categories of goods and services contained in the International Classification of Goods and Services for the Purposes of the Registration of Marks, otherwise known as the “Nice Classification” after the French city where it was established in 1957. U.S. PATENT & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, TRADEMARK MANUAL OF EXAMINING PROCEDURE § 1401.03 (Oct. 2018) [hereinafter TRADEMARK MANUAL OF EXAMINING PROCEDURE] (citing Requirements for a Complete Trademark or Service Mark Application, 37 C.F.R. § 2.32(a)(7) (2017)); see *Nice Classification*, WORLD INTELL. PROP. ORG. (2019), <http://www.wipo.int/classifications/nice/en/>; see also *List of Classes with Explanatory Notes*, WORLD INTELL. PROP. ORG., http://web2.wipo.int/classifications/nice/nclpub/en/ft/20170101/classheadings/?explanatory_note_s. Appendix 1 lists and labels the forty-five international classes.

receiving a § 2(a) immoral-or-scandalous refusal. Notably, each of these classes involve goods or services that are typically expressive in nature.

Figure 3:
International Classes Claimed by Word-Mark Applications Receiving a
§ 2(a) Immoral-or-Scandalous Refusal, Filing Years 2003-2015

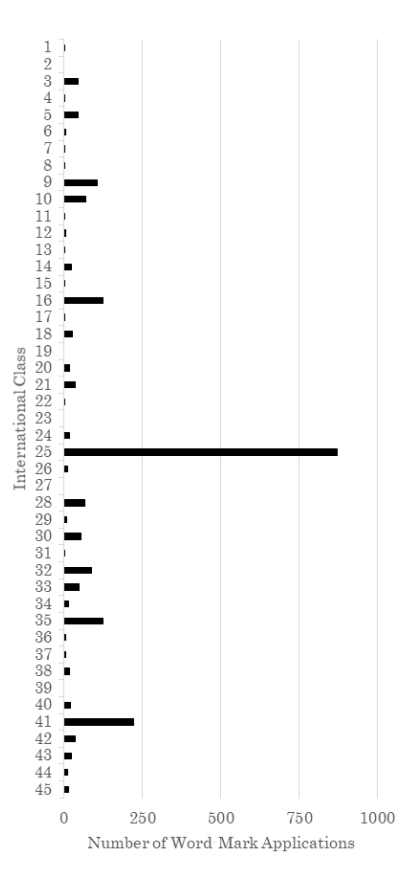
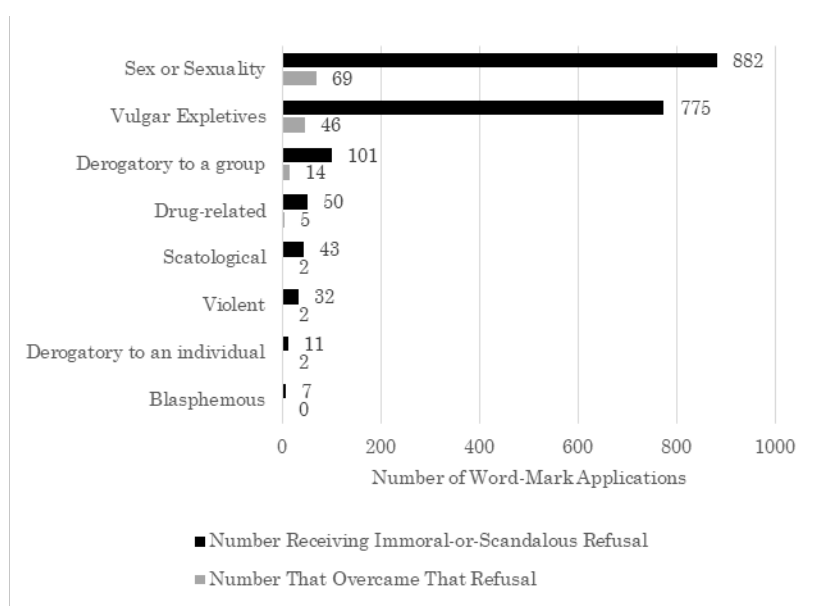


Figure 4 classifies all word-mark applications that received a § 2(a) immoral-or-scandalous refusal from 2003 through 2015 by the type of purported immorality or scandalousness that the applied-for mark primarily involved. In many instances, specific applications involved multiple forms of immorality or scandalousness. Figure 4 classifies each application into the one category of immorality or scandalousness that was most implicated by the applied-for mark. For example, this scheme classifies an application for PHAT FUK in connection with apparel (Class

25) as primarily a vulgar expletive;⁴⁴ an application for GOD IS GAY in connection with games and other articles (Class 28) as primarily blasphemous;⁴⁵ and an application for WHOREABUSE.COM in connection with online adult-entertainment services (Class 41) as primarily violent.⁴⁶ Admittedly, this classification scheme is sometimes highly subjective.

Figure 4:
Number of Word-Mark Applications Receiving a
§ 2(a) Immoral-or-Scandalous Refusal and
Number of Such Applications That Overcame That Refusal
by Type of Immorality or Scandalousness, Filing Years 2003-2015



IV

THE PTO'S ARBITRARY APPLICATION OF SECTION 2(a)

A. Combined Section 2(a) and Section 2(d) Refusals

We begin with what we believe is the strongest evidence that the PTO applies the immoral-or-scandalous prohibition arbitrarily and inconsistently. While § 2(a) prohibits the registration of a mark that “[c]onsists of or comprises immoral . . . or scandalous matter,” § 2(d) prohibits the registration of a mark that “[c]onsists of or

⁴⁴ See U.S. Trademark Application Serial No. 77/231,275 (filed July 17, 2007).

⁴⁵ See U.S. Trademark Application Serial No. 78/435,907 (filed June 16, 2004).

⁴⁶ See U.S. Trademark Application Serial No. 77/352,574 (filed Dec. 14, 2007).

comprises a mark which so resembles a mark registered in the Patent and Trademark Office . . . as to be likely, when used on or in connection with the goods of the applicant, to cause confusion, or to cause mistake, or to deceive.”⁴⁷ Remarkably, the PTO routinely issues refusals to the same application on the twin bases that the applied-for mark is immoral or scandalous under § 2(a) and that the applied-for mark is confusingly similar to an already-registered mark under § 2(d). In each of these cases, the PTO stated that the mark was immoral or scandalous and thus could not be registered—and that the PTO had already registered a highly similar mark on highly similar goods or services. By its own admission, therefore, the PTO is making a large number of inconsistent applications of the § 2(a) prohibition on the registration of immoral-or-scandalous marks—and often just a short time apart.⁴⁸

Consider some examples of applications for marks that are similar to Brunetti’s mark FUCT. In 2009, the PTO refused to register the mark FUK!T in connection with apparel (Class 25) and the operation of an internet website (Class 42) on the bases that the applied-for mark was immoral or scandalous under § 2(a) and confusingly similar under § 2(d) to the recently-registered mark PHUKIT for apparel (Class 25).⁴⁹ Similarly, on June 18, 2013, the PTO registered the mark PHUC for apparel (Class 25).⁵⁰ Four days before, on June 14, 2013, the PTO sent out an office action refusing to register the mark P.H.U.C. CANCER (PLEASE HELP US

⁴⁷ 15 U.S.C. § 1052(d) (2012).

⁴⁸ The examining attorney must provide all non-use-related grounds for refusal in the first office action. *See* TRADEMARK MANUAL OF EXAMINING PROCEDURE, *supra* note 43, § 704.01 (stating that “[t]he examining attorney’s first Office action must be complete, so the applicant will be advised of all requirements for amendment and all grounds for refusal,” but noting that use-related issues may be raised later in the application process). However, additional non-use-related grounds for refusal may be raised in subsequent office actions if failing to do so “would result in clear error,” though “[e]xamining attorneys should exercise great care to avoid these situations.” *Id.* § 706.

⁴⁹ U.S. Trademark Application Serial No. 77/818,033 (filed Sept. 1, 2009) sought the mark FUK!T for apparel. In the same office action letter dated December 7, 2009, the PTO refused registration on the twin grounds of immoral-or-scandalous content and was confusing similarity with the mark PHUKIT, U.S. Registration No. 2,934,721, namely for apparel, as registered on March 22, 2005. U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 86/533,866, OFFICE ACTION (May 26, 2015), <https://tsdr.uspto.gov/documentviewer?caseId=sn86533866&docId=OOA20150526204948#docIndex=1&page=1>.

⁵⁰ U.S. Trademark Application Serial No. 85/418,294 (filed on Sept. 8, 2011), sought mark PHUC for apparel (Class 25).

CURE CANCER) in connection with apparel (Class 25) on the bases that the mark was immoral or scandalous and confusingly similar to the about-to-be-registered mark PHUC for apparel. At no time during its registration process did the earlier-filed mark PHUC for apparel receive any immoral-or-scandalous refusal.⁵¹

The PTO has done this repeatedly—*i.e.*, given different treatment to the same (or nearly same) F-word variant, for use on the same kind of goods. For example, the PTO registered F U 2 for apparel, but barely two years later refused to register F.U. for apparel because it was both immoral and confusingly similar to the registered mark F U 2.⁵² Similarly, the PTO registered FVCK STREET WEAR for apparel, but then two years later refused to register FVCKD because it was both scandalous and confusingly similar to an already-registered mark.⁵³

⁵¹ U.S. Trademark Application Serial No. 85/855,531 (filed Feb. 20, 2013), sought the mark P.H.U.C. CANCER (PLEASE HELP US CURE CANCER) in connection with apparel (Class 25). Because the earlier-filed application had not yet been published and registered, the PTO's office action noted that this "mark[] in [a] prior-filed pending application[] may present a bar to registration of applicant's mark," and that "[i]f the mark[] in the referenced application[] register[s], applicant's mark may be refused registration . . . because of a likelihood of confusion between the marks." U.S. PAT. & TRADEMARK OFFICE, U.S. DEP'T OF COMMERCE, U.S. Trademark Application Serial No. 85/855,531, OFFICE ACTION (June 14, 2013), <http://tsdr.uspto.gov/documentviewer?caseId=sn85855531&docId=OOA20130614133853#docIndex=2&page=1>. The earlier-filed application received no immoral-or-scandalous refusal and was published on March 20, 2012, and registered on June 18, 2013 (U.S. Registration No. 4,354,653). The subsequent application for P.H.U.C. CANCER (PLEASE HELP US CURE CANCER) was abandoned after the PTO issued the office action refusing to register it.

⁵² U.S. Trademark Application Serial No. 86/533,866 (filed on Feb. 12, 2015) sought to register the mark F.U. in connection with apparel (Class 25). In an office action dated May 26, 2015, the PTO refused registration on the bases that the applied-for mark was immoral or scandalous and confusingly similar to the mark in U.S. Registration No. 4,254,831, namely F U 2 for apparel (Class 25), as registered on December 4, 2012. U.S. PAT. & TRADEMARK OFFICE, U.S. DEP'T OF COMMERCE, U.S. Trademark Application Serial No. 86/533,866, OFFICE ACTION (May 26, 2015), <https://tsdr.uspto.gov/documentviewer?caseId=sn86533866&docId=OOA20150526204948#docIndex=1&page=1>.

⁵³ U.S. Trademark Application Serial No. 86/808,278 (filed Nov. 3, 2015) sought to register the mark FVCKD in connection with apparel (Class 25). In an office action dated August 26, 2016, the PTO refused registration on the bases that the applied-for mark was immoral or scandalous and confusingly similar to the mark FVCK STREET WEAR, Registration No. 4,515,888, for apparel (Class 25), as registered on April 15, 2014. U.S. PAT. & TRADEMARK OFFICE, U.S. DEP'T OF COMMERCE, U.S. Trademark Application Serial No. 86/808,278, OFFICE ACTION (Aug. 26, 2016), <https://tsdr.uspto.gov/documentviewer?caseId=sn86808278&docId=OOA20160826155540#docIndex=1&page=1>.

There is a wide range of marks for which these twin refusals occur, well beyond those that are variations on Brunetti's applied-for mark. As illustration, the PTO has asserted in office actions that each of the following marks both contravenes the immoral-or-scandalous-marks provision and is confusingly similar to an already-registered mark:

- MILF SEEKER for online entertainment services, immoral or scandalous and confusingly similar to the recently-registered mark MILFHUNTER for online entertainment services;⁵⁴
- DS DIRTY SANCHEZ for apparel, immoral or scandalous and confusingly similar to the recently-registered mark DIRTY SANCHEZ for prerecorded video and entertainment services;⁵⁵
- HONKEY SOCAL for apparel, immoral or scandalous and confusingly similar to the recently-registered mark HONKEE for apparel;⁵⁶

⁵⁴ U.S. Trademark Application Serial No. 77/043,802 (filed Nov. 14, 2006) sought to register the mark MILF SEEKER in connection with online entertainment services (Class 41). In an office action dated March 19, 2007, the PTO refused registration on the bases that the applied-for mark was immoral or scandalous and confusingly similar to the mark MILFHUNTER, U.S. Registration 2,936,139, for online entertainment services (Class 41), as registered on March 29, 2005. U.S. PAT. & TRADEMARK OFFICE, U.S. DEP'T OF COMMERCE, U.S. Trademark Application Serial No. 77/043,802, OFFICE ACTION (Mar. 19, 2007), <https://tsdr.uspto.gov/documentviewer?caseId=sn77043802&docId=OOA20070319062059#docIndex=2&page=1>.

⁵⁵ U.S. Trademark Application Serial No. 78/495,056 (filed Oct. 5, 2004) sought to register the mark DS DIRTY SANCHEZ in connection with apparel (Class 25). In an office action dated May 9, 2005, the PTO refused registration on the bases that the applied-for mark was immoral or scandalous and confusingly similar to the mark DIRTY SANCHEZ, U.S. Registration 2,926,500, for prerecorded video (Class 9) and entertainment services (Class 41), as registered on February 15, 2005. U.S. PAT. & TRADEMARK OFFICE, U.S. DEP'T OF COMMERCE, U.S. Trademark Application Serial No. 78/495,056 OFFICE ACTION (Oct. 20, 2008), <https://tsdr.uspto.gov/documentviewer?caseId=sn78495056&docId=OOA20050509123704#docIndex=2&page=1>.

⁵⁶ U.S. Trademark Application Serial No. 77/133,487 (filed Mar. 16, 2007) sought to register the mark HONKEY SOCAL in connection with apparel (Class 25). In an office action dated June 29, 2007, the PTO refused registration on the bases that the applied-for mark was immoral or scandalous and confusingly-similar with the mark HONKEE, U.S. Registration 3,128,361, for apparel (Class 25), as registered on August 15, 2006. U.S. PAT. & TRADEMARK OFFICE, U.S. DEP'T OF COMMERCE, U.S. Trademark Application Serial No. 77/133,487, OFFICE ACTION (June. 29, 2007),

- MIDDLEFINGER for apparel, immoral or scandalous and confusingly similar to the recently-registered mark JONNY MIDDLEFINGER for bags and apparel;⁵⁷
- BANGBOAT for online adult-entertainment services, immoral or scandalous and confusingly similar to the recently-registered mark BANGBUS for online adult-entertainment services;⁵⁸
- FAT COCK BEER for beer, immoral or scandalous and confusingly similar to the recently-registered mark RED COCK BEER for beer;⁵⁹
- CAMEL TOES for apparel, immoral or scandalous and confusingly similar to the already-registered mark CAMEL TOES for apparel.⁶⁰

<https://tsdr.uspto.gov/documentviewer?caseId=sn77133487&docId=OOA20070629095618#docIndex=2&page=1>.

⁵⁷ U.S. Trademark Application Serial No. 78/863,232 (filed Apr. 17, 2006) sought to register the mark MIDDLEFINGER in connection with apparel (Class 25). In an office action dated September 25, 2006, the PTO refused registration on the bases that the applied-for mark was immoral or scandalous and confusingly-similar with the mark JONNY MIDDLEFINGER, U.S. Registration 2,381,895, for bags (Class 19) and apparel (Class 25), as registered on August 29, 2000. U.S. PAT. & TRADEMARK OFFICE, U.S. DEP'T OF COMMERCE, U.S. Trademark Application Serial No. 78/863,232, OFFICE ACTION (Sept. 25, 2006), <https://tsdr.uspto.gov/documentviewer?caseId=sn78863232&docId=OOA20060925201357#docIndex=1&page=1>.

⁵⁸ U.S. Trademark Application Serial No. 78/618,356 (filed Apr. 27, 2005) sought to register the mark BANGBOAT in connection with online adult-entertainment services (Class 42). In an office action dated December 2, 2005, the PTO refused registration on the bases that the applied-for mark was immoral or scandalous and confusingly-similar with the mark BANGBUS, U.S. Registration 2,810,145, for online adult-entertainment services (Class 41), as registered on February 3, 2004. U.S. PAT. & TRADEMARK OFFICE, U.S. DEP'T OF COMMERCE, U.S. Trademark Application Serial No. 78/618,356, OFFICE ACTION (Dec. 12, 2005), <https://tsdr.uspto.gov/documentviewer?caseId=sn78618356&docId=OOA20051202123340#docIndex=2&page=1>.

⁵⁹ U.S. Trademark Application Serial No. 85/253,332 (filed Feb. 28, 2011) sought to register the mark FAT COCK BEER in connection with beer (Class 32). In an office action dated July 5, 2011, the PTO refused registration on the bases that the applied-for mark was immoral or scandalous and confusingly similar to the mark RED COCK BEER U.S. Registration 3,793,133, for beer (Class 32), as registered on May 25, 2010. U.S. PAT. & TRADEMARK OFFICE, U.S. DEP'T OF COMMERCE, U.S. Trademark Application Serial No. 85/253,332, OFFICE ACTION (Jul. 5, 2011), <https://tsdr.uspto.gov/documentviewer?caseId=sn85253332&docId=OOA20110705185530#docIndex=13&page=1>.

⁶⁰ U.S. Trademark Application Serial No. 78/697,334 (filed Aug. 22, 2005) sought to register the mark CAMEL TOES in connection with apparel (Class 25). In an office action dated March 10, 2006, the PTO refused registration on the bases that the applied-for mark was immoral or

These twin refusals also occur with regard to marks containing non-English words. Consider the following examples, both in Spanish:

- PINCHE TAQUERIA (translated by the PTO in its § 2(a) refusal as “fucking taco stand”) for food services (Class 43), immoral or scandalous and confusingly similar to an application filed nine days earlier for PINCHES TACOS for food services (Class 43), which received no immoral-or-scandalous refusal and was subsequently registered;⁶¹
- UN CABRON POR MI PATRON (translated by the PTO in its § 2(a) refusal as “a prick or motherfucker for my boss”) for apparel, immoral or scandalous and confusingly similar to the recently-registered mark CABRON 49 for apparel.⁶²

scandalous and confusingly similar to the mark CAMEL TOES, U.S. Registration 1,872,570, for apparel (Class 25), as registered on January 10, 1995. U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 78/697,334, OFFICE ACTION (Mar. 10, 2006),

<https://tsdr.uspto.gov/documentviewer?caseId=sn78697334&docId=OOA20060310123000#docIndex=2&page=1>.

⁶¹ U.S. Trademark Application Serial No. 77/513,028 (filed on July 1, 2008) sought the mark PINCHES TACOS in connection with food services (Class 43). U.S. Trademark Application Serial No. 77/519,564 (filed July 10, 2008) sought the mark PINCHE TAQUERIA in connection with food services (Class 43). In an office action dated October 20, 2008, the PTO refused registration of the PINCHE TAQUERIA mark on the bases that it was immoral or scandalous and confusingly similar to the earlier-filed PINCHES TACOS mark. Because the earlier-filed application had not yet been published and registered, the PTO’s office action noted that “a potentially conflicting mark in a prior-filed pending application [the earlier-filed application] may present a bar to registration,” and that “[i]f the referenced application registers, registration may be refused in this case under Section 2(d).” U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 77/7519,564, OFFICE ACTION (Oct. 20, 2008), <http://tsdr.uspto.gov/documentviewer?caseId=sn77519564&docId=OOA20081020172830#docIndex=1&page=1>. The PINCHE TAQUERIA applicant then abandoned its application. PINCHES TACOS received no immoral-or-scandalous refusal and was published on November 25, 2008, and registered on February 10, 2009.

⁶² U.S. Trademark Application Serial No. 77/060,638 (filed Dec. 8, 2006) sought to register the mark UN CABRON POR MI PATRON in connection with apparel (Class 25). In an office action dated February 15, 2007, the PTO refused registration on the bases that the applied-for mark was immoral or scandalous and confusingly similar to the mark CABRON 49, U.S. Registration 3,202,335, for apparel (Class 25), as registered on January 23, 2007. U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 77/060,638, OFFICE

Appendix 2 sets forth, by filing year, all 114 trademark applications filed from 2003 through 2015 that were refused registration (and failed to publish) on the bases that the applied-for mark was immoral or scandalous under § 2(a) and confusingly similar under § 2(d) to a mark that the PTO had already registered or at least already approved for publication in the Official Gazette.⁶³ This appendix shows more comprehensively what these examples illustrate: that the PTO has acted inconsistently in issuing immoral-or-scandalous refusals to a wide range of words—from commonly used profanities like FUCK and its variations, to a slew of less widespread words—suggesting that the inconsistent treatment is broad and irremediable.

These inconsistencies cannot be explained away as merely the result of the marks at issue being used in different contexts.⁶⁴ This is precisely because in these

ACTION (Feb. 15, 2007),
<https://tsdr.uspto.gov/documentviewer?caseId=sn77060638&docId=OOA20070215130435#docIndex=5&page=1>.

⁶³ We do not include in this list trademark applications that received twin refusals for being immoral or scandalous and for being confusingly similar when the confusing similarity related to a different aspect of the mark than the one the PTO found immoral or scandalous. For example, with regard to the trademark application for ADIOS M.F. for alcoholic cocktail mixes (Class 33), *see* U.S. Trademark Application Serial No. 77/560,340 (filed Sept. 2, 2008), the PTO, on December 8, 2008, refused the application on the ground that the mark was immoral or scandalous for meaning “goodbye motherfucker,” and also that it was confusingly similar to registered mark ADIOS AMIGO, Trademark Registration No. 3,262,700, registered July 10, 2007, for mixed drinks (Class 33). U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 77/560,340, OFFICE ACTION (Dec. 8, 2008), <https://tsdr.uspto.gov/documentviewer?caseId=sn77560340&docId=OOA20081208152923#docIndex=5&page=1>. As another example, with regard to the trademark application for URBAN REKNEWAL THIS SH!T AINT GUNNA STOP for apparel (Class 25), *see* U.S. Trademark Application Serial No. 78/274,095 filed July 14, 2003), the PTO, on January 28, 2004, refused the application on the ground that the mark was immoral or scandalous for “contain[ing] the term ‘sh!t’ which purchasers would readily recognize as the term ‘shit,’” and also that it was confusingly similar with registered mark URBAN RENEWAL, Trademark Registration No. 2,412,456, registered Dec. 12, 2000, for apparel (Class 25). U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 78/274,095, OFFICE ACTION (Jan. 28, 2004), <https://tsdr.uspto.gov/documentviewer?caseId=sn78274095&docId=OOA20040128164634#docIndex=2&page=1>. In these instances, a twin refusal does not suggest inconsistency on the part of the PTO in application of the immoral-or-scandalous-marks provision.

⁶⁴ *See* Brief for Petitioner at 45-46, *Iancu v. Brunetti*, 139 S. Ct. 782 (Jan. 4, 2019) (No. 18-302) (arguing that the PTO treats similar marks differently because of differing “meaning in relation to the particular goods and services for which registration is sought” and “change[s] in attitudes] over time”).

situations of twin refusals, the PTO asserted that the applied-for mark was immoral or scandalous and contextually similar enough to the already-registered mark that consumer confusion would result.⁶⁵ Moreover, the PTO issued these twin refusals against applied-for marks whose application dates were close in time to the publication and registration dates of the earlier-filed marks that the PTO cited as the basis for its confusing similarity refusals under § 2(d). This indicates that changing attitudes cannot explain these inconsistencies.

B. Applications That Overcame a Section 2(a) Immoral-or-Scandalous Refusal

Sometimes the PTO refuses to register a mark as immoral or scandalous, but then backs down and allows the mark to be published and ultimately registered. A review of these registrations provides further evidence that the PTO is arbitrary and inconsistent in its administration of the immoral-or-scandalous marks provision.

As stated above, of the 1,901 word-mark applications filed from 2003 through 2015 that were refused registration as immoral or scandalous, 140 applications overcame that refusal and 91 proceeded to registration.⁶⁶ In many instances, the PTO appears to have arbitrarily accepted dubious reasoning in withdrawing its § 2(a) immoral-or-scandalous refusal—reasoning that the PTO has rejected in similar contexts.

For example, in 2013 the PTO refused to register the mark F'D UP for use in connection with apparel (Class 25) and skateboard parts (Class 28)⁶⁷ on the ground that it was immoral or scandalous, reasoning in an office action that “‘F’D UP’ is a common abbreviation for the obscene and vulgar phrase ‘fucked up.’”⁶⁸ The applicant responded: “We have defined the f’d up to represent fired up (get fired

⁶⁵ Specifically, in deciding to refuse the registration of an applied-for mark as confusingly similar to an already-registered mark, the PTO looks to “[t]he similarity or dissimilarity of the marks in their entireties as to appearance, sound, connotation and commercial impression” and “[t]he similarity or dissimilarity and nature of the goods or services as described in an application or registration or in connection with which a prior mark is in use.” *In re E.I. du Pont de Nemours & Co.*, 476 F.2d 1357, 1361 (C.C.P.A. 1973).

⁶⁶ *See supra* fig. 2.

⁶⁷ *See* U.S. Trademark Application Serial No. 85/762,896 (filed Oct. 24, 2012).

⁶⁸ *See* U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 85/762,896 OFFICE ACTION (Feb. 28, 2013), <http://tsdr.uspto.gov/documentviewer?caseId=sn85762896&docId=OOA20130228165144#docIndex=17&page=1>.

up)[, and] we are now using the words fired up with our advertising of f'd up products.”⁶⁹ Apparently accepting this representation as sufficient to resolve the matter, the PTO issued no further office actions, published the application on September 3, 2013, and registered it on March 11, 2014.⁷⁰

By contrast, in 2010 the PTO refused to register the mark EFFU for use in connection with apparel (Class 25)⁷¹ on the ground that it was immoral or scandalous, reasoning in an office action that “EFF U, . . . the phonetic equivalent of ‘Fu’ meaning ‘fuck you,’” is “scandalous, immoral, and offensive.”⁷² The applicant responded that EFFU was not necessarily vulgar and an “example of eff-u not being vulgar would be a television show called EFFIN science.”⁷³ The PTO maintained its refusal, stating that “EFFU, which is a direct vulgar insult meaning ‘go away’ or ‘go to hell,’ is distinguishable from the term EFFIN.”⁷⁴ The applicant subsequently abandoned its application.

In *Brunetti* itself, Brunetti similarly asserted to the PTO that FUCT is not necessarily vulgar. He argued in response to the PTO’s immoral-or-scandalous refusal that “[a]lthough FUCT is a made-up word, to the extent it has any meaning at all, it is FRIENDS U CAN’T TRUST.”⁷⁵ Indeed, Brunetti cited in support of this

⁶⁹ See U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 85/762,896, RESPONSE TO OFFICE ACTION OF FEB. 8, 2013 (June 10, 2013) (alteration in original), <http://tsdr.uspto.gov/documentviewer?caseId=sn85762896&docId=ROA20130610185140#docIndex=16&page=1>.

⁷⁰ F’D UP, Registration No. 4,495,813.

⁷¹ See U.S. Trademark Application Serial No. 77/959,391 (filed Mar. 15, 2010).

⁷² See U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 77/959,391, OFFICE ACTION (June 9, 2010), <http://tsdr.uspto.gov/documentviewer?caseId=sn77959391&docId=OOA20100609155823#docIndex=5&page=1>.

⁷³ See U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 77/959,391, RESPONSE TO OFFICE ACTION OF JUNE 9, 2010 (Nov. 7, 2010), <http://tsdr.uspto.gov/documentviewer?caseId=sn77959391&docId=OOA20100609#docIndex=3&page=1>.

⁷⁴ See U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 77/959,391, OFFICE ACTION (Nov. 22, 2010), <http://tsdr.uspto.gov/documentviewer?caseId=sn77959391&docId=OOA20100609155823#docIndex=2&page=1>.

⁷⁵ See U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 85/310,960, RESPONSE TO OFFICE ACTION OF JULY 3, 2012 (Jan. 2, 2013) (internal quotations omitted),

definition the same source, urbandictionary.com, that the PTO itself cites. But unlike the applicant for the mark F'D UP, Brunetti drew an examiner who was unwilling to accept reasoning of this nature.⁷⁶

Another example: in 2007, the PTO refused to register the mark MILF NEXT DOOR for use in connection with adult-oriented internet audiovisual entertainment (Class 41),⁷⁷ explaining that “the acronym MILF means MOTHER I’D LIKE TO F**K.”⁷⁸ In response, the applicant explained, *inter alia*, that “MILF is a title of distinction—a badge of honor—a triumph of the mature woman over a society that fetishizes youth and deems age to be akin to rot. Against this onslaught, this forty-something woman proudly bears the title, and no less importantly craves to retain it.”⁷⁹ The PTO initially maintained its decision and issued a final immoral-or-scandalous refusal.⁸⁰ But six months later, it inexplicably withdrew that refusal⁸¹ and published the mark for opposition on August 5, 2008. The mark was registered on October 21, 2008.⁸²

<http://tsdr.uspto.gov/documentviewer?caseId=sn85310960&docId=ROA20111221192649#docIndex=6&page=1>.

⁷⁶ See Carpenter & Garner, *supra* note 8, at 348-54 (discussing the kinds of arguments that applicants made in an effort to overcome an immoral-or-scandalous refusal).

⁷⁷ See U.S. Trademark Application No. 77/064,757 (filed Dec. 14, 2006).

⁷⁸ See U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 77/064,757, OFFICE ACTION (Apr. 9, 2007), <http://tsdr.uspto.gov/documentviewer?caseId=sn77064757&docId=OOA20070409153925#docIndex=24&page=1>.

⁷⁹ See U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 77/064,757, RESPONSE TO OFFICE ACTION OF JUL. 27, 2007, at 1 (Oct. 9, 2007),

<http://tsdr.uspto.gov/documentviewer?caseId=sn77064757&docId=ROA20071010192525#docIndex=17&page=1>.

⁸⁰ See U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 77/064,757, OFFICE ACTION (Nov. 1, 2007), <http://tsdr.uspto.gov/documentviewer?caseId=sn77064757&docId=OOA20071101124745#docIndex=15&page=1>.

⁸¹ See U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 77/064,757, NOTATION TO FILE, at 1 (June 4, 2008), <http://tsdr.uspto.gov/documentviewer?caseId=sn77064757&docId=OOA20071101124745#docIndex=13&page=1>.

⁸² MILF NEXT DOOR, Registration No. 3,518,834.

By contrast, in 2005 the PTO refused under § 2(a) to register the mark MILF.XXX in connection with adult-oriented internet audiovisual entertainment (Class 41),⁸³ explaining that “the term ‘MILF’ included in the applied-for mark means ‘Mother [or Mom] I’d Like [to] Fuck’ and is thus scandalous because it refers to a lewd or scandalous act.”⁸⁴ The applicant responded that “‘MILF’ is susceptible to multiple meanings which may be completely innocuous,” among them “‘Moro Islamic Liberation Front’ (Muslim group in the Philippines),” “‘Man I Like Fragg’ (Counter Strike gaming clan),” and “‘Mother I’d Like to Find’ (polite form; from the movie American Pie).”⁸⁵ In a subsequent office action, the PTO maintained and made final its refusal, stating that “a substantial composite of the general public would associate the term ‘MILF’ with the offensive phrase ‘mom [or mother] I’d like to fuck,’ rather than one of the possible alternative meanings offered by the applicant.”⁸⁶ The PTO asserted that this was particularly true in light of the type of adult entertainment services offered by MILF.XXX, which was precisely the same type of services offered in connection with the mark MILF NEXT DOOR, which was registered two years later. After the PTO’s final refusal, the applicant for MILF.XXX abandoned its application.

These dubious allowances and conflicting refusals are not isolated instances. Appendix 3 sets forth, by filing year, all 140 word-mark applications filed from 2003 through 2015 that were refused registration on the basis that the applied-for mark was immoral or scandalous but that overcame that refusal—a subset of which then proceeded to registration. Appendix 3 reports numerous examples of published and registered word marks that should not have merited publication or registration if the

⁸³ See U.S. Trademark Application No. 78/643,772 (filed June 4, 2005).

⁸⁴ See U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 78/643,772, OFFICE ACTION, at 1 (Dec. 28, 2005), <http://tsdr.uspto.gov/documentviewer?caseId=sn78643772&docId=OOA20051228022840#docIndex=7&page=1>.

⁸⁵ See U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 78/643,772, RESPONSE TO OFFICE ACTION OF DEC. 28, 2005 (June 29, 2006), <http://tsdr.uspto.gov/documentviewer?caseId=sn78643772&docId=OOA20051228#docIndex=4&page=1>.

⁸⁶ See U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 78/643,772 OFFICE ACTION (Aug. 10, 2006), <http://tsdr.uspto.gov/documentviewer?caseId=sn78643772&docId=OOA20051228022840#docIndex=3&page=1>.

PTO were applying its immoral-or-scandalous review in a non-arbitrary and consistent manner.

C. Applications for Immoral or Scandalous Marks That Never Received a Section 2(a) Refusal

For applications filed from 2003 through 2015, the PTO declined to issue an immoral-or-scandalous refusal to and approved for publication a significant number of applications that sought to register a word mark that, based on the PTO's own § 2(a) refusal practices, was immoral or scandalous regardless of context.

For example, in 2011 the PTO issued an immoral-or-scandalous refusal to an application for the mark HUNG LIKE A MULE .COM YOU HAVE A VOID AND WE CAN FILL IT 7+ in connection with dating services (Class 45), owing to the subpart HUNG LIKE A MULE.⁸⁷ The applicant subsequently abandoned its application. Yet in 2015, the PTO registered the mark HUNG LIKE A M.U.L.E. for apparel (Class 25) without any immoral-or-scandalous objection.⁸⁸

Taking another example, in 2007 the PTO issued an immoral-or-scandalous refusal to an application for the mark STFU for apparel (Class 25),⁸⁹ stating that "STFU is an acronym for the expletive 'shut the fuck up.'"⁹⁰ The applicant then abandoned its application. By contrast, in 2016, the PTO registered the mark STFU for noise suppressors for firearms (Class 13) without any immoral-or-scandalous objection.⁹¹

⁸⁷ See U.S. Trademark Application Serial No. 85/418,659 (filed Sept. 9, 2011). The PTO issued this refusal in an office action dated December 27, 2011. U.S. PAT. & TRADEMARK OFFICE, U.S. DEP'T OF COMMERCE, U.S. Trademark Application Serial No. 85/418,659, OFFICE ACTION (Oct. 20, 2008), <https://tsdr.uspto.gov/documentviewer?caseId=sn85418659&docId=OOA20111227184122#docIndex=2&page=1>.

⁸⁸ See HUNG LIKE A M.U.L.E., Registration No. 4,796,702.

⁸⁹ See U.S. Trademark Application Serial No. 77/090,708 (filed Jan. 25, 2007).

⁹⁰ U.S. PAT. & TRADEMARK OFFICE, U.S. DEP'T OF COMMERCE, U.S. Trademark Application Serial No. 77/090,708, OFFICE ACTION (May 19, 2007), <http://tsdr.uspto.gov/documentviewer?caseId=sn77090708&docId=OOA20070519190640#docIndex=1&page=1>.

⁹¹ See STFU, Registration No. 4,932,276. Indeed, the PTO's treatment of the acronym STFU has been highly variable. U.S. Trademark Application Serial No. 85418,950 (filed Jan. 17, 2012), sought the mark STFU!!! in connection with apparel (Class 25) received no immoral-or-

Other examples emerge from applications for marks containing non-English words. In 2008, the PTO issued an immoral-or-scandalous refusal to an application for the mark CAJONES for dietary supplements (Class 5).⁹² It cited evidence from urbandictionary.com, among other sources, in support of the conclusion that:

the proposed mark “CAJONES” means “TESTICLES” or “BALLS” and is thus scandalous because it is a commonly used vulgar slang term for a part of the male genitalia. In addition, while the proper spelling of the term is “COJONES” the attached evidence demonstrates that “CAJONES” is a common and often intentional misspelling of the word “COJONES” and has the same overall commercial impression.⁹³

The applicant subsequently abandoned the application.

Yet in 2008, the PTO registered the mark CAJONES for party games (Class 28) without any immoral-or-scandalous objection,⁹⁴ even though it amended the application record to include the following translation statement: “The foreign wording in the mark translates into English as drawers, and *as a slang term for testicles.*”⁹⁵ Similarly, in 2005 the PTO issued no immoral-or-scandalous refusal to the mark CAJONES for beer (Class 32)⁹⁶ and published the mark. In an office action, the PTO had asked the applicant for a translation of the mark, stating: “The following translation statement is suggested: ‘The English translation of CAJONES is

scandalous refusal and was published on January 17, 2012. Similarly, U.S. Trademark Application Serial No. 85/226,902 (filed Jan. 26, 2011), sought the mark STFU in connection with apparel (Class 25) received no immoral-or-scandalous refusal and was published on May 31, 2011. Finally, U.S. Trademark Application Serial No. 77/794,617 (filed Jan. 31, 2009), sought the mark STFU in connection with apparel (Class 25) received no immoral-or-scandalous refusal and was published on January 12, 2010. (None of these three applications proceeded to registration because each of the applicants failed to file evidence that it was using its respective mark in commerce.)

⁹² See U.S. Trademark Application Serial No. 77/291,198 (filed Sept. 28, 2007).

⁹³ U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 77/291,198, OFFICE ACTION, at 1 (Jan. 4, 2008), <http://tsdr.uspto.gov/documentviewer?caseId=sn77291198&docId=OOA20080104140332#docIndex=2&page=1>.

⁹⁴ See CAJONES, Registration No. 3,444,976.

⁹⁵ *Id.* (emphasis added).

⁹⁶ See U.S. Trademark Application Serial No. 78/452,365 (filed July 17, 2004).

drawers.”⁹⁷ (The application subsequently failed to proceed to registration because the applicant failed to submit evidence of actual use of the mark).

As a final example, the PTO has been inconsistent in its treatment of “obscenicons” (defined as “strings of symbols, like %\$*\$##@, used in comic books to represent obscenities”⁹⁸). It approves some for publication, while refusing to register other very similar obscenicons on the basis that they are immoral or scandalous. For example, in 2009 the PTO issued no immoral-or-scandalous refusal to the mark \$#!+ for use in connection with novelty gift items (Class 20) and apparel (Class 25).⁹⁹ By contrast, the PTO issued immoral-or-scandalous refusals to the marks NO \$#!+¹⁰⁰ and APE \$#!+,¹⁰¹ both filed only a few years after the application for the mark \$#!+.

⁹⁷ U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 78/452,365, OFFICE ACTION, at 1 (Feb. 20, 2005), <https://tsdr.uspto.gov/documentviewer?caseId=sn78452365&docId=OOA20050220094403#docIndex=5&page=1>.

⁹⁸ Patricia T. O’Conner & Stewart Kellerman, *What Do You Call a %\$*\$##@?*, GRAMMAPHOBIA BLOG (Mar. 1, 2011), <https://www.grammarphobia.com/blog/2011/03/grawlix.html>.

⁹⁹ See U.S. Trademark Application Serial No. 77/668,860 (filed Feb. 12, 2009). The mark was published on January 5, 2010 (but failed to register because the applicant filed no evidence of use in commerce).

¹⁰⁰ See U.S. Trademark Application Serial No. 85/855,449 (filed Feb. 20, 2013), sought the mark NO \$#!+ for website (Class 41). In an office action dated May 15, 2013, the PTO explained: “The attached evidence from The Merriam-Webster On-line Dictionary, Dictionary.com, and the Urban Dictionary show[s] that this wording is an expression of incredulity and is considered to be vulgar. The substitution of the symbols \$ # ! + for the letters S H I T is a chat room designation used to circumvent language filters.” U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 85/855,449 OFFICE ACTION (May 15, 2013), <http://tsdr.uspto.gov/documentviewer?caseId=sn85855449&docId=OOA20130515082926#docIndex=8&page=1>.

¹⁰¹ See U.S. Trademark Application Serial No. 85/611,740 (filed Apr. 30, 2012), sought the mark APE \$#!+ for apparel (Class 25). In an office action dated May 22, 2013, the PTO explained: “The attached evidence from the web-based *Urban Dictionary* shows that the lettering \$#!+ is a common substitution for the word ‘shit.’” U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 85/611,740, OFFICE ACTION, at 3 (May 22, 2013), <http://tsdr.uspto.gov/documentviewer?caseId=sn85611740&docId=OOA20130522162859#docIndex=6&page=1>.

Again, these are not isolated examples. Appendix 4 sets forth all word-mark applications for words longer than one letter filed from 2003 through 2015 that received no immoral-or-scandalous refusal and proceeded to publication (and often to registration), even though the applications were for word marks that identically matched terms which had elsewhere triggered an immoral-or-scandalous refusal. Perhaps context could explain some of the rejections—i.e., the PTO might have thought some of the word marks listed in Appendix 4 were immoral or scandalous with respect to some goods or services, but not others.¹⁰² But context cannot explain them all. And in any event, the need for the PTO to engage in such difficult contextual judgments helps show the essential arbitrariness of the process of determining that certain uses of a word mark are immoral or scandalous while certain other uses of the same mark are not.¹⁰³

V

VIEWPOINT DISCRIMINATION AT THE PTO UNDER SECTION 2(a)

From 2003 through 2015, the PTO issued immoral-or-scandalous refusals to at least 50 applied-for marks for being drug-related (including TIGHT BLUNTS for

¹⁰² For example, the PTO has refused registration of numerous applications for marks consisting in whole or part of the term BALLS. *See, e.g.*, U.S. Trademark Application Serial No. 77/587,730 (filed Oct. 7, 2008), sought the mark GOT BALLS... in connection with apparel (Class 25); U.S. Trademark Application Serial No. 85/051,113 (filed May 31, 2010), sought the mark FEEL YOUR BALLS in connection with apparel (Class 25). However, the PTO issued no immoral-or-scandalous refusal to U.S. Trademark Application Serial No. 85/071,112 (filed June 24, 2010), which sought the mark BALLS for use in connection with services relating to the organizing of rocketry conventions (Class 41). In response to a PTO request for clarification of the meaning of the mark, the applicant stated: “The term ‘Balls’ does not have a particular meaning or significance in the relevant industry, nor is it a term of art within the industry. The term is being used solely in a suggestive sense.” U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 85/071,112, RESPONSE TO OFFICE ACTION OF OCT. 4, 2010, at 1 (Apr. 4, 2011), <http://tsdr.uspto.gov/documentviewer?caseId=sn85071112&docId=ROA20110405173926#docIndex=8&page=1>. Apparently satisfied with this explanation, the PTO published the mark on June 7, 2011, and it was subsequently registered on August 23, 2011. Yet the “suggestive sense” of BALLS presumably is the same sense in which the earlier applicants wanted to use it on apparel—yet the PTO refused those applications.

¹⁰³ *See also* Carpenter & Garner, *supra* note 8, at 356-62 (reporting inconsistencies in the PTO’s issuance of immoral-or-scandalous refusals to different applications for similar or identical marks on similar goods or services).

apparel,¹⁰⁴ WHITE POWDER for apparel,¹⁰⁵ COCAINE for soft drinks and energy drinks,¹⁰⁶ and YOU CAN'T SPELL HEALTHCARE WITHOUT THC for pain-relief medication¹⁰⁷). In its immoral-or-scandalous refusals, the PTO frequently cites the glorification of drug usage as the basis for the immorality or scandalousness of these marks.¹⁰⁸

By contrast, during the same time period, the PTO has both not issued an immoral-or-scandalous refusal and has published marks that contain an anti-drug message (such as DOGS AGAINST DRUGS / DOGS AGAINST CRIME for charity services,¹⁰⁹ D.A.R.E. TO RESIST DRUGS AND VIOLENCE for apparel and other goods,¹¹⁰ and SAY NO TO DRUGS - REALITY IS THE BEST TRIP IN LIFE for printed matter¹¹¹).

VI

FIT AND VAGUENESS UNDER THE FIRST AMENDMENT

The Supreme Court made clear in *Matal v. Tam* that the law's regulation of trademarks, specifically legal prohibitions on registration of certain categories of marks, implicates First Amendment interests.¹¹² Viewed through the lens of the First Amendment, many of the marks subject to an immoral-or-scandalous refusal are instances of high-value speech. Whichever level of scrutiny is applied to analyze the

¹⁰⁴ See U.S. Trademark Application Serial No. 78/521,773 (filed Nov. 23, 2004).

¹⁰⁵ See U.S. Trademark Application Serial No. 78/674,808 (filed July 20, 2005).

¹⁰⁶ See U.S. Trademark Application Serial No. 77/006,212 (filed Sept. 25, 2006).

¹⁰⁷ See U.S. Trademark Application Serial No. 77/833,964 (filed Sept. 24, 2009).

¹⁰⁸ See, e.g., U.S. PAT. & TRADEMARK OFFICE, U.S. DEP'T OF COMMERCE, U.S. Trademark Application Serial No. 77/006,212, OFFICE ACTION (Oct. 19, 2006), <http://tsdr.uspto.gov/documentviewer?caseId=sn77006212&docId=OOA20061019082158#docIndex=12&page=1>; U.S. PAT. & TRADEMARK OFFICE, U.S. DEP'T OF COMMERCE, U.S. Trademark Application Serial No. 78/674,808, OFFICE ACTION (Feb. 8, 2006), <http://tsdr.uspto.gov/documentviewer?caseId=sn78674808&docId=OOA20060208095100#docIndex=2&page=1>.

¹⁰⁹ See DOGS AGAINST DRUGS / DOGS AGAINST CRIME Registration No. 2,822,861.

¹¹⁰ See D.A.R.E. TO RESIST DRUGS AND VIOLENCE Registration No. 2,975,163.

¹¹¹ See SAY NO TO DRUGS - REALITY IS THE BEST TRIP IN LIFE Registration No. 2,966,019.

¹¹² See *Matal v. Tam*, 137 S. Ct. 1744, 1751 (2017) ("We now hold that [§ 1052(a)'s disparagement] provision violates the Free Speech Clause of the First Amendment. It offends a bedrock First Amendment principle: Speech may not be banned on the ground that it expresses ideas that offend.").

constitutionality of the immoral-or-scandalous-marks provision, the PTO's inconsistent and arbitrary enforcement of the provision is problematic. The PTO's enforcement suggests a lack of fit between the purposes of the provision and the provision as enforced. The PTO's inconsistent and arbitrary enforcement also indicates unconstitutional vagueness.

A. *High-Value Speech*

Although it might be tempting to dismiss many of the marks refused as immoral or scandalous as low-value speech at best, a good number of the mark applications in our study that received a § 2(a) immoral-or-scandalous refusal contain political speech or “speech concerning public affairs.”¹¹³ Such speech “occupies the highest rung of the hierarchy of First Amendment values, and is entitled to special protection.”¹¹⁴ For example, of the 1,091 word-mark applications in our sample that received an immoral-or-scandalous refusal, 22 of them are a variation of one kind or another on FUCK CANCER (listed in Appendix 5).¹¹⁵ Others contain political commentary, such as mark applications for OBAMA BIN LADEN for apparel,¹¹⁶ KATRINA BLOWS BUSH SUCKS for bumper stickers,¹¹⁷ CRAPITOL HILL for magnets, printed matter, and apparel, among other things,¹¹⁸ REPUBLICANS ARE LIKE DIAPERS... TIGHT ON THE POOR MAN'S ASS AND ALWAYS FULL OF SHIT for bumper stickers,¹¹⁹ and FUCK PARIS FUCK LONDON I LOVE NEW YORK for apparel.¹²⁰

¹¹³ *Snyder v. Phelps*, 562 U.S. 443, 452 (2011) (quoting *Garrison v. Louisiana*, 379 U.S. 64, 74-75 (1964)).

¹¹⁴ *Id.* (quoting *Connick v. Myers*, 461 U.S. 138, 145 (1983)).

¹¹⁵ See generally Denise Restauri, *When Cancer Gets Personal, a Daughter Gets Mad and Starts a Human Movement*, FORBES (Dec. 17, 2013), <https://www.forbes.com/sites/deniserestauri/2013/12/17/when-cancer-gets-personal-a-daughter-gets-mad-and-starts-a-human-movement> (“That was the beginning of the charity Fuck Cancer—a story about a young women who really just wanted to help her mom and ended up starting a movement that targets Millennials to engage them in an open dialogue about early detection with a clear call to action to involve, engage and educate their parents—and put an end to late stage cancer.”). Of these marks, only two were published, both for F CANCER, and only one of these registered. U.S. Trademark Application Serial No. 77/954,532 (filed Mar. 9, 2010) (published only); U.S. Trademark Application Serial No. 77/983,618 (filed Mar. 9, 2010) (registered).

¹¹⁶ U.S. Trademark Application Serial No. 77/086,418 (filed Jan. 19, 2007).

¹¹⁷ U.S. Trademark Application Serial No. 78/706,886 (filed Sept. 5, 2005).

¹¹⁸ U.S. Trademark Application Serial No. 85/503,117 (filed Dec. 23, 2011).

¹¹⁹ U.S. Trademark Application Serial No. 85/506,065 (filed Dec. 29, 2011).

¹²⁰ U.S. Trademark Application Serial No. 86/727,750 (filed Aug. 17, 2015).

Compare these marks with a jacket worn by an individual in public bearing the visible words “Fuck the Draft.” With regard to that behavior, the Supreme Court held in *Cohen v. California*¹²¹ that criminalization of this individual’s conduct was inconsistent with the First Amendment for forbidding core speech.¹²² The Court reasoned that despite the distastefulness of the language used:

Surely the State has no right to cleanse public debate to the point where it is grammatically palatable to the most squeamish among us. Yet no readily ascertainable general principle exists for stopping short of that result were we to affirm the judgment below. For, while the particular four-letter word being litigated here is perhaps more distasteful than most others of its genre, it is nevertheless often true that one man’s vulgarity is another’s lyric. Indeed, we think it is largely because governmental officials cannot make principled distinctions in this area that the Constitution leaves matters of taste and style so largely to the individual.¹²³

The Court also emphasized that:

[M]uch linguistic expression serves a dual communicative function: it conveys not only ideas capable of relatively precise, detached explication, but otherwise inexpressible emotions as well. In fact, words are often chosen as much for their emotive as their cognitive force. We cannot sanction the view that the Constitution, while solicitous of the cognitive content of individual speech has little or no regard for that emotive function which practically speaking, may often be the more important element of the overall message sought to be communicated. Indeed, as Mr. Justice Frankfurter has said, “[o]ne of the prerogatives of American citizenship is the right to criticize public men and measures—and that means not only informed and responsible criticism but the freedom to speak foolishly and without moderation.”¹²⁴

¹²¹ *Cohen v. California*, 403 U.S. 15 (1971).

¹²² *Id.* at 26.

¹²³ *Id.* at 25.

¹²⁴ *Id.* at 26 (quoting *Baumgartner v. United States*, 322 U.S. 665, 673-74 (1944)). It is principally only in the narrow context of broadcast television, which appears “in the privacy of the home” and “is uniquely accessible to children, even those too young to read,” that the Supreme

Furthermore, many of the mark applications in our study involve sex or sexuality, a category of speech that the Supreme Court has treated as valuable and protected. For example, the Supreme Court has subjected restrictions of sexually-oriented programming on cable television to strict scrutiny.¹²⁵ Moreover, in this context, the Supreme Court has expressed doubt whether it is even possible to locate “a principled standard” to separate a parody advertisement with sexual content—about a minister’s first time having sexual relations with his mother in an outhouse—from “more traditional political cartoons.”¹²⁶

B. Fit

First, the PTO’s inconsistency and arbitrariness in enforcing the provision shows that there is insufficient fit between the governmental purpose of the provision and the provision’s enforcement. In defending the constitutionality of the provision, the government has asserted three interests that the provision serves: “protecting the sensibilities of the public,”¹²⁷ “the orderly flow of commerce,”¹²⁸ and “avoiding any appearance that the government approves of such marks.”¹²⁹

This fit is relevant for both more relaxed and stricter forms of scrutiny.

To the extent that this provision must withstand strict scrutiny, the inconsistency and arbitrariness of the PTO’s enforcement of the immoral-or-scandalous-marks provision bears on the provision’s constitutionality. Specifically, the inconsistency and arbitrariness of the PTO’s enforcement of the provision shows that the provision is substantially underinclusive (by failing to refuse registration to all immoral or scandalous marks) and overinclusive (by refusing registration to marks that are not immoral or scandalous). As the Supreme Court has made clear, when a law “imposes content-based restrictions on speech, those provisions can stand only if they survive strict scrutiny, ‘which requires the Government to prove that the restriction furthers a compelling interest and is narrowly tailored to achieve that interest.’”¹³⁰ This standard requires that “when [laws] affect First Amendment

Court has limited the First Amendment protection afforded to explicit speech. *FCC v. Pacifica Found.*, 438 U.S. 726, 748-51 (1978).

¹²⁵ *United States v. Playboy Ent. Grp., Inc.*, 529 U.S. 803, 813-14 (2000).

¹²⁶ *Hustler Magazine, Inc. v. Falwell*, 485 U.S. 46, 55 (1988).

¹²⁷ Brief for Petitioner at 32, *Iancu v. Brunetti*, 139 S. Ct. 782 (Jan. 4, 2019) (No. 18-302).

¹²⁸ *Id.* at 34.

¹²⁹ *Id.*

¹³⁰ *Reed v. Town of Gilbert, Ariz.*, 135 S. Ct. 2218, 2231 (2015) (quoting *Ariz. Free Enterprise Club’s Freedom Club PAC v. Bennett*, 564 U.S. 721, 734 (2011)); *accord Church of the Lukumi*

rights they must be pursued by means that are neither seriously underinclusive nor seriously overinclusive.”¹³¹ When a law’s enforcement is “riddled with exceptions”—as our data show to be true of the PTO’s enforcement of the immoral-or-scandalous-marks provision—the “law’s underinclusivity raises a red flag.”¹³² Such exceptions “diminish the credibility of the government’s rationale for restricting speech in the first place.”¹³³ Analysis of the immoral-or-scandalous provision pursuant to strict scrutiny therefore suggests a lack of fit between the government’s asserted purposes for the provision and its enforcement of the provision.

The analysis is similar even if the immoral-or-scandalous-marks provision is subject to a more relaxed form of constitutional scrutiny pursuant to *Central Hudson*—the standard the Federal Circuit applied in *Brunetti*¹³⁴—as a regulation of commercial speech. Recall that the fourth prong of the *Central Hudson* inquiry requires a determination whether the law at issue “is not more extensive than necessary to serve [a substantial government] interest.”¹³⁵ The Federal Circuit found the immoral-or-scandalous-marks provision constitutionally wanting under this prong, as discussed above.¹³⁶

Our data support a failure of the fourth *Central Hudson* prong. Specifically, the Supreme Court has made clear that when, as here, “[t]he operation of [a law] is so pierced by exemptions and inconsistencies . . . the Government cannot hope to exonerate it” under the fourth prong of *Central Hudson*.¹³⁷

Babalu Aye, Inc. v. City of Hialeah, 508 U.S. 520, 546-47 (1993) (“Where government restricts only conduct protected by the First Amendment and fails to enact feasible measures to restrict other conduct producing substantial harm or alleged harm of the same sort, the interest given in justification of the restriction is not compelling.”).

¹³¹ *Brown v. Entertainment Merchants Ass’n*, 564 U.S. 786, 805 (2011).

¹³² *Williams-Yulee v. Fla. Bar*, 135 S. Ct. 1656, 1668 (2015).

¹³³ *City of Ladue v. Gilleo*, 512 U.S. 43, 52-53 (1994).

¹³⁴ *Supra* section I.B.

¹³⁵ *Central Hudson Gas & Electric Corp. v. Public Service Commission of New York*, 447 U.S. 557, 566 (1980).

¹³⁶ *Supra* section I.B.

¹³⁷ *Greater New Orleans Broad. Ass’n v. United States*, 527 U.S. 173, 190 (1999); *cf.* *Rubin v. Coors Brewing Co.*, 514 U.S. 476, 489 (1995) (“[E]xemptions and inconsistencies [in an alcohol labeling ban] bring into question the purpose of the labeling ban.”).

C. Vagueness

The PTO's inconsistency and arbitrariness in enforcement of the § 2(a) prohibition on the registration of immoral or scandalous marks shows that the provision is also unconstitutionally vague in the context of the First Amendment. The Supreme Court has consistently emphasized that a law that contains "no standard for determining" how to satisfy a requirement of the law is constitutionally problematic.¹³⁸ That is because in such an instance, the law "vests virtually complete discretion in the hands of the [government] to determine whether the" legal requirement is met.¹³⁹ The Court has concluded that such a law "is unconstitutionally vague on its face because it encourages arbitrary enforcement by failing to describe with sufficient particularity what [one] must do in order to satisfy the statute."¹⁴⁰

To the Court, the constitutional "concern [with vagueness] . . . is based upon the 'potential for arbitrarily suppressing First Amendment liberties.'"¹⁴¹ Specifically, "the vagueness of . . . a [content-based] regulation [of speech] raises special First Amendment concerns because of its obvious chilling effect on free speech."¹⁴² For this reason, although unconstitutional vagueness arises in multiple contexts, the Court has made clear that "[i]f . . . [a] law interferes with the right of free speech . . . , a more stringent vagueness test should apply."¹⁴³

With respect to § 2(a), the inconsistent and arbitrary enforcement by the PTO of the immoral-or-scandalous-marks provision suggests that the provision is unconstitutionally vague, in that the vagueness engenders trademark examiners' widely inconsistent and arbitrary applications of the provision. In fact, in the related context of § 2(a)'s disparagement provision, the *Tam* Court acknowledged the "admitted vagueness of the disparagement test."¹⁴⁴

¹³⁸ *Kolender v. Lawson*, 461 U.S. 352, 358 (1983).

¹³⁹ *Id.*

¹⁴⁰ *Id.* at 361.

¹⁴¹ *Id.* (quoting *Shuttlesworth v. City of Birmingham*, 382 U.S. 87, 91 (1965)).

¹⁴² *Reno v. Am. Civil Liberties Union*, 521 U.S. 844, 871-72 (1997).

¹⁴³ *Village of Hoffman Estates v. Flipside, Hoffman Estates, Inc.*, 455 U.S. 489, 499 (1982); *cf. Winters v. New York*, 333 U.S. 507, 509-10 (1948) (finding unconstitutionally vague a criminal law prohibiting the sale of obscene magazines, and reasoning that "[a] failure of a statute limiting freedom of expression to give fair notice of what acts will be punished and such a statute's inclusion of prohibitions against expressions, protected by the principles of the First Amendment violates a[subject's] rights under . . . freedom of speech").

¹⁴⁴ *Matal v. Tam*, 137 S. Ct. 1744, 1756 (2017).

CONCLUSION

Our study shows that the PTO's enforcement of the immoral-or-scandalous-marks provision is systematically inconsistent and arbitrary. This inconsistency and arbitrariness suggest that the provision violates the First Amendment's Free Speech clause because of a lack of fit between the provision's purposes and its enforcement. Furthermore, the provision abets viewpoint discrimination and is unconstitutionally vague.

Beyond the bounds of this Article, but of significant theoretical interest, is the question of how courts should assess claims of lack of fit when those claim are based on "big data," particularly when a party challenging a statutory provision is able to show exactly how many false positives and false negatives the provision has produced in practice. While previously parties may have relied on handpicked collections of representative anecdotes and courts on vague admonitions against statutes that are "seriously" underinclusive or overinclusive,¹⁴⁵ it is now not difficult to imagine the emergence of "big data Brandeis briefs"¹⁴⁶ that will compel courts to specify precisely how much fit is necessary for a provision to pass constitutional muster.¹⁴⁷

¹⁴⁵ *Brown v. Entertainment Merchants Ass'n*, 564 U.S. 786, 805 (2011).

¹⁴⁶ The ordinary "Brandeis brief" was "the first brief that had more pages by far of statistics than of legal principles It exemplified the method of explaining to a court the facts that make a law reasonable[.]" Phillipa Strum, *Brandeis and the Living Constitution*, in *BRANDEIS AND AMERICA* 120 (Nelson L. Dawson ed., 1989).

¹⁴⁷ The Supreme Court has done something similar in the context of election law, after it had ruled that redistricting plans must satisfy the constitutional principle under the Equal Protection Clause of "one person, one vote." See *Gray v. Sanders*, 372 U.S. 368 (1963); *Baker v. Carr*, 369 U.S. 186 (1962). In subsequent decisions, the Supreme Court noted that state legislative redistricting plans with "a maximum population deviation under 10%" among districts are presumptively constitutional. *Brown v. Thomson*, 462 U.S. 835, 842 (1983).

APPENDIX 1

*International Classification of Goods and Services for the Purposes of the Registration of Marks*¹⁴⁸*Goods*

Class 1: Chemicals for use in industry, science and photography, as well as in agriculture, horticulture and forestry; unprocessed artificial resins, unprocessed plastics; fire extinguishing and fire prevention compositions; tempering and soldering preparations; substances for tanning animal skins and hides; adhesives for use in industry; putties and other paste fillers; compost, manures, fertilizers; biological preparations for use in industry and science.

Class 2: Paints, varnishes, lacquers; preservatives against rust and against deterioration of wood; colorants, dyes; inks for printing, marking and engraving; raw natural resins; metals in foil and powder form for use in painting, decorating, printing and art.

Class 3: Non-medicated cosmetics and toiletry preparations; non-medicated dentifrices; perfumery, essential oils; bleaching preparations and other substances for laundry use; cleaning, polishing, scouring and abrasive preparations.

Class 4: Industrial oils and greases, wax; lubricants; dust absorbing, wetting and binding compositions; fuels and illuminants; candles and wicks for lighting.

Class 5: Pharmaceuticals, medical and veterinary preparations; sanitary preparations for medical purposes; dietetic food and substances adapted for medical or veterinary use, food for babies; dietary supplements for human beings and animals; plasters, materials for dressings; material for stopping teeth, dental wax; disinfectants; preparations for destroying vermin; fungicides, herbicides.

Class 6: Common metals and their alloys, ores; metal materials for building and construction; transportable buildings of metal; non-electric cables and wires of common metal; small items of metal hardware; metal containers for storage or transport; safes.

Class 7: Machines, machine tools, power-operated tools; motors and engines, except for land vehicles; machine coupling and transmission components, except for

¹⁴⁸*List of Classes with Explanatory Notes*, WIPO (last updated Dec. 19, 2018), [https://www.wipo.int/classifications/nice/nclpub/en/fr/20190101/classheadings/?explanatory_not es=show&lang=en&menulang=en](https://www.wipo.int/classifications/nice/nclpub/en/fr/20190101/classheadings/?explanatory_notes=show&lang=en&menulang=en)

land vehicles; agricultural implements, other than hand-operated hand tools; incubators for eggs; automatic vending machines.

Class 8: Hand tools and implements, hand-operated; cutlery; side arms, except firearms; razors.

Class 9: Scientific, research, navigation, surveying, photographic, cinematographic, audiovisual, optical, weighing, measuring, signalling (sic), detecting, testing, inspecting, life-saving and teaching apparatus and instruments; apparatus and instruments for conducting, switching, transforming, accumulating, regulating or controlling the distribution or use of electricity; apparatus and instruments for recording, transmitting, reproducing or processing sound, images or data; recorded and downloadable media, computer software, blank digital or analogue recording and storage media; mechanisms for coin-operated apparatus; cash registers, calculating devices; computers and computer peripheral devices; diving suits, divers' masks, ear plugs for divers, nose clips for divers and swimmers, gloves for divers, breathing apparatus for underwater swimming; fire-extinguishing apparatus.

Class 10: Surgical, medical, dental and veterinary apparatus and instruments; artificial limbs, eyes and teeth; orthopaedic articles; suture materials; therapeutic and assistive devices adapted for the disabled; massage apparatus; apparatus, devices and articles for nursing infants; sexual activity apparatus, devices and articles.

Class 11: Apparatus and installations for lighting, heating, cooling, steam generating, cooking, drying, ventilating, water supply and sanitary purposes.

Class 12: Vehicles; apparatus for locomotion by land, air or water.

Class 13: Firearms; ammunition and projectiles; explosives; fireworks.

Class 14: Precious metals and their alloys; jewellery (sic), precious and semi-precious stones; horological and chronometric instruments.

Class 15 Musical instruments; music stands and stands for musical instruments; conductors' batons.

Class 16: Paper and cardboard; printed matter; bookbinding material; photographs; stationery and office requisites, except furniture; adhesives for stationery or household purposes; drawing materials and materials for artists; paintbrushes; instructional and teaching materials; plastic sheets, films and bags for wrapping and packaging; printers' type, printing blocks.

Class 17: Unprocessed and semi-processed rubber, gutta-percha, gum, asbestos, mica and substitutes for all these materials; plastics and resins in extruded form for use in manufacture; packing, stopping and insulating materials; flexible pipes, tubes and hoses, not of metal.

Class 18: Leather and imitations of leather; animal skins and hides; luggage and carrying bags; umbrellas and parasols; walking sticks; whips, harness and saddlery; collars, leashes and clothing for animals.

Class 19: Materials, not of metal, for building and construction; rigid pipes, not of metal, for building; asphalt, pitch, tar and bitumen; transportable buildings, not of metal; monuments, not of metal.

Class 20: Furniture, mirrors, picture frames; containers, not of metal, for storage or transport; unworked or semi-worked bone, horn, whalebone or mother-of-pearl; shells; meerschaum; yellow amber.

Class 21: Household or kitchen utensils and containers; cookware and tableware, except forks, knives and spoons; combs and sponges; brushes, except paintbrushes; brush-making materials; articles for cleaning purposes; unworked or semi-worked glass, except building glass; glassware, porcelain and earthenware.

Class 22: Ropes and string; nets; tents and tarpaulins; awnings of textile or synthetic materials; sails; sacks for the transport and storage of materials in bulk; padding, cushioning and stuffing materials, except of paper, cardboard, rubber or plastics; raw fibrous textile materials and substitutes therefor.

Class 23: Yarns and threads for textile use.

Class 24: Textiles and substitutes for textiles; household linen; curtains of textile or plastic.

Class 25: Clothing, footwear, headwear.

Class 26: Lace, braid and embroidery, and haberdashery ribbons and bows; buttons, hooks and eyes, pins and needles; artificial flowers; hair decorations; false hair.

Class 27: Carpets, rugs, mats and matting, linoleum and other materials for covering existing floors; wall hangings, not of textile.

Class 28: Games, toys and playthings; video game apparatus; gymnastic and sporting articles; decorations for Christmas trees.

Class 29: Meat, fish, poultry and game; meat extracts; preserved, frozen, dried and cooked fruits and vegetables; jellies, jams, compotes; eggs; milk, cheese, butter, yoghurt and other milk products; oils and fats for food.

Class 30: Coffee, tea, cocoa and artificial coffee; rice, pasta and noodles; tapioca and sago; flour and preparations made from cereals; bread, pastries and confectionery; chocolate; ice cream, sorbets and other edible ices; sugar, honey, treacle; yeast, baking-powder; salt, seasonings, spices, preserved herbs; vinegar, sauces and other condiments; ice (frozen water).

Class 31: Raw and unprocessed agricultural, aquacultural (sic), horticultural and forestry products; raw and unprocessed grains and seeds; fresh fruits and vegetables, fresh herbs; natural plants and flowers; bulbs, seedlings and seeds for planting; live animals; foodstuffs and beverages for animals; malt.

Class 32: Beers; non-alcoholic beverages; mineral and aerated waters; fruit beverages and fruit juices; syrups and other non-alcoholic preparations for making beverages.

Class 33: Alcoholic beverages, except beers; alcoholic preparations for making beverages.

Class 34: Tobacco and tobacco substitutes; cigarettes and cigars; electronic cigarettes and oral vaporizers for smokers; smokers' articles; matches.

Services

Class 35: Advertising; business management; business administration; office functions.

Class 36: Insurance; financial affairs; monetary affairs; real estate affairs.

Class 37: Building construction; repair; installation services.

Class 38: Telecommunications.

Class 39: Transport; packaging and storage of goods; travel arrangement.

Class 40: Treatment of materials.

Class 41: Education; providing of training; entertainment; sporting and cultural activities.

Class 42: Scientific and technological services and research and design relating thereto; industrial analysis and industrial research services; design and development of computer hardware and software.

Class 43: Services for providing food and drink; temporary accommodation.

Class 44: Medical services; veterinary services; hygienic and beauty care for human beings or animals; agriculture, horticulture and forestry services.

Class 45: Legal services; security services for the physical protection of tangible property and individuals; personal and social services rendered by others to meet the needs of individuals.

APPENDIX 2

All Word-Mark Applications Filed From 2003 Through 2015 That Received Both a § 2(a) Refusal on the Basis That the Applied-For Mark Was Immoral or Scandalous and a § 2(d) Refusal on the Basis That the Applied-For Mark Was Confusingly-Similar with an Already Published or Registered Mark

Applied-For Word Mark Receiving § 1052(a) & § 1052(d) Refusals <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Word Mark Cited in § 1052(d) Refusal <Int'l Class>	Cited Mark Serial No. (Application Date) [Registration Date]
DICKWEAR <Class 10>	78,207,741 (1/28/2003)	DICKS <Class 35>	75,658,351 (3/11/1999) [10/22/2002]
		DICK'S <Class 35>	75,658,352 (3/11/1999) [4/9/2002]
THE BIG WOODIE <Class 28>	78,214,752 (2/13/2003)	WOODY <Class 28>	75,251,914 (3/5/1997) [6/9/1998]
NAKA DASHI <Class 9>	76,501,004 (3/26/2003)	CREAM PIE <Class 41>	75,740,629 (6/30/1999) [3/21/2000]
C P CREAM PIE <Classes 9, 41>	76,511,051 (5/2/2003)	CREAM PIE <Class 41>	75,740,629 (6/30/1999) [3/21/2000]
NICE CAMELTOE <Class 28>	78,253,440 (5/22/2003)	CAMEL TOES <Class 25>	74,439,311 (9/23/1993) [1/10/1995]
WIFEBEADER <Class 25>	78,282,968 (8/4/2003)	HUSBAND * BEATER <Class 25>	78,353,517 (1/18/2004) [2/28/2006]

Applied-For Word Mark Receiving § 1052(a) & § 1052(d) Refusals <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Word Mark Cited in § 1052(d) Refusal <Int'l Class>	Cited Mark Serial No. (Application Date) [Registration Date]
M F MO FO WWW.MOFOSHOP. COM GEAR WITH A FLIPPIN'ATTITUDE <Class 25>	76,550,070 (10/6/2003)	MOFO <Class 25,41>	73,593,770 (4/16/1986) [2/23/1988]
BRASS BALLS <Classes 32, 33>	78,335,045 (12/2/2003)	BRASS BALLS SALOON <Class 42>	73,500,342 (9/20/1984) [5/28/1985]
NICE SNATCH <Class 25>	78,393,971 (3/31/2004)	SNACH CLOTHING COMPANY <Class 25>	76,205,985 (2/7/2001) [6/8/2004]
RUSSKY STANDART <Class 32>	78,452,112 (7/16/2004)	RUSKI <Class 33>	75,737,420 (6/25/1999) [6/17/2003]
		LEMON RUSKI <Class 33>	75,737,422 (6/25/1999) [8/12/2003]
RUSSKY STANDART <Class 32>	78,452,091 (7/16/2004)	RUSKI <Class 33>	75,737,420 (6/25/1999) [6/17/2003]
		LEMON RUSKI <Class 33>	75,737,422 (6/25/1999) [8/12/2003]
PHUKIT APPAREL <Class 25>	78,451,664 (7/16/2004)	PHUKIT <Class 25>	78,257,504 (6/3/2003) [3/22/2005]
DS DIRTY SANCHEZ <Class 25>	78,495,056 (10/5/2004)	DIRTY SANCHEZ <Classes 9, 41>	76,132,917 (9/20/2000) [2/15/2005]

Applied-For Word Mark Receiving § 1052(a) & § 1052(d) Refusals <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Word Mark Cited in § 1052(d) Refusal <Int'l Class>	Cited Mark Serial No. (Application Date) [Registration Date]
A DOZICH <WITH IMAGE> <Class 25>	78,515,009 (11/11/2004)	<IMAGE OF TWO STICK FIGURES ENGAGED IN SEX> <Class 25>	78,121,581 (4/14/2002) [9/19/2006]
TIGHT BLUNTS <Class 25>	78,521,773 (11/23/2004)	BLUNT <Class 25>	74,338,427 (12/9/1992) [1/18/1994]
MO FO JEANS <Class 25>	78,541,440 (1/3/2005)	MOFO.COM <Class 42>	75,914,802 (2/9/2000) [10/23/2001]
FUKITOL <Classes 21, 25>	78,564,750 (2/10/2005)	PHUKIT <Class 25>	78,257,504 (6/3/2003) [3/22/2005]
WANKER <Class 25>	78,610,369 (4/16/2005)	WANK. <Class 25>	78,421,170 (5/18/2004) [9/26/2006]
		WANCHORS <Class 25>	78,591,173 (3/21/2005) [9/26/2006]
MILF GOLF <Class 25>	78,614,007 (4/21/2005)	MYLF <Class 25>	78,351,515 (1/13/2004) [5/17/2005]
BANGBOAT <Class 42>	78,618,356 (4/27/2005)	BANGBUS <Class 41>	76,483,301 (1/21/2003) [2/3/2004]
MILF SEEKER <Class 42>	78,618,337 (4/27/2005)	MILFHUNTER <Class 41>	78,306,103 (9/26/2003) [3/29/2005]

Applied-For Word Mark Receiving § 1052(a) & § 1052(d) Refusals <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Word Mark Cited in § 1052(d) Refusal <Int'l Class>	Cited Mark Serial No. (Application Date) [Registration Date]
THE SHOCKER <Class 25>	78,638,901 (5/27/2005)	SHOCKERS <Class 25>	73,120,720 (3/28/1977) [12/23/1980]
HB HUSBANDBEATER <Class 25>	78,638,942 (5/27/2005)	HUSBAND * BEATER <Class 25>	78,353,517 (1/18/2004) [2/28/2006]
CLONE A PUSSY <Class 20>	78,692,020 (8/12/2005)	CLONE-A-WILLY <Classes 10, 28>	78,419,307 (5/14/2004) [1/10/2006]
CAMEL TOES <Class 25>	78,697,334 (8/22/2005)	CAMEL TOES <Class 25>	74,439,311 (9/23/1993) [1/10/1995]
TALKING COCK <Class 10>	78,716,443 (9/20/2005)	TALKING HEAD <Class 10>	78,686,087 (8/4/2005) [7/17/2007]
THE JACK MAG <Class 16>	78,772,903 (12/14/2005)	JACK <Classes 9, 16, 41>	76,448,506 (9/6/2002) [2/22/2005]
SOFA KING AWESOME <Class 14>	78,784,188 (1/3/2006)	TEAM SOFA KING <Classes 16, 21, 25, 35, 41>	76,514,970 (5/16/2003) [6/3/2008]
MIDDLEFINGER <Class 25>	78,863,232 (4/17/2006)	JONNY MIDDLEFINGER <Classes 18, 25>	75,685,285 (5/11/1999) [8/29/2000]
BONER BATS ROCK HARD WOOD <Class 28>	78,904,458 (6/9/2006)	BONER <Classes 25, 28>	76,535,752 (8/11/2003) [8/3/2004]
WIGGA PLEASE <Class 25>	78,951,841 (8/14/2006)	WIGGA WEAR <Class 25>	78,160,418 (9/4/2002) [8/10/2004]

Applied-For Word Mark Receiving § 1052(a) & § 1052(d) Refusals <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Word Mark Cited in § 1052(d) Refusal <Int'l Class>	Cited Mark Serial No. (Application Date) [Registration Date]
BALL SACK POWDER <Class 3>	78,963,466 (8/30/2006)	BALSAC <Class 3,18>	75,649,424 (3/1/1999) [5/7/2002]
MILF DUDS <Class 25>	77,004,154 (9/21/2006)	MYLF <Class 25>	78,351,515 (1/13/2004) [5/17/2005]
UKININAM <Class 25>	77,004,145 (9/21/2006)	SCREW YOU <Class 25>	78,699,134 (8/24/2005) [9/24/2013]
HARDWOODY LURES <Class 28>	77,007,106 (9/25/2006)	WOODY LURE COMPANY <Class 28>	78,693,734 (8/16/2005) [†]
MILF SEEKER <Class 41>	77,043,802 (11/14/2006)	MILFHUNTER <Class 41>	78,306,103 (9/26/2003) [3/29/2005]
UN CABRON POR MI PATRON <Class 32>	77,060,638 (12/8/2006)	KBRON <Class 25>	78,070,454 (6/21/2001) [8/15/2006]
		CABRON 49 <Class 3, 18, 25>	79,015,795 (2/17/2005) [1/23/2007]
MILF DUDS #1-B <Class 25>	77,070,433 (12/22/2006)	MYLF <Class 25>	78,351,515 (1/13/2004) [5/17/2005]
WIFEBEATER <Class 25>	77,121,502 (3/2/2007)	HUSBAND*BEATER <Class 25>	78,353,517 (1/18/2004) [2/28/2006]
FIELD NEGRO <Class 25>	77,124,403 (3/7/2007)	PHIELD NEGRO 74 <Class 25>	78,800,557 (1/26/2006) [3/23/2010]

Applied-For Word Mark Receiving § 1052(a) & § 1052(d) Refusals <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Word Mark Cited in § 1052(d) Refusal <Int'l Class>	Cited Mark Serial No. (Application Date) [Registration Date]
HONKEY SOCAL <Class 25>	77,133,487 (3/16/2007)	HONKEE <Class 25>	76,594,332 (5/26/2004) [8/15/2006]
HARD ASS CRACKER <Class 25>	77,163,723 (4/23/2007)	CRACKER <Class 25>	75,048,627 (1/25/1996) [5/27/1997]
PUSSY VODKA <Class 33>	77,174,382 (5/7/2007)	RED PUSSY <Class 32>	77,162,516 (4/21/2007) [†]
AY CABRON <Classes 16, 25, 29, 30, 32>	77,184,231 (5/17/2007)	CABRON 44 <Classes 3, 18, 25>	79,015,795 (2/17/2005) [1/23/2007]
PUSSIE VODKA <Class 33>	77,201,989 (6/8/2007)	RED PUSSY <Class 32>	77,162,516 (4/21/2007) [†]
FADED. TITTIES. BEER. <Class 25>	77,263,236 (8/23/2007)	TITTY'S BEER <Class 25>	78,820,782 (2/22/2006) [†]
POTHEAD 420 <Class 25>	77,290,998 (9/27/2007)	POTTHEAD <Class 25>	77,235,554 (7/22/2007) [†]
PUSSY <Class 33>	77,314,522 (10/26/2007)	RED PUSSY <Class 32>	77,162,516 (4/21/2007) [†]
SUCK IT! <Class 25>	77,350,732 (12/12/2007)	SUCKIT. <Class 16>	77,296,697 (10/4/2007) [3/23/2010]
THE G-MILF HUNTER <Class 41>	77,376,265 (1/20/2008)	MILFHUNTER <Class 41>	78,306,103 (9/26/2003) [3/29/2005]

Applied-For Word Mark Receiving § 1052(a) & § 1052(d) Refusals <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Word Mark Cited in § 1052(d) Refusal <Int'l Class>	Cited Mark Serial No. (Application Date) [Registration Date]
PINCHE TAQUERIA <Class 43>	77,519,564 (7/10/2008)	PINCHES TACOS <Class 43>	77,513,028 (7/1/2008) [2/10/2009]
DAMN! DIGITAL MAGAZINE <Class 9>	77,538,713 (8/4/2008)	DAMN GIRL MAGAZINE <Class 41>	77,390,430 (2/6/2008) [10/12/2010]
SCRW-U <Class 25>	77,558,390 (8/28/2008)	SCREW YOU <Class 25>	78,699,134 (8/24/2005) [9/24/2013]
BOYS2RENT <Class 45>	77,646,070 (1/8/2009)	MEN4RENTNOW.COM <Class >	77,150,767 (4/6/2007) [3/31/2009 – Supp. Reg.]
BAMF BRAND <Class 25>	77,665,028 (2/6/2009)	B.A.M.F. <Class 25>	78,345,314 (12/24/2003) [9/19/2006]
MARYJANE COLA <Classes 5, 32>	77,673,405 (2/19/2009)	MARY JANE'S RELAXING SODA <Class 32>	77,687,542 (3/10/2009) [2/21/2012]
		MARY JANE'S SODA <Class 5>	77,642,501 (1/2/2009) [2/21/2012]
BAMF <Class 25>	77,687,946 (3/10/2009)	B.A.M.F. <Class 25>	78,345,314 (12/24/2003) [9/19/2006]
COCK BLOC <Class 25>	77,798,234 (8/6/2009)	KOK-BLOCKERS <Class 25>	76,348,076 (12/13/2001) [3/2/2004]

Applied-For Word Mark Receiving § 1052(a) & § 1052(d) Refusals <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Word Mark Cited in § 1052(d) Refusal <Int'l Class>	Cited Mark Serial No. (Application Date) [Registration Date]
FU <Classes 21, 25>	77,814,006 (8/27/2009)	F.U. HOLLYWOOD <Class 25>	77,778,897 (7/10/2009) [8/14/2012]
FUK!T <Classes 25, 42>	77,818,033 (9/1/2009)	PHUKIT <Class 25>	78,257,504 (6/3/2003) [3/22/2005]
OMFG <Class25>	77,835,813 (9/26/2009)	OMFG <Class 25>	77,607,951 (11/5/2008) [2/9/2010]
SON OF A BITCH <Classes 9, 18, 25, 28, 41>	77,852,839 (10/20/2009)	SOM BITCH <Class 25>	75,353,099 (9/8/1997) [1/9/2001]
TITS 'N PEARL GIRL <Class 25>	77,859,966 (10/28/2009)	TITS <WITH IMAGE OF BIRDS> <Class 25>	76,379,045 (3/5/2002) [8/15/2006]
PUSSY NATURAL ENERGY <Classes 25, 32>	77,880,452 (11/25/2009)	PUSSY NATURAL ENERGY <Class 32>	77,817,308 (9/1/2009) [12/4/2012]
KO KANE <Class 33>	85,038,867 (5/14/2010)	KOKANEE <Class 32>	73,572,784 (12/10/1985) [2/3/1987]
UNGLORYHOLE <Class 41>	85,114,580 (8/24/2010)	GLORYHOLE <Class 41>	77,389,462 (2/5/2008) [8/26/2008]
FUCK CANCER <Class 16>	85,237,359 (2/8/2011)	SCREW CANCER <Class 36>	85,207,375 (12/29/2010) [8/16/2011]
FAT COCK BEER <Class 32>	85,253,332 (2/28/2011)	RED COCK BEER <Class 32>	77,875,474 (11/18/2009) [5/25/2010]

Applied-For Word Mark Receiving § 1052(a) & § 1052(d) Refusals <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Word Mark Cited in § 1052(d) Refusal <Int'l Class>	Cited Mark Serial No. (Application Date) [Registration Date]
SOCK MY COCK <Class 25>	85,264,154 (3/11/2011)	COCKSOX <Class 25>	85,185,067 (11/24/2010) [4/10/2012]
CAMEL TOE BLUE JEANS <Class 25>	85,277,696 (3/25/2011)	CAMEL TOES <Class 25>	74,439,311 (9/23/1993) [1/10/1995]
THE GLORY HOLE <Class 9>	85,329,178 (5/24/2011)	GLORYHOLE INITIATIONS <Class 41>	77,389,460 (2/5/2008) [8/26/2008]
		GLORYHOLE <Class 41>	77,389,462 (2/5/2008) [8/26/2008]
HAUTE COCK <Class 25>	85,333,389 (5/30/2011)	HAUTE COQ <Class 25>	78,461,869 (8/4/2004) [9/20/2005]
BIG DICK'N IT <Class 25>	85,344,736 (6/13/2011)	BIG DICK'S <Class 25>	74,266,388 (4/16/1992) [12/8/1992]
COCKSTAR <Classes 5, 10, 35>	85,376,863 (7/21/2011)	PARTY LIKE A COCKSTAR <Class >	77,312,851 (8/5/2007) [8/21/2008 – Supp. Reg.]
I BANGED BETTY <Class 25>	85,386,222 (8/1/2011)	BETTY BANGS <Class 25>	77,447,517 (4/14/2008) [12/9/2008]
POK-HER GOOD <Class 10>	85,386,833 (8/2/2011)	POKER <Class 10>	78,566,655 (2/14/2005) [8/8/2006]

Applied-For Word Mark Receiving § 1052(a) & § 1052(d) Refusals <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Word Mark Cited in § 1052(d) Refusal <Int'l Class>	Cited Mark Serial No. (Application Date) [Registration Date]
LITTLE PUSSIE <Class 32>	85,408,947 (8/27/2011)	PUSSY NATURAL ENERGY <Class 32>	77,817,308 (9/1/2009) [12/4/2012]
CHINGA <Class 25>	85,464,503 (11/4/2011)	CHENGA <Class 25>	85,006,316 (4/5/2010) [4/12/2011]
PHUCKET! <Class 25>	85,482,448 (11/29/2011)	PHUKET THAI <Class 25>	76,202,633 (1/26/2001) [12/23/2003]
COCKED N LOADED <Class 5>	85,561,169 (3/6/2012)	COCKED & LOADED <Class 32>	85,146,710 (10/6/2010) [5/31/2011]
OINK <Classes 16, 35, 38, 41, 42, 45>	85,587,247 (4/3/2012)	OINK.COM <Class 35>	85,137,460 (9/24/2010) [5/24/2011]
PHUP DUC <Class 25>	85,716,502 (8/29/2012)	PHUP DUC <Class 25>	85,640,365 (5/31/2012) [†]
#@%&! BREAST CANCER <Class 25>	76,712,792 (11/6/2012)	#@%&! <Class 25>	75,770,446 (9/2/1999) [8/14/2001]
COOLIE <Class 25>	85,785,992 (11/22/2012)	KOOLEY <Class 25>	85,489,665 (12/7/2011) [5/29/2012]
P.H.U.C. CANCER (PLEASE HELP US CURE CANCER) <Class 25>	85,855,531 (2/20/2013)	PHUC <Class 25>	85,418,294 (9/8/2011) [6/18/2013]
CAMO-TOE <Class 25>	85,866,252 (3/4/2013)	CAMOTOES <Class 25>	85,775,183 (11/8/2012) [†]

Applied-For Word Mark Receiving § 1052(a) & § 1052(d) Refusals <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Word Mark Cited in § 1052(d) Refusal <Int'l Class>	Cited Mark Serial No. (Application Date) [Registration Date]
T.I.T.S. (TOES IN THE SAND) <Class 25>	85,872,690 (3/11/2013)	TITS <WITH IMAGE OF BIRDS> <Class 25>	76,379,045 (3/5/2002) [8/15/2006]
BEAVER BUTTER <Class 3>	85,923,590 (5/4/2013)	BEAVER <Class 3>	85,821,724 (1/11/2013) [4/15/2014]
PRETTY PUSSY <Class 25>	85,939,135 (5/22/2013)	THE PRETTY PUSSYCAT <Class 25>	76,453,991 (9/30/2002) [4/3/2007]
F K CANCER <Class 25>	86,016,028 (7/22/2013)	F CANCER <Class 25>	77,954,532 (3/9/2010) [†]
LADIES LOVE BIG ROD'S <Class 43>	86,048,968 (8/27/2013)	BIG ROD'S <Class 43>	78,377,360 (3/2/2004) [6/7/2005]
I GOT STUFFED AT BIG ROD'S <Class 43>	86,050,041 (8/28/2013)	BIG ROD'S <Class 43>	78,377,360 (3/2/2004) [6/7/2005]
COOLIE <Class 25>	86,092,994 (10/16/2013)	KOOLEY <Class 25>	85,489,665 (12/7/2011) [5/29/2012]
		COOLEY HIGH CLOTHING COMPANY <Class 25>	85,834,638 (1/28/2013) [7/15/2014]
FUCK CANCER <Class 25>	86,286,757 (5/20/2014)	F CANCER <Class 25>	77,983,618 (3/9/2010) [6/10/2014]

Applied-For Word Mark Receiving § 1052(a) & § 1052(d) Refusals <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Word Mark Cited in § 1052(d) Refusal <Int'l Class>	Cited Mark Serial No. (Application Date) [Registration Date]
F CK CANCER <Class 42>	86,288,375 (5/21/2014)	F CANCER <Class 25>	77,983,618 (3/9/2010) [6/10/2014]
FUCK CANCER <Class 25>	86,290,011 (5/23/2014)	F CANCER <Class 25>	77,983,618 (3/9/2010) [6/10/2014]
SHE GOT THE D <Class 25>	86,295,630 (5/30/2014)	THE D <Class 25>	85,654,302 (6/18/2012) [4/9/2013]
NAMASTE MOTHER FUCKER <Class 25>	86,350,476 (7/28/2014)	NAMASTE MF <Class 25>	85,827,086 (1/18/2013) [4/1/2014]
JEBAO <Class 7>	86,350,659 (7/29/2014)	JEBO <Classes 7, 11, 16>	79,033,500 (4/17/2006) [9/1/2009]
FREE THE NIPPLE X X <Class 25>	86,380,758 (8/29/2014)	FREE THE NIPPLE <Class 25>	86,151,239 (12/23/2013) [10/21/2014]
SUPER WANG <Class 5>	86,400,750 (9/19/2014)	SUPERWANG <Class 5>	85,962,120 (6/17/2013) [7/29/2014]
FVCK LA <Class 25>	86,405,502 (9/25/2014)	FVCK STREET WEAR <Class 25>	85,826,194 (1/17/2013) [4/15/2014]
F.U! <Class 25>	86,468,096 (12/1/2014)	F U 2 <Class 25>	85,394,120 (8/10/2011) [12/4/2012]
HOLY SH!T <Class 33>	86,507,039 (1/19/2015)	HOLY EXPLETIVE <Class 33>	85,142,000 (9/30/2010) [1/10/2012]

Applied-For Word Mark Receiving § 1052(a) & § 1052(d) Refusals <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Word Mark Cited in § 1052(d) Refusal <Int'l Class>	Cited Mark Serial No. (Application Date) [Registration Date]
F.U. <Class 25>	86,533,866 (2/12/2015)	F U 2 <Class 25>	85,394,120 (8/10/2011) [12/4/2012]
FVCK IT <Class 25>	86,535,216 (2/13/2015)	FVCK STREET WEAR <Class 25>	85,826,194 (1/17/2013) [4/15/2014]
CAMELTOENER <Class 16>	86,535,371 (2/14/2015)	CAMEL TOES <Class 25>	74,439,311 (9/23/1993) [1/10/1995]
BULLSHIT FLAG <Class 24>	86,550,661 (3/2/2015)	BS <Classes 20, 24>	76,528,727 (7/9/2003) [12/27/2005]
BOMB PUNANI <Class 25>	86,550,637 (3/2/2015)	PUNANI <Class 25>	77,396,582 (2/14/2008) [9/15/2009]
I (HEART DESIGN) BALLS! <Classes 14, 25>	86,570,398 (3/19/2015)	I (HEART DESIGN) MY BALLS <Class 14>	85,291,848 (4/11/2011) [1/15/2013]
CRACKER LIFE <Class 25>	86,616,548 (5/1/2015)	CRACKER LIFE <Class 25>	85,236,440 (2/8/2011) [8/30/2011]
BIG COCK SPORTSWEAR <Class 25>	86,661,862 (6/14/2015)	BIG COCKE <Class 25>	77,870,338 (11/11/2009) [5/3/2011]
		BIG COCK COUNTRY <Class 25>	85,225,003 (1/24/2011) [3/26/2013]

Applied-For Word Mark Receiving § 1052(a) & § 1052(d) Refusals <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Word Mark Cited in § 1052(d) Refusal <Int'l Class>	Cited Mark Serial No. (Application Date) [Registration Date]
CRACKER LIFE <Class 25>	86,707,984 (7/29/2015)	CRACKER LIFE <Class 25>	85,236,440 (2/8/2011) [8/30/2011]
FVCKD <Class 25>	86,808,278 (11/3/2015)	FVCK STREET WEAR <Class 25>	85,826,194 (1/17/2013) [4/15/2014]

† The application was abandoned after publication.

APPENDIX 3

All Trademark Applications Filed From 2003 Through 2015 That Received a § 2(a) Immoral-or-Scandalous Refusal and That Overcame That Refusal and Were Published/Registered

Applied-For Word Mark Receiving § 1052(a) Refusal <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
COOCHY <Class 3>	78,214,120 (2/12/2003)	6/1/2004	8/24/2004
POTATOFINGER <Class 29>	78,215,674 (2/17/2003)	5/3/2005	7/26/2005
BIG BLACK DICK - PREMIUM RUM- NORTH SOUTH GRAND CAYMAN SEVEN MILE BEACH CARRIBEAN SEA BBD <Classes 21, 25, 33>	78,219,113 (2/26/2003)	12/28/2004	11/22/2005
HONKIES <Class 28>	78,233,268 (4/2/2003)	9/14/2004	†
BITCH WHIFFS <Class 34>	78,390,812 (3/25/2004)	9/20/2005	†
BITCH WHIFFS <Class 25>	78,397,712 (4/7/2004)	9/13/2005	12/6/2005
BITCH WHIFFS <Class 28>	78,398,827 (4/8/2004)	9/20/2005	†
CHILITOS CAFE <Class 35>	78,406,642 (4/22/2004)	7/17/2007	†
WANK. <Class 25>	78,421,170 (5/18/2004)	3/7/2006	9/26/2006

Applied-For Word Mark Receiving § 1052(a) Refusal <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
VELVETPARK DYKE CULTURE IN BLOOM <Class 16>	78,448,110 (7/8/2004)	5/23/2006	8/15/2006
DYKEDOLLS <Class 28>	78,497,352 (10/9/2004)	4/10/2007	6/26/2007
OSHIRT <Class 25>	78,522,338 (11/24/2004)	9/27/2005	†
EFENK?L <Classes 16, 25>	78,536,608 (12/21/2004)	11/21/2006	2/6/2007
OUR MEMBERS GET LAID & OUR AFFILIATES GET PAID! <Class 35>	78,545,359 (1/11/2005)	6/13/2006	9/5/2006
ONE JACK OFF <Class 25>	78,604,378 (4/7/2005)	9/18/2007	6/17/2008
FUW <Class 25>	78,613,631 (4/21/2005)	8/8/2006	10/24/2006
WTF <Class 41>	78,623,114 (5/4/2005)	8/15/2006	†
ANGRY PUSSY <Class 25>	78,657,002 (6/23/2005)	9/2/2008	†
DIRTY HOE LANDSCAPING <Class 44>	78,677,596 (7/25/2005)	11/14/2006	1/30/2007
WHIPPEDASS <Class 41>	78,680,652 (7/28/2005)	8/14/2007	10/30/2007
PRICK PILLS <Class 20>	78,684,903 (8/3/2005)	1/9/2007	1/1/2008

Applied-For Word Mark Receiving § 1052(a) Refusal <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
SCREW YOU <Class 25>	78,699,134 (8/24/2005)	12/1/2009	9/24/2013
THE SEX WHISPERER <Class 9>	78,791,631 (1/13/2006)	9/4/2007	†
SWEATYBALLZ <Class 25>	78,834,247 (3/10/2006)	1/30/2007	†
SCREW YOU <Classes 3, 10, 32>	78,874,735 (5/2/2006)	11/17/2009	4/2/2013
GOY CRAZY <Class 25>	78,898,405 (6/1/2006)	8/28/2007	†
MILPH <Classes 16, 25, 26>	78,980,326 (6/8/2006)	8/21/2007	7/8/2008
MILPH <Class 14>	78,903,398 (6/8/2006)	8/21/2007	†
CHASING PURPOSE 'TIL IT MEETS EXISTENCE CP TIME EST 1999 <Class 25>	78,917,364 (6/26/2006)	4/1/2008	6/17/2008
SUPER GIMP <Classes 16, 25>	78,917,737 (6/27/2006)	9/25/2007	†
POCHA <Class 25>	78,919,432 (6/28/2006)	5/22/2007	2/5/2008
POCHO <Class 25>	78,919,434 (6/28/2006)	5/22/2007	2/5/2008

Applied-For Word Mark Receiving § 1052(a) Refusal <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
EL CARAJOS INTERNATIONAL TAPAS & WINES <Class 43>	77,004,537 (9/21/2006)	11/20/2007	2/5/2008
CP TIME <Class 25>	77,019,230 (10/11/2006)	3/25/2008	6/10/2008
DAME UN CABRON <Class 32>	77,060,641 (12/8/2006)	10/23/2007	†
BAZZA A BAMF TEA! <Class 30>	77,063,697 (12/13/2006)	5/20/2008	†
MILF NEXT DOOR <Class 41>	77,064,757 (12/14/2006)	8/5/2008	10/21/2008
ROADHEAD INDUSTRIES NEED IT. WANT IT. GOT IT. <Class 25>	77,093,949 (1/29/2007)	1/22/2008	†
LONGCOCK'S <Class 33>	77,161,404 (4/20/2007)	6/17/2008	†
RED PUSSY <Class 32>	77,162,516 (4/21/2007)	8/26/2008	†
I'M RICK JAMES BITCH <Class 25>	77,207,411 (6/15/2007)	12/16/2008	†
HIMMEL ARSCH & ZWIRN <Classes 18, 21, 25, 32>	77,242,166 (7/30/2007)	3/17/2009	6/2/2009
TERDZ <Class 30>	77,258,747 (8/18/2007)	4/29/2008	9/23/2008

Applied-For Word Mark Receiving § 1052(a) Refusal <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
DAMN GIRL MAGAZINE <Class 41>	77,390,430 (2/6/2008)	1/27/2009	10/12/2010
TA-CABRON <Class 43>	77,410,171 (2/29/2008)	4/28/2009	4/6/2010
FUBAR <Class 5>	77,419,918 (3/12/2008)	3/10/2009	11/10/2009
PURPLE STUFF <Class 32>	77,446,644 (4/11/2008)	5/18/2010	8/3/2010
.XXX <Class 16>	77,510,626 (6/28/2008)	5/19/2009	4/20/2010
PURPLE STUFF <Class 32>	77,520,464 (7/11/2008)	5/11/2010	7/27/2010
PURPLE STUFF <Class 32>	77,520,466 (7/11/2008)	5/11/2010	7/27/2010
AXE HOLE <Class 25>	77,522,972 (7/15/2008)	5/12/2009	†
BLONDE PUSSY <Class 32>	77,523,080 (7/15/2008)	3/10/2009	†
AXE HOLE <Class 25>	77,979,567 (7/15/2008)	5/12/2009	†
MERDE <Class 16>	77,537,063 (8/1/2008)	6/1/2010	8/17/2010
BIG EFFIN GARAGE <Class 42>	77,595,225 (10/17/2008)	4/5/2011	†
BIG F'N GARAGE <Class 42>	77,595,240 (10/17/2008)	3/29/2011	†

Applied-For Word Mark Receiving § 1052(a) Refusal <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
NASTY BITCH <Class 32>	77,616,001 (11/17/2008)	5/25/2010	9/27/2011
TOPA <Class 33>	77,637,758 (12/22/2008)	5/3/2011	12/27/2011
SNATCH <Class 25>	77,639,364 (12/23/2008)	1/5/2010	†
COCKTALES <Class 41>	77,641,819 (12/30/2008)	6/21/2011	9/6/2011
SNATCH <Class 25>	77,665,554 (2/6/2009)	12/29/2009	3/16/2010
COCKSURE <Classes 9, 41>	77,778,633 (7/10/2009)	7/13/2010	9/28/2010
MBS COCKTALE COLLECTION <Class 25>	77,797,702 (8/5/2009)	3/30/2010	7/17/2012
PUSSY NATURAL ENERGY <Class 32>	77,817,308 (9/1/2009)	1/4/2011	12/4/2012
BLEAUMEI <Class 25>	77,841,081 (10/5/2009)	4/13/2010	†
COCKTANE <Class 32>	77,877,163 (11/20/2009)	7/27/2010	†
BEITZIM <Classes 14, 25>	77,890,751 (12/10/2009)	5/25/2010	8/10/2010
FRESH BALLS <Class 3>	77,897,974 (12/21/2009)	1/4/2011	3/22/2011
HTFU <Class 25>	77,902,017 (12/29/2009)	5/31/2011	3/13/2012

Applied-For Word Mark Receiving § 1052(a) Refusal <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
BOYS ARE STUPID, THROW ROCKS AT THEM <Classes 16, 18, 25>	77,934,946 (2/12/2010)	5/1/2012	7/17/2012
BOYS ARE STUPID, THROW ROCKS AT THEM <Class 41>	77,934,899 (2/12/2010)	5/1/2012	†
F CANCER <Class 25>	77,983,618 (3/9/2010)	5/31/2011	6/10/2014
CMTHRCKNT <Class 41>	77,954,054 (3/9/2010)	3/8/2011	†
CMTHRCKNT <Class 25>	77,954,169 (3/9/2010)	3/8/2011	†
F CANCER <Class 25>	77,954,532 (3/9/2010)	5/31/2011	†
CMTHRCKNT <Class 9>	77,956,237 (3/11/2010)	3/8/2011	†
BAMF <Class 12>	85,012,455 (4/13/2010)	12/20/2011	10/16/2012
DILLIGAF BY BOHICA BILL <Classes 25, 35>	85,020,964 (4/22/2010)	3/19/2013	6/4/2013
COCK RUB <Class 30>	85,050,620 (5/28/2010)	5/24/2011	12/11/2012
FUGGIN AWESOME <Class 41>	85,056,466 (6/7/2010)	10/8/2013	9/2/2014
WHITE ASS <Class 33>	85,100,568 (8/5/2010)	7/19/2011	†

Applied-For Word Mark Receiving § 1052(a) Refusal <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
FN GOLDEN <Class 41>	85,129,726 (9/15/2010)	12/6/2011	2/21/2012
IF WE TOUCH IT, IT'S FN GOLDEN <Class 41>	85,129,728 (9/15/2010)	12/6/2011	2/21/2012
F* WORD FRIDAY <Class 41>	85,133,005 (9/19/2010)	6/28/2011	9/13/2011
BUTTERLOADS <Class 41>	85,134,454 (9/21/2010)	9/20/2011	12/6/2011
ROCK THE F OUT <Class 42>	85,145,075 (10/5/2010)	10/4/2011	8/14/2012
DUBE HEMP <Class 32>	85,181,806 (11/20/2010)	7/31/2012	11/5/2013
HOTTER THAN A MOFO <Classes 29, 30>	85,237,185 (2/8/2011)	7/26/2011	7/29/2014
HOTTER THAN A MOFO <Class 30>	85,977,648 (2/8/2011)	7/26/2011	11/27/2012
69 LUNCH FOR TWO <Class 25>	85,282,477 (3/31/2011)	10/25/2011	6/19/2012
HAPPY TUGS <Class 41>	85,342,637 (6/9/2011)	5/14/2013	7/30/2013
SLOPPY POPPY <Class 33>	85,373,166 (7/16/2011)	2/7/2012	7/31/2012
SLOPPY BALLS <Class 43>	85,373,158 (7/16/2011)	2/7/2012	†

Applied-For Word Mark Receiving § 1052(a) Refusal <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
ROCK 'N' SANDWICHES R'N'R HOME OF THE PIZZA SANDWICH <Class 43>	85,415,963 (9/6/2011)	9/11/2012	†
SNACK BOX <Class 10>	85,458,774 (10/28/2011)	2/12/2013	4/30/2013
BOOTY <Class 10>	85,458,830 (10/28/2011)	2/12/2013	†
MUFF SPIDER <Class 10>	85,464,510 (11/4/2011)	2/12/2013	†
SLUTLOAD <Class 38>	85,484,399 (11/30/2011)	1/1/2013	3/19/2013
LAY PIPE <Class 25>	85,525,358 (1/25/2012)	5/7/2013	3/11/2014
A F S U <Class 25>	85,547,238 (2/20/2012)	1/1/2013	†
BLACK KANGO <Class 42>	85,619,830 (5/8/2012)	1/15/2013	9/10/2013
THE HANDIE <Class 10>	85,620,655 (5/9/2012)	5/21/2013	9/16/2014
PAWG <Class 41>	85,627,933 (5/17/2012)	10/23/2012	12/8/2015
FOXY BOX <Class 44>	85,668,913 (7/4/2012)	1/22/2013	4/9/2013
FOXY BOX <Class 3>	85,668,920 (7/4/2012)	1/22/2013	†

Applied-For Word Mark Receiving § 1052(a) Refusal <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
BAKED BY A NEGRO <Class 30>	85,708,593 (8/21/2012)	8/13/2013	10/29/2013
THE ORIGINAL GANG BANGERS <Class 25>	85,723,051 (9/7/2012)	3/26/2013	6/11/2013
F'D UP <Classes 25, 28>	85,762,896 (10/24/2012)	9/3/2013	3/11/2014
BACKROOM FACIALS <Class 41>	85,768,581 (10/31/2012)	11/12/2013	1/28/2014
GIRL BONER <Class 41>	85,770,192 (11/2/2012)	6/17/2014	4/7/2015
FACIAL FEST <Class 41>	85,771,170 (11/5/2012)	11/12/2013	1/28/2014
CAMOTOES <Class 25>	85,775,183 (11/8/2012)	12/10/2013	†
CANNABIS.CA <Classes 16, 44>	85,779,234 (11/14/2012)	6/13/2017	8/29/2017
FA'QUE <Class 33>	85,815,206 (1/3/2013)	6/24/2014	†
COOLIE HIGH CLOTHING COMPANY <Class 25>	85,834,638 (1/28/2013)	2/25/2014	7/15/2014
THAT'S SO GAY <Class 28>	85,876,216 (3/14/2013)	6/3/2014	9/30/2014
THAT'S SO GAY <Class 9>	85,876,233 (3/14/2013)	6/3/2014	†

Applied-For Word Mark Receiving § 1052(a) Refusal <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
COOCH <Class 9>	85,896,602 (4/5/2013)	10/1/2013	12/17/2013
#DATASS <Class 16>	85,915,438 (4/26/2013)	4/8/2014	6/24/2014
CRACKA AZZ SKATEBOARDS <Classes 25, 28>	85,927,818 (5/9/2013)	12/17/2013	8/19/2014
LEFT NUT BREWING CO. <Class 32>	85,935,569 (5/17/2013)	12/22/2015	11/14/2017
FU-C <Class 36>	85,945,468 (5/29/2013)	6/3/2014	4/14/2015
THE MIDDLE FINGER PROJECT <Classes 9, 35, 41>	85,968,620 (6/24/2013)	9/2/2014	11/18/2014
#DATASS <Classes 22, 25>	86,034,915 (8/12/2013)	4/15/2014	12/30/2014
NUT SACK DOUBLE BROWN ALE <Class 32>	86,038,803 (8/15/2013)	12/15/2015	3/1/2016
HUGE WOOD <Class 41>	86,076,522 (9/27/2013)	9/30/2014	12/16/2014
EFFÜE <Class 25>	86,164,156 (1/13/2014)	2/17/2015	†
FLIPSTOP <Classes 9, 35, 42>	86,198,426 (2/20/2014)	9/19/2017	†
COCK CONTROL <Class 41>	86,270,103 (5/2/2014)	5/5/2015	†

Applied-For Word Mark Receiving § 1052(a) Refusal <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
EFFBOMB <Class 5>	86,356,940 (8/4/2014)	10/20/2015	8/22/2017
DICK <Class 25>	86,380,071 (8/28/2014)	3/29/2016	6/14/2016
CHUCHA CAPONE'S <Classes 30, 32, 33, 43>	86,423,765 (10/14/2014)	5/17/2016	†
ARMAFUGGINGE DDON <Class 25>	86,512,620 (1/23/2015)	12/29/2015	8/2/2016
FUGAZI <Class 9>	86,517,426 (1/28/2015)	3/15/2016	5/31/2016
WONDERFUL WORLD OF BONING <Class 41>	86,539,463 (2/19/2015)	1/19/2016	4/5/2016
COCK N' KITTEN <Class 3>	86,559,304 (3/10/2015)	2/16/2016	†
TERDS <Class 30>	86,589,075 (4/7/2015)	7/26/2016	†
EFFWORDS <Class 28>	86,627,159 (5/12/2015)	11/17/2015	4/19/2016
TURKEY DICK <Class 30>	86,648,220 (6/2/2015)	6/13/2017	†
KUM KLEAN NATURAL SOAPS <Class 3>	86,675,699 (6/26/2015)	2/2/2016	†

† The application was abandoned after publication.

APPENDIX 4

All Word-Mark Applications for Marks of More than One Letter Filed From 2003 Through 2015 That Identically Matched a Mark or Term the PTO Elsewhere Determined to Be Immoral or Scandalous But that Received No § 1052(a) Immoral-or-Scandalous Refusal

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
\$#!+ <Classes 20, 25>	77,668,860 (2/12/2009)	1/5/2010	.
69 <Class 25>	78,981,098 (10/20/2004)	2/27/2007	.
69 <Classes 3, 10>	78,730,269 (10/10/2005)	6/6/2006	9/8/2009
69 <Class 25>	85,412,766 (9/1/2011)	2/7/2012	11/20/2012
69 <Class 25>	86,414,064 (10/3/2014)	3/17/2015	.
69 <Class 15>	78,502,810 (10/20/2004)	2/27/2007	.
A.N.A.L. <Class 25>	78,375,319 (2/27/2004)	1/4/2005	.
ASS <Class 9>	76,674,406 (3/22/2007)	10/14/2008	.
ASS <Class 9>	76,499,576 (3/21/2003)	1/6/2004	.
ASH-HOLE <Class 11>	86,745,394 (9/2/2015)	3/1/2016	1/3/2017
ASS <Class 25>	86,171,122 (1/21/2014)	6/3/2014	10/7/2014

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
BALL <Classes 18, 21, 25>	86,458,906 (11/19/2014)	9/1/2015	11/17/2015
BALL <Class 6>	85,090,087 (7/21/2010)	1/4/2011	3/22/2011
BALL <Class 30>	77,847,188 (10/13/2009)	3/27/2018	.
BALL <Classes 35, 39>	85,527,057 (1/27/2012)	7/10/2012	.
BALL <Class 40>	86,766,948 (9/24/2015)	3/8/2016	5/24/2016
BALL <Class 25>	85,966,576 (6/21/2013)	11/19/2013	.
BALL <Classes 40, 42>	85,853,514 (2/19/2013)	7/16/2013	10/1/2013
BALL <Class 6>	86,766,935 (9/24/2015)	3/8/2016	5/24/2016
BALL <Classes 40, 42>	85,853,519 (2/19/2013)	7/16/2013	10/1/2013
BALL <Class 14>	76,515,375 (4/24/2003)	12/30/2003	7/13/2004
BALL <Class 7>	76,621,307 (11/18/2004)	10/11/2005	5/9/2006
BALL <Class 9>	76,509,398 (4/25/2003)	12/2/2003	3/15/2005
BALL <Class 41>	77,391,723 (2/7/2008)	7/22/2008	10/7/2008
BALL <Class 25>	85,966,545 (6/21/2013)	11/19/2013	.
BALL <Classes 1, 31>	86,426,688 (10/17/2014)	5/19/2015	8/4/2015

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
BALLZACK <Class 9>	77,807,774 (8/19/2009)	6/29/2010	9/14/2010
BS <Class 25>	77,143,985 (3/29/2007)	10/2/2007	3/25/2008
BALLS <Class 35>	77,085,961 (1/18/2007)	7/3/2007	9/18/2007
BALLS <Class 16>	76,578,485 (3/1/2004)	11/30/2004	.
BALLS <Class 33>	77,777,661 (7/9/2009)	11/24/2009	4/26/2011
BALLZ <Class 16>	78,715,110 (9/17/2005)	12/19/2006	.
BALLZ <Class 43>	86,327,244 (7/2/2014)	11/18/2014	.
BALLS <Classes 16, 41>	77,468,867 (5/8/2008)	4/14/2009	10/9/2012
BALZ <Class 3>	85,888,304 (3/27/2013)	9/3/2013	.
BALLS <Class 35>	86,240,435 (4/2/2014)	4/7/2015	.
BALLZEE <Class 28>	78,373,819 (2/25/2004)	9/27/2005	12/20/2005
BALZZ <Class 28>	85,111,176 (8/19/2010)	6/28/2011	.
BALLS <Class 9>	78,219,746 (2/27/2003)	2/24/2004	8/3/2004
BALLS <Class 41>	85,071,112 (6/24/2010)	6/7/2011	8/23/2011

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
B.A.M.F. <Class 25>	78,345,314 (12/24/2003)	6/27/2006	9/19/2006
BAMF <Class 25>	85,496,386 (12/15/2011)	9/24/2013	8/12/2014
B.A.M.F. <Class 13>	86,810,199 (11/5/2015)	4/12/2016	6/28/2016
BAMF <Class 9>	76,560,985 (11/3/2003)	7/27/2004	.
BANG <Class 44>	86,569,409 (3/19/2015)	9/22/2015	12/8/2015
B·A·N·G <Class 28>	76,691,300 (7/14/2008)	12/9/2008	2/24/2009
BANG <Class 2>	85,633,227 (5/23/2012)	10/30/2012	.
BANG <Classes 9, 35, 38, 42, 45>	77,852,667 (10/20/2009)	3/30/2010	.
BANGG! <Class 25>	76,573,894 (2/4/2004)	11/16/2004	4/18/2006
BANG! <Class 3>	78,382,539 (3/11/2004)	1/25/2005	.
BANG <Class 5>	78,637,163 (5/25/2005)	2/28/2006	12/9/2008
BANG! <Class 16>	78,692,386 (8/15/2005)	5/2/2006	.
BANG <Class 9>	77,169,046 (4/30/2007)	4/13/2010	.
BANG <Class 32>	77,865,654 (11/5/2009)	10/19/2010	2/11/2014

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
B'ANG <Classes 9, 10, 16, 18, 22, 25, 40>	78,884,833 (5/16/2006)	2/19/2008	.
BANG <Class 32>	77,822,181 (9/8/2009)	3/1/2011	5/17/2011
BANG <Class 3>	77,451,882 (4/18/2008)	9/9/2008	5/3/2011
BANG <Class 33>	76,587,708 (4/19/2004)	2/7/2006	5/2/2006
BANG <Class 28>	85,180,620 (11/18/2010)	4/5/2011	11/1/2011
BANG! <Class 20>	78,350,498 (1/12/2004)	10/26/2004	9/13/2005
BANG <Class 32>	77,247,665 (8/6/2007)	1/29/2008	5/19/2009
BANG <Class 16>	86,249,534 (4/11/2014)	7/22/2014	.
BANG! <Class 41>	86,980,268 (11/4/2015)	10/18/2016	1/3/2017
BANG <Class 41>	86,249,589 (4/11/2014)	7/22/2014	.
BANG <Class 35>	85,549,329 (2/22/2012)	7/10/2012	9/25/2012
BANG <Classes 9, 34, 35>	86,598,258 (4/15/2015)	9/22/2015	3/29/2016
BANG! <Class 41>	86,980,267 (11/4/2015)	10/18/2016	1/3/2017

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
BANG <Classes 9, 35, 38, 42, 45>	77,852,338 (10/20/2009)	3/30/2010	.
BANG! <Classes 16, 28>	79,065,326 (9/24/2008)	6/2/2009	8/18/2009
BS <Class 35>	77,003,124 (9/20/2006)	6/26/2007	.
BASTARD <Class 32>	78,222,999 (3/7/2003)	7/13/2004	10/18/2005
BASTARD <Class 25>	79,975,041 (3/5/2007)	5/13/2008	7/29/2008
BASSTURD <Class 25>	85,657,509 (6/21/2012)	11/13/2012	10/8/2013
BEARD <Class 25>	85,626,166 (5/15/2012)	10/9/2012	.
BEARD <Class 3>	86,206,224 (2/27/2014)	12/30/2014	3/17/2015
BEAT IT! <Class 16>	77,605,721 (11/2/2008)	3/24/2009	.
BEAT IT <Class 25>	78,533,262 (12/15/2004)	9/13/2005	.
BEAT IT <Class 14>	78,533,232 (12/15/2004)	9/13/2005	.
BEAT IT! <Class 5>	78,451,686 (7/16/2004)	5/29/2007	8/14/2007
BEAT IT <Class 3>	85,461,456 (11/1/2011)	2/28/2012	7/17/2012
BEATIT <Class 9>	86,766,706 (9/24/2015)	2/16/2016	5/3/2016

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
BEAVER <Classes 7, 12>	77,428,521 (3/21/2008)	4/28/2009	7/14/2009
BEAVER <Class 3>	85,821,724 (1/11/2013)	1/28/2014	4/15/2014
BEAVER <Class 30>	77,925,366 (2/1/2010)	8/24/2010	11/9/2010
BEEVER <Class 3>	79,070,269 (4/21/2009)	6/8/2010	8/24/2010
BEAVER <Class 28>	85,061,745 (6/14/2010)	11/9/2010	5/24/2011
BEAVER <Classes 12, 37>	77,691,841 (3/16/2009)	6/6/2017	.
BEAVER <Class 16>	77,113,707 (2/22/2007)	7/21/2009	10/6/2009
BEAVER <Class 32>	85,016,445 (4/17/2010)	9/14/2010	3/6/2012
BEAVERBONG <Class 35>	76,514,155 (5/12/2003)	12/30/2003	1/4/2005
BIG COCKE <Class 25>	77,870,338 (11/11/2009)	2/15/2011	5/3/2011
BIG COQ <Class 33>	85,039,558 (5/15/2010)	10/19/2010	3/13/2012
BS <Class 33>	78,285,818 (8/11/2003)	9/21/2004	12/14/2004
BITCH <Class 32>	77,466,281 (5/5/2008)	9/30/2008	.
BITCH <Class 3>	78,888,670 (5/22/2006)	8/28/2007	3/25/2008

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
BITCH <Class 33>	85,683,977 (7/23/2012)	12/25/2012	.
BITCH <Class 36>	78,845,101 (3/24/2006)	11/7/2006	.
BITCH <Class 18>	85,227,441 (1/27/2011)	6/16/2015	9/29/2015
BITCH <Class 33>	78,821,582 (2/23/2006)	5/5/2009	7/21/2009
BITCH <Class 25>	77,842,390 (10/6/2009)	8/30/2011	6/4/2013
BIT@HES! <Class 16>	85,142,925 (10/1/2010)	3/15/2011	5/31/2011
BJ'S <Class 32>	85,363,576 (7/5/2011)	6/5/2012	9/15/2015
BJ'S <Class 33>	86,678,234 (6/29/2015)	11/17/2015	2/2/2016
BJ'S <Classes 29, 30, 32>	86,709,014 (7/29/2015)	5/24/2016	.
BJ'S <Class 25>	85,025,280 (4/28/2010)	10/5/2010	.
BJ'S <Class 43>	85,314,987 (5/6/2011)	9/20/2011	12/6/2011
BJ'S <Class 32>	85,830,784 (1/23/2013)	4/16/2013	7/2/2013
BJ'S <Class 43>	77,103,211 (2/8/2007)	8/7/2007	10/23/2007
BJ'S <Class 32>	86,065,901 (9/16/2013)	1/21/2014	4/8/2014
BJ'S <Classes 35, 43>	77,451,370 (4/17/2008)	9/16/2008	8/3/2010

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
BLVCK <Class 34>	85,967,785 (6/24/2013)	5/17/2016	8/2/2016
BLVCK <Class 34>	86,036,156 (8/13/2013)	5/17/2016	8/2/2016
BLAC \$ <Class 9>	85,077,829 (7/4/2010)	11/30/2010	.
BLACK <Classes 30, 35>	77,605,895 (11/3/2008)	3/24/2009	3/23/2010
BLK <Classes 35, 36>	85,555,020 (2/28/2012)	7/17/2012	5/28/2013
BLACK <Classes 35, 36, 39, 41, 42, 43, 44, 45>	77,661,119 (2/2/2009)	10/22/2013	6/10/2014
BLAC <Classes 16, 41>	86,173,621 (1/23/2014)	1/13/2015	3/31/2015
BLACK <Class 7>	76,676,013 (4/26/2007)	10/23/2007	1/8/2008
BLAK <Class 32>	78,771,559 (12/12/2005)	9/26/2006	10/30/2007
BLACCK <Classes 9, 25, 41>	78,730,094 (10/10/2005)	7/4/2006	.
BLACK <Class 33>	85,770,019 (11/2/2012)	10/15/2013	.
BLACK <Class 9>	76,528,872 (7/10/2003)	3/23/2004	9/19/2006
BLACK <Class 36>	78,275,043 (7/16/2003)	8/17/2004	11/9/2004
BLACK <Classes 6, 9, 18, 25>	79,100,176 (4/18/2011)	1/10/2012	3/27/2012

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
BLACK <Class 28>	77,445,692 (4/11/2008)	9/9/2008	11/25/2008
BLACK <Class 3>	77,461,542 (4/30/2008)	9/16/2008	1/19/2010
BLACK <Class 12>	86,098,721 (10/22/2013)	10/21/2014	8/4/2015
BLAK <Class 15>	77,534,383 (7/30/2008)	1/13/2009	12/1/2009
BLACK <Class 5>	77,671,586 (2/16/2009)	3/9/2010	5/25/2010
BLACK <Class 41>	78,943,168 (8/2/2006)	12/11/2007	2/26/2008
BLAK <Class 15>	77,648,248 (1/13/2009)	5/5/2009	4/13/2010
BLAAK <Classes 3, 18, 25>	79,060,127 (6/20/2008)	10/20/2009	1/5/2010
BLAK <Class 35>	85,670,649 (7/6/2012)	12/4/2012	2/19/2013
BLAX <Class 2>	78,334,573 (12/1/2003)	8/17/2004	6/6/2006
BLACKZ <Classes 29, 30, 31>	85,623,202 (5/11/2012)	12/18/2012	3/24/2015
BLACK'S <Class 43>	77,328,019 (11/13/2007)	4/29/2008	7/15/2008
BS <Class 20>	85,755,243 (10/16/2012)	10/15/2013	.
BLOW <Class 3>	86,021,130 (7/26/2013)	12/17/2013	.
BLO <Class 44>	77,040,010 (11/8/2006)	11/3/2009	1/19/2010

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
BLOW <Classes 35, 45>	86,233,571 (3/27/2014)	2/3/2015	.
BLOW <Class 5>	77,164,255 (4/24/2007)	10/16/2007	8/26/2008
BLOW <Class 41>	85,197,715 (12/14/2010)	6/14/2011	8/30/2011
BLO <Class 21>	77,527,717 (7/21/2008)	6/22/2010	9/7/2010
BLO <Class 3>	85,199,406 (12/16/2010)	10/11/2011	12/27/2011
BLO <Class 45>	86,570,376 (3/19/2015)	8/18/2015	11/3/2015
BLO <Classes 9, 41>	78,516,877 (11/15/2004)	10/11/2005	.
BLOW <Classes 11, 34>	85,817,921 (1/8/2013)	7/16/2013	2/11/2014
BLOW <Class 35>	86,618,883 (5/4/2015)	2/23/2016	7/11/2017
BLO <Class 25>	78,429,013 (6/2/2004)	5/10/2005	8/2/2005
BLO <Class 4>	85,339,795 (6/7/2011)	10/25/2011	.
BLOW <Class 44>	76,510,122 (4/28/2003)	1/20/2004	11/2/2004
BLOW ME <Class 35>	77,932,786 (2/10/2010)	6/22/2010	.
BLOWN <Class 42>	77,502,087 (6/18/2008)	11/11/2008	.

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
BLOWN <Class 44>	85,465,489 (11/6/2011)	4/17/2012	.
BLUE BALL <Class 32>	85,944,552 (5/29/2013)	10/8/2013	.
BLU BALL <Class 7>	85,805,689 (12/18/2012)	5/14/2013	10/22/2013
BLUE BALLZ <Class 34>	86,561,999 (3/12/2015)	8/4/2015	10/20/2015
BLUE BALLS <Class 25>	86,368,818 (8/17/2014)	3/3/2015	5/19/2015
BLUBALLS <Class 33>	78,400,343 (4/12/2004)	10/4/2005	.
BS <Class 25>	85,055,249 (6/4/2010)	11/2/2010	5/10/2011
BONA <Classes 2, 3>	77,279,164 (9/13/2007)	3/4/2008	5/20/2008
BONA <Class 20>	77,490,258 (6/4/2008)	5/5/2009	7/21/2009
BONA <Class 28>	76,525,737 (6/27/2003)	11/11/2003	.
BONE <Class 16>	76,485,120 (1/24/2003)	9/9/2003	12/2/2003
BONE <Class 41>	85,464,436 (11/4/2011)	4/17/2012	7/3/2012
B.O.N.E. <Class 13>	85,233,249 (2/3/2011)	6/21/2011	4/24/2012
BONE <Class 28>	85,485,407 (12/1/2011)	5/15/2012	7/31/2012
BONE <Class 9>	77,123,072 (3/6/2007)	12/25/2007	7/8/2008

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
BONE <Class 9>	77,921,930 (1/27/2010)	6/15/2010	.
BO KNERR <Class 5>	86,662,909 (6/15/2015)	10/6/2015	.
BONER <Class 28>	77,952,998 (3/8/2010)	6/21/2011	7/3/2012
BONER <Class 28>	78,417,864 (5/13/2004)	12/12/2006	.
BONER <Classes 25, 28>	76,535,752 (8/11/2003)	5/11/2004	8/3/2004
BONG <Class 33>	78,503,302 (10/20/2004)	8/22/2006	.
BONG <Class 43>	78,648,894 (6/12/2005)	2/28/2006	3/17/2009
BONG <Class 25>	86,436,695 (10/28/2014)	3/31/2015	.
BOOB <Class 10>	85,467,729 (11/8/2011)	5/7/2013	7/8/2014
BOOB <Classes 3, 5, 25, 35>	79,136,180 (7/10/2013)	7/7/2015	12/29/2015
BOOB <Class 25>	79,007,595 (10/25/2004)	6/10/2008	8/26/2008
BS <Class 42>	86,808,250 (11/3/2015)	4/5/2016	6/21/2016
BOY <Class 3>	86,983,198 (11/24/2015)	4/19/2016	11/7/2017
BOY <Class 3>	86,830,248 (11/24/2015)	4/19/2016	.

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
BOY <Class 3>	86,830,219 (11/24/2015)	4/19/2016	9/19/2017
BOY <Classes 14, 25>	85,946,830 (5/30/2013)	2/3/2015	4/21/2015
BOY <Class 9>	79,001,268 (11/12/2003)	3/14/2006	6/6/2006
BOY <Class 28>	77,794,128 (7/31/2009)	2/2/2010	.
BOY <Class 18>	77,260,208 (8/21/2007)	2/17/2009	5/5/2009
BRASS BALLS <Class 28>	77,923,419 (1/29/2010)	12/7/2010	.
BRASS BALLS <Class 12>	78,938,035 (7/26/2006)	3/13/2007	.
BRASS BALLS <Class 30>	77,238,369 (7/25/2007)	2/26/2008	5/13/2008
BRASS BALLS <Class 30>	76,503,065 (3/28/2003)	11/11/2003	.
BRASS BALLS <Class 12>	77,345,602 (12/6/2007)	11/25/2008	2/10/2009
BS <Class 41>	86,437,148 (10/28/2014)	10/6/2015	12/22/2015
BS <Class 28>	78,842,363 (3/21/2006)	11/7/2006	1/23/2007
BS <Classes 16, 42>	79,021,553 (4/18/2005)	1/22/2008	4/8/2008
BS <Classes 14, 18>	79,046,082 (6/21/2007)	9/9/2008	11/25/2008
BS <Class 3>	86,709,988 (7/30/2015)	12/15/2015	3/1/2016

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
BS <Class 10>	78,498,723 (10/12/2004)	2/21/2006	5/16/2006
B'S <Class 18>	78,598,167 (3/30/2005)	12/20/2005	3/14/2006
BS <Class 25>	77,787,885 (7/23/2009)	12/22/2009	.
BS <Class 26>	86,150,561 (12/22/2013)	8/19/2014	11/4/2014
BS <Class 25>	76,533,936 (7/31/2003)	3/23/2004	.
B.S. <Class 33>	85,362,554 (7/3/2011)	12/13/2011	2/28/2012
BS <Class 33>	78,276,117 (7/18/2003)	4/20/2004	1/25/2005
B.S. <Class 32>	86,169,547 (1/19/2014)	6/3/2014	.
BS <Class 25>	77,857,261 (10/26/2009)	7/20/2010	10/5/2010
BS <Class 9>	85,823,545 (1/15/2013)	6/11/2013	11/5/2013
BS <Class 35>	86,710,011 (7/30/2015)	6/21/2016	9/6/2016
B S <Class 11>	76,613,474 (9/27/2004)	9/6/2005	11/29/2005
BS <Class 25>	78,255,205 (5/28/2003)	3/2/2004	5/25/2004
BS <Class 18>	78,540,598 (12/31/2004)	11/29/2005	2/21/2006

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
BS <Class 3>	77,949,810 (3/3/2010)	12/7/2010	10/18/2011
BS <Class 43>	85,469,125 (11/10/2011)	5/1/2012	7/2/2013
BS <Class 25>	78,540,604 (12/31/2004)	11/29/2005	2/21/2006
BS <Class 7>	79,140,045 (10/21/2013)	5/20/2014	8/5/2014
BS <Class 25>	76,533,935 (7/31/2003)	3/23/2004	11/9/2004
BS <Class 25>	78,915,654 (6/23/2006)	7/24/2007	.
B:S <Class 25>	78,235,906 (4/9/2003)	12/16/2003	3/9/2004
BUD.TV <Class 38>	78,952,712 (8/15/2006)	7/24/2007	10/9/2007
BUD.TV <Class 35>	78,952,716 (8/15/2006)	7/24/2007	10/9/2007
BUD <Class 9>	86,555,400 (3/6/2015)	8/11/2015	.
BUD <Class 35>	85,421,634 (9/13/2011)	2/21/2012	.
ÜBUD <Class 35>	86,783,463 (10/9/2015)	10/25/2016	1/10/2017
BUD <Class 21>	86,407,686 (9/26/2014)	3/3/2015	.
BS <Classes 20, 24>	76,528,727 (7/9/2003)	11/23/2004	12/27/2005
BUMBUM <Class 25>	78,578,912 (3/2/2005)	12/15/2009	.

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
BUTTCRACKER <Class 8>	86,379,954 (8/28/2014)	1/27/2015	.
BUTTHOLE <Class 34>	85,611,931 (4/30/2012)	10/2/2012	6/11/2013
CABRON <Classes 30, 33>	77,195,037 (5/31/2007)	4/28/2009	12/14/2010
CABRON <Classes 32, 33>	77,530,030 (7/23/2008)	1/3/2012	10/16/2012
CABRON <Class 32>	77,978,287 (12/7/2006)	10/9/2007	12/29/2009
CABRON <Class 32>	77,059,379 (12/7/2006)	10/9/2007	12/21/2010
CACHUÁ <Classes 3, 35, 44>	86,746,759 (9/3/2015)	1/3/2017	.
CACHUÁ <Classes 3, 35, 44>	86,746,727 (9/3/2015)	1/3/2017	.
CAJONES <Class 32>	78,452,365 (7/17/2004)	9/13/2005	.
CAJONES <Class 28>	77,310,580 (10/23/2007)	3/25/2008	6/10/2008
CAK <Classes 35, 41>	85,850,796 (2/15/2013)	1/14/2014	4/1/2014
CANNABIS <Class 41>	85,865,340 (3/4/2013)	5/21/2013	1/28/2014
CANNABIS <Class 41>	85,427,784 (9/21/2011)	2/28/2012	.
CANNABIS <Class 35>	86,067,054 (9/17/2013)	4/15/2014	.

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
CANNABIS <Class 25>	86,066,960 (9/17/2013)	4/15/2014	.
CAZZO <Class 41>	79,006,168 (7/26/2004)	1/17/2006	4/11/2006
CHRIST <Class 16>	85,487,656 (12/5/2011)	1/15/2013	4/2/2013
CHRIST <Class 9>	79,157,403 (9/30/2014)	8/11/2015	10/27/2015
CHRIST <Classes 9, 11>	85,099,102 (8/3/2010)	7/26/2011	10/11/2011
CIRCLE JERKY <Class 29>	86,212,791 (3/6/2014)	8/18/2015	.
COÑO <Class 32>	78,769,624 (12/8/2005)	1/23/2007	.
KOCAINE <Class 25>	86,532,926 (2/12/2015)	6/30/2015	2/28/2017
COCAINE <Class 3>	78,820,405 (2/22/2006)	10/17/2006	.
COKAINE <Class 25>	79,029,937 (10/5/2006)	11/27/2007	2/12/2008
COCK <Class 5>	85,564,335 (3/8/2012)	7/31/2012	10/16/2012
COCKBLOCKER <Class 5>	86,640,395 (5/25/2015)	10/13/2015	.
COCKSOX <Class 25>	85,185,067 (11/24/2010)	1/24/2012	4/10/2012
COCKED & LOADED <Class 25>	77,051,851 (11/28/2006)	6/19/2007	.
COCKED & LOADED <Class 32>	85,146,710 (10/6/2010)	3/15/2011	5/31/2011

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
KOXX <Class 12>	85,172,333 (11/9/2010)	3/29/2011	6/14/2011
COCKS <Classes 6, 16, 25>	76,488,319 (2/6/2003)	6/1/2004	8/24/2004
COCKSMAN <Classes 3, 25>	86,790,866 (10/16/2015)	3/22/2016	6/7/2016
COCKTAIL <Class 9>	85,537,563 (2/8/2012)	1/29/2013	.
COCKTAIL <Class 16>	85,104,253 (8/10/2010)	7/12/2011	.
COCKTAYL <Class 3>	78,954,935 (8/17/2006)	4/10/2007	1/26/2016
COCKTAIL <Class 3>	85,337,357 (6/3/2011)	11/15/2011	4/24/2012
COCKTAIL <Class 16>	77,066,765 (12/18/2006)	5/29/2007	.
COCKTAIL <Class 24>	76,595,921 (6/4/2004)	7/26/2005	.
COCKTAIL <Class 20>	76,595,923 (6/4/2004)	5/3/2005	.
COKE <Class 16>	78,264,374 (6/19/2003)	3/9/2004	6/1/2004
COKE <Class 32>	78,509,548 (11/2/2004)	4/11/2006	7/4/2006
COKE <Class 9>	78,264,308 (6/19/2003)	3/9/2004	6/1/2004
COKE <Class 20>	78,264,397 (6/19/2003)	3/23/2004	6/15/2004

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
COKE <Class 14>	78,264,357 (6/19/2003)	3/2/2004	5/25/2004
COKE <Class 32>	77,153,712 (4/11/2007)	9/18/2007	12/4/2007
COKE <Class 11>	78,264,318 (6/19/2003)	3/2/2004	5/25/2004
COKE <Class 21>	78,264,405 (6/19/2003)	3/23/2004	6/15/2004
COKE <Class 25>	78,264,410 (6/19/2003)	3/2/2004	5/25/2004
COKE <Class 12>	78,264,345 (6/19/2003)	3/2/2004	5/25/2004
COKE <Class 6>	78,264,301 (6/19/2003)	3/2/2004	5/25/2004
COKE <Class 28>	78,264,421 (6/19/2003)	3/23/2004	6/15/2004
COKE <Class 18>	78,264,382 (6/19/2003)	3/2/2004	5/25/2004
COKE <Class 4>	78,264,295 (6/19/2003)	3/2/2004	5/25/2004
COME <Class 43>	77,100,297 (2/6/2007)	8/7/2007	.
COME <Class 16>	78,871,724 (4/27/2006)	6/26/2007	9/11/2007
COME <Class 16>	86,385,988 (9/4/2014)	2/3/2015	4/21/2015
COME TOGETHER <Class 20>	76,599,599 (6/25/2004)	6/14/2005	1/10/2006
COME TOGETHER <Class 35>	77,528,826 (7/22/2008)	2/10/2009	12/8/2009

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
COME TOGETHER <Class 16>	77,728,519 (5/4/2009)	9/22/2009	.
COME TOGETHER <Class 43>	77,728,527 (5/4/2009)	9/15/2009	.
COME TOGETHER <Class 45>	77,528,843 (7/22/2008)	2/3/2009	12/8/2009
CUM TOGETHER <Class 9>	76,528,502 (7/1/2003)	3/2/2004	5/25/2004
COME TOGETHER <Class 41>	77,528,838 (7/22/2008)	6/2/2009	12/8/2009
COME TOGETHER <Class 30>	77,728,524 (5/4/2009)	9/15/2009	.
COME TOGETHER <Class 42>	77,224,067 (7/7/2007)	12/18/2007	.
COME TOGETHER <Class 29>	77,728,522 (5/4/2009)	9/15/2009	.
COME TOGETHER <Class 9>	77,224,068 (7/7/2007)	12/18/2007	.
COME TOGETHER <Classes 25, 35>	78,599,352 (3/31/2005)	12/27/2005	.
COME TOGETHER <Class 38>	77,528,836 (7/22/2008)	2/3/2009	12/8/2009
COMETOGETHER <Class 35>	77,364,199 (1/4/2008)	1/6/2009	11/24/2009
COMFYBALLS <Class 25>	86,828,902 (11/23/2015)	5/24/2016	8/9/2016
COMING <Classes 38, 41, 42>	79,053,093 (3/20/2008)	8/5/2008	10/21/2008

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
COMING <Class 28>	77,739,067 (5/18/2009)	12/8/2009	.
CONO <Classes 9, 16, 28, 41>	85,944,086 (5/28/2013)	5/6/2014	.
CONO <Class 11>	79,172,501 (7/30/2015)	5/24/2016	8/9/2016
CONO <Class 33>	78,274,387 (7/15/2003)	4/20/2004	.
CONO <Class 30>	78,830,074 (3/6/2006)	10/17/2006	1/2/2007
COOLIE <Class 30>	76,639,970 (6/2/2005)	3/14/2006	6/6/2006
KOOLIE <Class 28>	85,560,444 (3/5/2012)	7/24/2012	5/28/2013
CRACK <Classes 9, 38, 42>	86,542,432 (2/23/2015)	8/9/2016	.
CRACK <Class 43>	86,087,644 (10/9/2013)	2/18/2014	.
CRAC <Class 9>	85,456,685 (10/26/2011)	4/3/2012	.
CRACK <Class 32>	85,953,274 (6/7/2013)	5/13/2014	.
KRACK <Class 25>	78,785,877 (1/5/2006)	7/4/2006	.
CRACK <Class 3>	77,916,042 (1/20/2010)	5/4/2010	3/1/2011
CRACKA <Class 25>	78,800,598 (1/26/2006)	4/10/2007	.
KRACKER <Class 41>	85,822,099 (1/14/2013)	6/11/2013	12/17/2013

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
CRACKER LIFE <Class 16>	85,517,045 (1/16/2012)	6/19/2012	9/4/2012
CRACKER LIFE <Class 25>	85,236,440 (2/8/2011)	6/14/2011	8/30/2011
CRAWCKERS <Class 30>	85,807,274 (12/20/2012)	5/7/2013	7/23/2013
CRAPP <Class 33>	77,713,885 (4/14/2009)	8/4/2009	.
CRAP <Class 9>	78,250,826 (5/16/2003)	2/10/2004	.
C.R.A.P. <Classes 36, 41>	86,688,324 (7/9/2015)	5/17/2016	9/27/2016
CRAP <Class 28>	85,689,315 (7/27/2012)	1/8/2013	3/26/2013
CRAP <Class 9>	77,816,249 (8/31/2009)	1/26/2010	4/13/2010
CRAQUE <Class 30>	86,392,848 (9/12/2014)	2/10/2015	4/28/2015
CREAM PIE <Class 33>	85,370,835 (7/13/2011)	7/10/2012	1/8/2013
CULO <Class 24>	85,278,900 (3/28/2011)	9/6/2011	.
CULO <Class 16>	85,278,893 (3/28/2011)	9/16/2014	.
CULO <Class 25>	85,859,321 (2/25/2013)	6/14/2016	8/30/2016
CUMMING <Classes 35, 37>	77,009,830 (9/28/2006)	8/26/2008	7/21/2009

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
DP <Class 41>	77,358,073 (12/21/2007)	5/13/2008	7/29/2008
DP <Class 14>	77,823,283 (9/9/2009)	2/2/2010	4/20/2010
DAMN! <Class 25>	77,066,071 (12/18/2006)	7/10/2007	.
DAMN! <Class 25>	76,676,970 (5/16/2007)	9/23/2008	8/25/2009
DP <Class 33>	85,897,764 (4/8/2013)	8/27/2013	11/12/2013
DTF <Class 32>	85,938,946 (5/21/2013)	10/15/2013	.
DP <Class 18>	85,132,848 (9/18/2010)	3/8/2011	8/2/2011
DP <Class 1>	86,488,293 (12/22/2014)	6/9/2015	.
DP <Class 36>	77,479,628 (5/20/2008)	10/21/2008	1/6/2009
DP <Class 45>	77,808,603 (8/19/2009)	1/19/2010	.
DP <Class 9>	86,062,873 (9/12/2013)	4/22/2014	9/30/2014
DP <Class 41>	86,062,878 (9/12/2013)	4/22/2014	9/30/2014
DP <Class 25>	85,832,226 (1/25/2013)	6/11/2013	6/24/2014
DP <Class 28>	85,825,948 (1/17/2013)	6/11/2013	.
DP <Class 6>	86,416,318 (10/6/2014)	3/17/2015	.

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
DP <Class 25>	78,669,810 (7/13/2005)	3/28/2006	5/29/2007
DP <Class 38>	78,669,831 (7/13/2005)	3/28/2006	10/30/2007
DP <Class 38>	86,445,973 (11/5/2014)	12/30/2014	3/17/2015
DP <Class 9>	78,669,707 (7/13/2005)	3/28/2006	5/6/2008
DP <Class 28>	78,669,819 (7/13/2005)	10/10/2006	8/25/2009
DP <Class 41>	78,669,838 (7/13/2005)	3/28/2006	5/29/2007
DP <Class 16>	78,669,792 (7/13/2005)	3/28/2006	11/20/2007
DP <Class 18>	78,669,800 (7/13/2005)	5/22/2007	11/4/2008
DP <Classes 36, 37>	86,343,803 (7/21/2014)	12/9/2014	2/24/2015
DICK <Class 16>	86,259,681 (4/22/2014)	9/23/2014	12/9/2014
DICK <Class 25>	78,832,298 (3/8/2006)	11/14/2006	5/19/2009
DICK <Class 8>	79,022,510 (4/27/2005)	8/7/2007	10/23/2007
D I C K <Class 3>	78,860,488 (4/12/2006)	11/21/2006	.
DICK <Class 33>	85,635,032 (5/24/2012)	10/23/2012	.

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
DICKWEAR <Classes 18, 25>	78,475,683 (8/30/2004)	8/23/2005	.
DICK'S <Class 29>	86,343,301 (7/21/2014)	12/16/2014	3/3/2015
DIKS <Class 25>	78,509,844 (11/2/2004)	10/11/2005	.
DICK'S <Class 43>	86,343,046 (7/21/2014)	12/16/2014	3/3/2015
DICK'S <Class 35>	85,414,359 (9/2/2011)	2/28/2012	5/15/2012
DICKTIONARY <Class 28>	78,300,222 (9/15/2003)	5/11/2004	11/2/2004
DIKÉ <Class 25>	77,029,601 (10/26/2006)	6/19/2007	.
DP <Class 45>	77,550,165 (8/19/2008)	1/6/2009	.
DP <Class 17>	86,517,724 (1/29/2015)	6/16/2015	9/1/2015
DIRTY HOE <Class 33>	78,377,649 (3/3/2004)	9/13/2005	12/6/2005
DP <Class 16>	85,352,239 (6/21/2011)	11/8/2011	1/24/2012
DP <Class 35>	77,623,407 (11/30/2008)	9/22/2009	12/8/2009
DO ME <Class 10>	77,783,913 (7/17/2009)	12/15/2009	3/2/2010
DO.ME <Class 42>	77,492,190 (6/5/2008)	2/3/2009	.
DO ME! <Class 21>	86,155,944 (1/2/2014)	5/13/2014	.

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
DP <Classes 30, 43>	85,526,804 (1/27/2012)	11/6/2012	1/22/2013
DP <Class 32>	78,855,002 (4/5/2006)	1/9/2007	4/22/2008
DP <Class 25>	85,826,606 (1/18/2013)	6/4/2013	4/8/2014
DP <Class 40>	86,200,747 (2/21/2014)	8/19/2014	11/4/2014
DOGGIE STYLE <Class 41>	78,459,917 (7/30/2004)	6/17/2014	.
DOGGIE STYLE <Class 32>	85,307,370 (4/28/2011)	9/13/2011	11/29/2011
DOGGIE STYLE <Classes 16, 35>	77,246,504 (8/3/2007)	1/22/2008	.
DOGGIE STYLE <Class 35>	77,806,220 (8/17/2009)	7/20/2010	11/29/2011
DOGGIE STYLE <Class 43>	78,407,627 (4/25/2004)	1/25/2005	11/29/2005
DOPE <Class 18>	77,862,126 (10/31/2009)	6/1/2010	.
DOPE <Class 14>	85,777,601 (11/13/2012)	2/26/2013	8/20/2013
DOPE <Class 34>	86,660,147 (6/11/2015)	1/31/2017	.
DOPE <Class 3>	85,846,893 (2/11/2013)	7/23/2013	.
DOPE <Class 25>	85,841,683 (2/5/2013)	7/2/2013	9/17/2013

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
DOPE <Class 35>	85,729,957 (9/15/2012)	2/19/2013	.
DOPE <Class 25>	85,375,315 (7/19/2011)	12/18/2012	6/10/2014
DOPE <Class 35>	86,083,846 (10/7/2013)	2/25/2014	5/13/2014
DOPE <Class 8>	86,686,117 (7/8/2015)	1/12/2016	3/29/2016
DOPE <Class 28>	85,763,811 (10/25/2012)	3/5/2013	5/21/2013
DOPE <Class 5>	85,107,525 (8/13/2010)	2/15/2011	.
DOPE <Classes 9, 25, 28, 35, 41>	85,926,376 (5/8/2013)	12/29/2015	.
DOPE <Class 25>	86,293,042 (5/28/2014)	10/21/2014	3/15/2016
DOPE <Class 34>	86,980,958 (6/11/2015)	1/31/2017	.
DOPE <Class 34>	86,660,157 (6/11/2015)	1/31/2017	.
DOPE <Class 25>	85,773,190 (11/6/2012)	2/26/2013	12/3/2013
DOPE <Class 41>	85,846,862 (2/11/2013)	7/23/2013	10/8/2013
DP <Class 1>	77,364,537 (1/4/2008)	5/20/2008	8/5/2008
DP <Class 7>	85,956,334 (6/11/2013)	10/1/2013	12/17/2013

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
DP <Classes 9, 35, 38, 39, 42>	77,966,352 (3/23/2010)	2/8/2011	.
DP <Class 41>	76,484,581 (1/23/2003)	9/16/2003	12/9/2003
DP <Classes 2, 3>	77,233,254 (7/19/2007)	7/22/2008	.
DP <Class 35>	77,976,424 (12/20/2006)	12/25/2007	4/28/2009
PP PARKER POE <Class 45>	77,708,600 (4/7/2009)	8/4/2009	4/13/2010
DP <Class 7>	79,069,979 (3/5/2009)	9/15/2009	12/1/2009
DP <Class 0>	76,657,266 (3/22/2006)	6/26/2007	12/29/2009
DP <Classes 9, 11>	79,152,520 (3/5/2014)	4/5/2016	6/21/2016
DP <Classes 16, 41, 45>	77,068,555 (12/20/2006)	12/25/2007	7/21/2009
DP <Class 9>	85,277,491 (3/25/2011)	11/1/2011	11/26/2013
DP <Class 29>	78,854,873 (4/5/2006)	11/14/2006	.
DP <Class 11>	79,102,496 (8/26/2011)	5/8/2012	7/24/2012
DP <Class 25>	85,927,570 (5/9/2013)	4/8/2014	11/4/2014
PP <Class 10>	76,609,284 (8/30/2004)	9/18/2007	12/4/2007

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
DP <Classes 6, 9, 25, 28>	86,836,517 (12/2/2015)	5/30/2017	8/15/2017
<DP> <Class 9>	79,108,772 (1/3/2012)	3/19/2013	6/4/2013
DP <Class 25>	86,631,293 (5/15/2015)	8/18/2015	11/3/2015
DP <Class 2>	77,233,252 (7/19/2007)	7/22/2008	7/13/2010
DP <Class 25>	86,346,259 (7/23/2014)	12/2/2014	2/17/2015
DP <Classes 35, 40, 43>	78,854,897 (4/5/2006)	8/21/2007	.
DP <Classes 20, 24>	77,216,060 (6/26/2007)	9/16/2008	12/2/2008
DP <Class 9>	85,049,684 (5/27/2010)	10/26/2010	5/31/2011
DP <Class 5>	77,523,815 (7/16/2008)	5/19/2009	.
DP <Classes 9, 11>	77,424,527 (3/18/2008)	4/28/2009	.
DP <Class 5>	78,443,319 (6/29/2004)	11/1/2005	1/24/2006
DP <Classes 9, 11>	85,074,078 (6/29/2010)	11/30/2010	2/15/2011
DP <Class 20>	76,711,055 (3/26/2012)	8/14/2012	.
DP+ <Class 9>	85,168,832 (11/4/2010)	12/6/2011	9/25/2012

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
DP <Classes 8, 25>	85,363,433 (7/5/2011)	6/12/2012	8/28/2012
DP <Class 18>	78,626,336 (5/10/2005)	4/25/2006	.
DP <Class 32>	78,854,953 (4/5/2006)	1/9/2007	4/22/2008
DP <Classes 1, 19>	79,024,196 (3/6/2006)	5/22/2007	8/7/2007
DP <Class 25>	85,750,806 (10/10/2012)	3/19/2013	6/4/2013
DTF <Class 0>	85,293,485 (4/12/2011)	7/5/2011	9/2/2014
DTF <Classes 12, 16, 17, 28>	86,009,765 (7/14/2013)	7/15/2014	.
DTF <Class 8>	77,222,281 (7/5/2007)	4/29/2008	.
DTF <Classes 6, 7, 8>	77,802,467 (8/12/2009)	6/1/2010	8/17/2010
DTF <Class 25>	85,056,754 (6/7/2010)	4/26/2011	.
DTF <Class 6>	77,202,312 (6/10/2007)	5/6/2008	.
DUMB ASS <Class 41>	85,466,394 (11/7/2011)	11/20/2012	.
DUMBASS <Classes 9, 28, 41>	77,758,157 (6/12/2009)	10/27/2009	.
DUMB ASS <Class 30>	85,103,820 (8/10/2010)	11/16/2010	2/1/2011

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
DUMBASS <Class 25>	78,874,761 (5/2/2006)	12/5/2006	10/23/2007
DUMBASS <Class 32>	77,756,279 (6/10/2009)	10/27/2009	.
DP <Class 5>	78,478,529 (9/3/2004)	8/23/2005	.
DP <Class 5>	78,976,670 (9/3/2004)	8/23/2005	4/18/2006
DP <Class 42>	78,478,535 (9/3/2004)	7/12/2005	.
DP <Class 17>	78,375,498 (2/27/2004)	11/1/2005	1/24/2006
EAT ME <Class 33>	85,522,147 (1/21/2012)	6/12/2012	.
EATME <Class 35>	85,743,052 (10/1/2012)	6/4/2013	8/19/2014
EAT ME! <Classes 25, 28>	76,514,544 (5/14/2003)	6/14/2005	.
EAT ME! <Classes 25, 29>	86,411,992 (10/1/2014)	3/17/2015	.
EAT ME! <Class 25>	85,141,044 (9/29/2010)	6/28/2011	9/13/2011
EATME <Class 30>	85,334,122 (5/31/2011)	6/12/2012	8/28/2012
EAT ME! <Class 35>	85,338,987 (6/6/2011)	3/20/2012	6/5/2012
EAT ME <Class 25>	78,352,142 (1/14/2004)	5/16/2006	8/8/2006
EAT.ME <Class 42>	77,492,159 (6/5/2008)	1/13/2009	.

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
EAT ME <Classes 30, 35, 43>	86,856,753 (12/22/2015)	5/31/2016	8/16/2016
EAT ME! <Class 21>	85,141,034 (9/29/2010)	6/28/2011	9/13/2011
EAT ME! <Class 30>	85,141,087 (9/29/2010)	3/15/2011	5/31/2011
EFFING <Class 33>	77,490,182 (6/3/2008)	8/19/2008	.
EFFING <Class 25>	85,122,954 (9/3/2010)	2/14/2012	5/1/2012
EFF <Class 36>	77,620,650 (11/24/2008)	9/22/2009	12/8/2009
EFF <Class 35>	86,713,369 (8/3/2015)	2/16/2016	5/3/2016
ERECTION <Class 32>	77,007,890 (9/26/2006)	9/18/2007	10/28/2008
ERECTUS <Classes 9, 14, 16, 25, 28, 38, 41, 42>	79,181,752 (11/10/2014)	7/4/2017	9/19/2017
F* <Class 35>	85,132,852 (9/18/2010)	2/1/2011	.
F-BOMB <Class 3>	86,122,070 (11/18/2013)	3/18/2014	.
F-BOMB <Class 9>	86,191,010 (2/11/2014)	6/17/2014	.
F-IT <Classes 25, 35>	79,130,169 (2/27/2013)	10/1/2013	12/17/2013
F K <Class 43>	86,515,910 (1/27/2015)	6/9/2015	8/25/2015

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
F-OFF! <Class 5>	78,297,653 (9/9/2003)	6/8/2004	.
F/U <Class 9>	86,266,549 (4/29/2014)	9/23/2014	.
F/U <Classes 9, 16, 25, 28, 41>	86,266,119 (4/29/2014)	9/23/2014	.
FA <Class 10>	79,030,106 (5/15/2006)	1/1/2008	3/18/2008
FA <Class 42>	86,249,672 (4/11/2014)	8/26/2014	3/24/2015
FA <Class 35>	85,970,204 (6/26/2013)	11/19/2013	6/17/2014
FA <Classes 16, 28, 35, 40, 41, 42>	79,097,702 (2/23/2011)	2/26/2013	5/14/2013
FA <Class 25>	78,306,525 (9/29/2003)	6/15/2004	.
FA <Class 25>	78,784,184 (1/3/2006)	4/24/2007	7/10/2007
FA <Classes 7, 9, 11>	79,055,885 (4/18/2008)	4/14/2009	6/30/2009
FA <Class 2>	77,736,095 (5/13/2009)	5/4/2010	.
FA <Class 35>	77,377,984 (1/22/2008)	6/3/2008	8/19/2008
FA <Class 6>	79,132,363 (5/29/2013)	3/18/2014	6/3/2014
FAÈ <Class 33>	77,093,194 (1/29/2007)	7/17/2007	10/2/2007

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
FK <Classes 12, 25>	85,514,888 (1/12/2012)	11/27/2012	2/12/2013
FK <Class 25>	86,189,858 (2/11/2014)	4/21/2015	7/7/2015
FAG <Classes 4, 7, 9, 12>	79,054,548 (7/25/2007)	10/27/2009	1/12/2010
FAG <Classes 7, 9, 12>	85,039,919 (5/17/2010)	12/13/2011	2/28/2012
PHAG <Class 25>	77,022,538 (10/17/2006)	6/3/2008	5/1/2012
FAG <Classes 4, 6, 7, 8, 9, 12, 17>	79,049,409 (5/30/2007)	6/9/2009	8/25/2009
FAIREEZ <Classes 9, 14, 16, 24, 25, 28, 41>	79,020,269 (5/2/2005)	8/1/2006	10/17/2006
FAIRY <Class 33>	77,183,926 (5/17/2007)	3/11/2008	9/30/2008
FAIRY <Class 10>	85,680,959 (7/18/2012)	12/25/2012	3/12/2013
FAK <Class 14>	85,322,250 (5/16/2011)	10/4/2011	8/21/2012
FAK <Class 7>	77,829,394 (9/18/2009)	2/23/2010	.
FK <Classes 3, 30, 33>	86,674,707 (6/25/2015)	12/22/2015	.
F.A.P. <Class 12>	85,607,284 (4/25/2012)	1/22/2013	4/9/2013

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
FK <Class 44>	85,832,586 (1/25/2013)	6/18/2013	9/3/2013
FAT COQ <Class 33>	85,039,560 (5/15/2010)	10/19/2010	3/13/2012
FCUK <Class 18>	86,518,528 (1/29/2015)	12/8/2015	10/3/2017
FCUK <Classes 14, 28, 35>	78,239,593 (4/18/2003)	3/21/2006	6/13/2006
FYM <Class 41>	85,627,522 (5/16/2012)	10/16/2012	1/1/2013
FA <Class 42>	78,946,779 (8/7/2006)	3/20/2007	6/5/2007
FING <Class 25>	85,736,863 (9/24/2012)	7/2/2013	.
FING <Class 25>	77,673,462 (2/19/2009)	6/16/2009	.
FING <Class 25>	77,674,315 (2/19/2009)	6/16/2009	.
FA <Class 25>	77,494,994 (6/10/2008)	10/14/2008	.
FA <Class 37>	86,404,327 (9/24/2014)	2/17/2015	5/5/2015
FA <Classes 9, 15>	76,580,736 (3/12/2004)	3/1/2005	.
F-IT <Class 38>	78,663,973 (7/5/2005)	6/12/2007	8/28/2007
FK <Classes 9, 18>	86,287,082 (5/20/2014)	11/10/2015	.
FK <Class 25>	85,197,804 (12/14/2010)	3/8/2011	.

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
FK <Class 7>	76,672,245 (2/5/2007)	8/7/2007	10/23/2007
FK <Class 25>	85,687,857 (7/26/2012)	1/1/2013	3/19/2013
FK <Class 40>	77,309,147 (10/19/2007)	4/1/2008	.
FK <Class 7>	79,010,120 (10/26/2004)	4/25/2006	7/18/2006
FK <Class 25>	78,659,300 (6/27/2005)	6/27/2006	9/19/2006
FK <Class 11>	78,204,228 (1/16/2003)	5/4/2004	5/29/2007
FKD <Classes 18, 25, 28>	77,750,467 (6/2/2009)	12/8/2009	6/22/2010
FKD <Classes 18, 25, 28>	77,744,582 (5/26/2009)	11/10/2009	6/1/2010
FKS <Classes 14, 40, 42>	79,099,173 (3/9/2011)	4/3/2012	6/19/2012
FA-Q <Class 34>	86,548,888 (2/27/2015)	7/28/2015	10/13/2015
FK <Class 28>	86,708,753 (7/29/2015)	2/9/2016	4/26/2016
FAP <Class 35>	78,767,952 (12/6/2005)	2/27/2007	5/15/2007
FOCKER <Class 25>	77,584,755 (10/3/2008)	3/3/2009	.
FA <Class 9>	78,458,267 (7/28/2004)	6/28/2005	9/20/2005

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
FOOK <Class 45>	77,689,173 (3/12/2009)	5/4/2010	7/20/2010
FOOK <Classes 25, 35>	85,855,783 (2/21/2013)	7/16/2013	5/27/2014
FK <Class 25>	86,654,406 (6/8/2015)	11/10/2015	.
FORK YOU <Class 43>	85,699,701 (8/9/2012)	1/15/2013	.
FORK YOU! <Class 21>	86,123,291 (11/19/2013)	6/24/2014	9/9/2014
FK <Classes 18, 26>	78,951,982 (8/15/2006)	7/24/2007	10/9/2007
FK <Class 25>	85,468,265 (11/9/2011)	10/23/2012	9/24/2013
FK <Class 7>	79,069,040 (3/23/2009)	2/23/2010	5/11/2010
FK <Classes 14, 16, 21>	85,979,873 (12/14/2012)	5/20/2014	8/5/2014
FU <Class 45>	86,689,300 (7/10/2015)	11/24/2015	.
FU <Class 25>	77,755,775 (6/9/2009)	2/26/2013	8/20/2013
F.U. <Class 33>	77,559,376 (8/29/2008)	1/20/2009	12/29/2009
FU <Class 41>	85,669,124 (7/5/2012)	6/18/2013	.
FUG <Class 25>	86,154,971 (12/31/2013)	11/18/2014	2/3/2015
FUG <Class 40>	86,368,070 (8/15/2014)	1/13/2015	3/31/2015

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
FUKU <Class 43>	86,754,659 (9/11/2015)	1/19/2016	4/5/2016
FUKU <Classes 6, 16, 21, 24, 25, 29, 30>	86,722,589 (8/12/2015)	6/28/2016	.
FUKU <Class 43>	86,561,752 (3/12/2015)	10/20/2015	1/5/2016
FUKU <Classes 9, 35>	86,566,398 (3/17/2015)	10/20/2015	.
FUKU <Class 43>	86,561,757 (3/12/2015)	10/20/2015	1/5/2016
FA <Class 35>	86,536,164 (2/16/2015)	6/23/2015	9/8/2015
FUT <Class 25>	85,095,832 (7/29/2010)	3/15/2011	.
GAY.COM <Classes 38, 41, 42, 45>	77,565,137 (9/8/2008)	10/5/2010	1/24/2012
GAY.COM <Classes 38, 41, 42, 45>	77,565,110 (9/8/2008)	10/19/2010	2/21/2012
GAY <Class 33>	85,792,086 (11/30/2012)	12/10/2013	2/25/2014
GET BLOWN <Class 35>	78,403,459 (4/16/2004)	2/1/2005	.
GET BLOWN! <Class 34>	76,660,179 (5/17/2006)	12/26/2006	.
GET OFF <Class 42>	78,207,990 (1/28/2003)	9/9/2003	4/24/2007
GET OFF <Class 2>	76,589,891 (5/3/2004)	3/15/2005	6/7/2005

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
GLORYHOLE <Class 41>	77,389,462 (2/5/2008)	6/10/2008	8/26/2008
GOOCH <Class 25>	78,311,828 (10/9/2003)	5/25/2004	.
GOOCH <Class 25>	78,221,612 (3/4/2003)	4/13/2004	.
GOOCH <Classes 18, 25>	85,645,159 (6/6/2012)	10/9/2012	8/20/2013
GREATHEAD <Class 32>	85,530,445 (1/31/2012)	6/26/2012	.
HAD <Class 14>	85,370,424 (7/13/2011)	12/6/2011	.
HAD <Class 20>	85,340,519 (6/7/2011)	7/10/2012	9/25/2012
HANDJOB <Class 28>	77,180,373 (5/14/2007)	11/6/2007	.
HARD-ON <Class 5>	77,297,066 (10/5/2007)	4/15/2008	9/9/2008
HARD-ON <Class 3>	78,972,653 (9/12/2006)	4/24/2007	.
HARD-ON <Class 3>	77,497,456 (6/12/2008)	11/4/2008	1/20/2009
HEAD <Class 3>	78,587,989 (3/15/2005)	7/4/2006	9/26/2006
HEAD <Class 43>	77,185,990 (5/21/2007)	11/6/2007	.
HEAD <Classes 9, 25, 28>	85,956,064 (6/11/2013)	10/29/2013	9/9/2014
HEAD <Classes 3, 4, 5, 35>	77,356,897 (12/20/2007)	6/30/2009	.

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
HEAD <Class 3>	79,073,551 (9/7/2009)	2/23/2010	5/11/2010
HEAD <Class 3>	79,000,605 (12/15/2003)	1/25/2005	4/19/2005
HEAD <Classes 9, 12, 14, 18, 25, 28>	77,759,877 (6/15/2009)	7/6/2010	9/21/2010
HEAD <Class 3>	76,675,295 (4/10/2007)	11/13/2007	1/29/2008
HEAD <Class 25>	86,451,153 (11/11/2014)	5/19/2015	3/22/2016
HEEB <Class 41>	78,250,619 (5/15/2003)	12/23/2003	6/29/2004
HEY DICK <Classes 9, 25>	85,832,228 (1/25/2013)	6/18/2013	9/3/2013
HO <Class 25>	79,036,500 (10/2/2006)	3/18/2008	6/3/2008
HOMO <Class 25>	86,758,765 (9/16/2015)	3/8/2016	11/22/2016
HOTBOXX <Class 9>	77,813,956 (8/27/2009)	1/19/2010	9/7/2010
HOT BOX <Class 34>	86,263,851 (4/26/2014)	10/14/2014	.
HOT BOX <Class 30>	85,291,763 (4/11/2011)	8/23/2011	11/8/2011
HOT BOX <Class 28>	78,378,019 (3/3/2004)	12/7/2004	11/15/2005
HOTBOX <Class 11>	76,494,725 (2/24/2003)	12/2/2003	.

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
HOTBOXX <Class 6>	78,530,537 (12/10/2004)	12/20/2005	.
HOTBOX <Class 11>	86,568,047 (3/18/2015)	2/16/2016	5/3/2016
HOTBOX <Classes 38, 41, 42>	85,454,447 (10/24/2011)	2/28/2012	5/15/2012
HOT BOX <Class 32>	86,717,076 (8/6/2015)	11/17/2015	2/2/2016
HOT BOX <Classes 9, 28>	77,359,661 (12/26/2007)	6/8/2010	.
HOT BOX <Class 9>	78,639,603 (5/30/2005)	10/10/2006	.
HOTBOX <Class 41>	85,730,625 (9/17/2012)	2/19/2013	5/7/2013
HOT BOX <Class 33>	85,514,766 (1/12/2012)	5/29/2012	.
HOT BOX <Class 21>	86,307,420 (6/12/2014)	6/2/2015	.
! HOTBOX ! <Class 7>	86,286,911 (5/20/2014)	10/28/2014	1/13/2015
HOUSE OF DAVID <Class 45>	77,472,261 (5/12/2008)	10/14/2008	12/30/2008
HO <Class 16>	78,350,982 (1/13/2004)	11/23/2004	2/15/2005
HTFU <Class 25>	77,321,100 (11/5/2007)	4/15/2008	.
HUMP <Classes 37, 38, 42, 45>	86,274,913 (5/7/2014)	1/20/2015	.
HUNG <Class 41>	78,897,457 (5/31/2006)	1/9/2007	3/27/2007

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
HUNG <Class 21>	77,599,097 (10/23/2008)	3/3/2009	.
HUNG <Class 37>	86,596,039 (4/13/2015)	10/13/2015	12/29/2015
HUNG <Class 41>	77,594,801 (10/17/2008)	9/8/2009	3/30/2010
HUNG <Class 16>	77,594,807 (10/17/2008)	9/8/2009	.
HUNGO <Class 9>	86,701,993 (7/23/2015)	12/15/2015	3/1/2016
HUNG <Class 18>	77,599,060 (10/23/2008)	9/8/2009	.
HUNG <Class 9>	77,594,804 (10/17/2008)	3/3/2009	1/31/2012
HUNG LIKE A M.U.L.E <Class 25>	86,384,689 (9/3/2014)	1/27/2015	8/18/2015
HUSBAND * BEATER <Class 25>	78,353,517 (1/18/2004)	12/6/2005	2/28/2006
HUYA <Classes 8, 9>	77,071,589 (12/27/2006)	6/10/2008	12/2/2008
ICE LABS <Class 30>	77,037,384 (11/6/2006)	6/5/2007	.
JAP <Class 24>	86,840,326 (12/5/2015)	10/3/2017	.
JIZZ <Class 3>	85,225,675 (1/25/2011)	5/31/2011	.
JIZZ <Class 25>	79,102,880 (8/17/2011)	10/14/2014	12/30/2014

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
JOHNSON <Class 25>	78,840,466 (3/17/2006)	4/22/2008	10/14/2008
JOHNSON <Classes 8, 9>	85,593,619 (4/10/2012)	4/2/2013	6/18/2013
JJ <Class 17>	78,607,316 (4/12/2005)	9/19/2006	12/5/2006
JOHNSON <Class 9>	78,665,257 (7/7/2005)	7/18/2006	10/10/2006
JOHNSON <Class 15>	77,020,204 (10/12/2006)	10/30/2007	1/15/2008
JOHNSON <Classes 8, 9>	85,588,686 (4/4/2012)	4/2/2013	6/18/2013
KARMIC B.S. <Class 20>	85,070,267 (6/23/2010)	11/16/2010	.
LICK ME <Class 3>	77,299,891 (10/9/2007)	8/19/2008	.
LIQ ME <Class 30>	85,397,138 (8/12/2011)	1/17/2012	.
LIQUID CHRONIC <Class 9>	85,387,860 (8/3/2011)	8/14/2012	1/29/2013
LIQUID CHRONIK <Class 33>	77,609,487 (11/7/2008)	11/20/2012	8/27/2013
LIQUID CHRONIC <Class 9>	77,168,307 (4/28/2007)	9/18/2007	.
LOVEBUTTER <Class 28>	85,064,154 (6/16/2010)	5/10/2011	.
LOVE BUTTER <Class 3>	77,082,693 (1/14/2007)	8/7/2007	10/23/2007
MF <Classes 11, 34>	85,300,496 (4/20/2011)	2/28/2012	5/15/2012

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
MF <Class 9>	85,377,843 (7/21/2011)	12/20/2011	10/16/2012
MF <Class 42>	85,377,836 (7/21/2011)	12/20/2011	10/16/2012
MF <Class 41>	85,377,839 (7/21/2011)	12/20/2011	10/16/2012
MAN WHOORE <Class 25>	77,441,291 (4/7/2008)	9/22/2009	.
MANDINGO <Class 34>	78,220,051 (2/28/2003)	5/25/2004	8/17/2004
MANDINGO <Class 10>	85,101,345 (8/5/2010)	1/18/2011	4/5/2011
MANDINGO <Class 33>	85,247,291 (2/21/2011)	6/28/2011	9/13/2011
MF <Class 14>	77,618,195 (11/20/2008)	3/31/2009	6/16/2009
MARIA JUANA <Class 25>	77,490,509 (6/4/2008)	11/11/2008	1/27/2009
MARIJUANA <Class 25>	86,613,546 (4/29/2015)	4/12/2016	.
MF <Class 35>	77,102,392 (2/8/2007)	8/7/2007	10/23/2007
MASTERBAIT <Classes 25, 28>	77,713,220 (4/14/2009)	1/5/2010	3/23/2010
MASTER-BAITS <Class 28>	78,521,085 (11/22/2004)	9/27/2005	.
MF <Class 41>	77,554,558 (8/25/2008)	1/13/2009	3/31/2009

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
MDMA <Classes 18, 24, 26>	79,181,771 (7/27/2015)	11/15/2016	1/31/2017
MDMA <Classes 9, 38, 42>	78,212,997 (2/10/2003)	4/5/2005	6/28/2005
MDMA <Class 41>	86,351,406 (7/29/2014)	1/13/2015	3/31/2015
M.D.M.A. <Class 25>	85,748,833 (10/9/2012)	3/19/2013	6/4/2013
ME VALE MADRE <Class 25>	77,700,746 (3/27/2009)	1/12/2010	3/30/2010
ME@T <Class 43>	77,665,452 (2/6/2009)	6/2/2009	.
MEAT WALLET <Classes 25, 41>	85,453,754 (10/21/2011)	6/5/2012	.
MF <Classes 6, 20>	86,285,153 (5/19/2014)	2/3/2015	7/11/2017
METH <Class 1>	79,021,033 (11/26/2005)	8/1/2006	10/17/2006
MF <Class 37>	78,631,255 (5/17/2005)	1/31/2006	2/13/2007
MF <Class 24>	76,598,511 (6/18/2004)	10/18/2005	1/10/2006
MF <Class 3>	77,261,780 (8/22/2007)	3/11/2008	2/17/2009
MF <Class 33>	85,266,640 (3/14/2011)	7/26/2011	1/10/2012
M.F. <Class 1>	79,174,113 (6/24/2015)	4/19/2016	7/5/2016
MF <Class 7>	86,405,378 (9/24/2014)	2/24/2015	11/10/2015

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
MF <Class 7>	78,770,602 (12/9/2005)	12/1/2009	2/16/2010
MF <Classes 6, 7, 40>	79,111,091 (12/7/2011)	12/11/2012	2/26/2013
MF <Class 34>	86,242,283 (4/4/2014)	8/19/2014	11/4/2014
MF <Class 3>	85,719,756 (9/4/2012)	2/5/2013	.
MF <Class 25>	86,401,476 (9/22/2014)	2/3/2015	.
MF <Class 30>	85,367,938 (7/11/2011)	1/8/2013	10/29/2013
MF <Classes 6, 7, 40>	79,111,094 (12/7/2011)	1/1/2013	3/19/2013
MF <Classes 16, 35, 38, 41>	78,847,824 (3/28/2006)	4/17/2007	9/23/2008
MF <Class 24>	79,128,495 (3/20/2013)	10/15/2013	12/31/2013
MF <Class 14>	78,622,925 (5/4/2005)	1/31/2006	4/25/2006
MF <Class 9>	85,316,230 (5/9/2011)	9/27/2011	12/13/2011
MF <Class 43>	86,134,042 (12/3/2013)	3/29/2016	1/17/2017
MF <Class 25>	85,336,759 (6/2/2011)	10/18/2011	1/3/2012
MIKE HOCK <Class 25>	86,371,057 (8/19/2014)	1/13/2015	10/27/2015

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
MIKE HOCK <Class 25>	78,689,689 (8/10/2005)	4/18/2006	9/16/2008
MILF GOLF <Class 25>	85,916,193 (4/26/2013)	12/3/2013	5/20/2014
MILK OF THE POPPY <Class 21>	85,200,475 (12/17/2010)	4/26/2011	9/24/2013
MILK OF THE POPPY <Class 25>	85,200,595 (12/17/2010)	4/26/2011	8/27/2013
MF <Class 31>	79,145,005 (1/27/2014)	1/20/2015	4/7/2015
MOFO <Class 28>	77,185,795 (5/21/2007)	11/20/2007	2/5/2008
MOFO <Class 41>	78,307,167 (9/30/2003)	11/9/2004	2/1/2005
MOFO <Class 41>	77,404,085 (2/22/2008)	1/12/2010	6/4/2013
MOFO <Class 12>	86,111,237 (11/6/2013)	3/11/2014	.
MOFO <Class 33>	85,917,204 (4/29/2013)	11/5/2013	.
MOFOS <Classes 38, 41, 42>	85,392,457 (8/8/2011)	9/4/2012	11/20/2012
MOFOS.COM <Classes 38, 41, 42>	85,392,712 (8/8/2011)	9/4/2012	11/20/2012
MOLLY <Class 35>	77,584,029 (10/2/2008)	2/17/2009	5/5/2009
MOLLY <Class 7>	85,084,747 (7/14/2010)	10/12/2010	6/21/2011
MOLIE <Class 14>	86,733,545 (8/21/2015)	8/30/2016	11/15/2016

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
MOLLY <Class 38>	78,871,549 (4/27/2006)	9/19/2006	.
MOLLY <Class 5>	85,838,057 (1/31/2013)	2/17/2015	5/5/2015
MOLLY <Classes 30, 34>	86,237,505 (3/31/2014)	7/29/2014	.
MOLLY <Class 10>	85,113,183 (8/23/2010)	4/2/2013	9/10/2013
MOLLY <Class 35>	85,605,204 (4/23/2012)	3/5/2013	5/21/2013
MF <Classes 7, 9>	79,144,044 (9/20/2013)	5/19/2015	8/4/2015
MONEY SHOT <Class 5>	78,953,082 (8/16/2006)	4/10/2007	6/26/2007
MONEY-SHOT <Class 32>	77,045,678 (11/16/2006)	7/3/2007	3/11/2008
MONEY SHOT <Class 41>	85,397,157 (8/12/2011)	11/1/2011	.
MF <Class 14>	77,602,447 (10/28/2008)	9/29/2009	.
MORPHINE <Class 25>	77,300,248 (10/10/2007)	3/25/2008	6/10/2008
MORPHINE <Class 3>	85,508,672 (1/4/2012)	5/29/2012	9/24/2013
ANNULLO TUI EFFIGIES <Class 25>	78,832,483 (3/8/2006)	10/17/2006	.
MF <Class 9>	85,136,400 (9/23/2010)	12/14/2010	3/1/2011

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
MUFF <Class 14>	85,048,326 (5/26/2010)	4/19/2011	2/21/2012
MF <Class 25>	76,509,883 (4/28/2003)	5/18/2004	7/26/2005
MF <Class 41>	85,583,764 (3/29/2012)	8/13/2013	10/29/2013
NIG <Class 25>	85,939,012 (5/22/2013)	11/12/2013	1/28/2014
NOOKIE <Class 25>	85,762,826 (10/24/2012)	7/2/2013	9/17/2013
NOOKIE <Class 33>	85,792,318 (12/1/2012)	4/30/2013	.
NUGGETS <Class 25>	78,247,841 (5/9/2003)	12/13/2005	.
NUGGETS <Class 41>	77,781,752 (7/15/2009)	5/25/2010	8/10/2010
NUGGITZ <Class 35>	85,515,692 (1/13/2012)	5/15/2012	7/31/2012
NUT SAC <Class 29>	77,663,650 (2/4/2009)	4/6/2010	.
NUTSAC <Class 18>	77,668,333 (2/11/2009)	7/7/2009	9/22/2009
NUTSACK <Class 28>	78,419,717 (5/17/2004)	4/5/2005	.
KNUTTSAK <Class 25>	78,357,883 (1/27/2004)	11/9/2004	8/1/2006
NUTSACK <Class 3>	76,696,479 (3/24/2009)	7/21/2009	7/6/2010
N.U.T.S. <Class 16>	78,774,276 (12/15/2005)	8/8/2006	6/2/2009

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
N.U.T.S <Class 41>	77,037,949 (11/6/2006)	6/5/2007	8/21/2007
NUTZZ <Classes 25, 28, 35, 41>	78,377,092 (3/2/2004)	4/18/2006	.
NUTS <Class 3>	78,741,646 (10/27/2005)	6/27/2006	5/22/2007
NUTS <Class 35>	85,018,513 (4/20/2010)	9/21/2010	12/7/2010
NUTS <Class 16>	78,278,861 (7/25/2003)	5/4/2004	4/4/2006
NUTS <Classes 8, 21>	79,148,132 (4/25/2014)	10/31/2017	1/16/2018
NUTS! <Class 9>	85,355,948 (6/24/2011)	12/6/2011	2/21/2012
NUTZ <Class 34>	86,451,391 (11/11/2014)	4/28/2015	7/14/2015
NUT'Z <Class 9>	79,097,031 (2/4/2011)	7/19/2011	10/4/2011
OINK! <Class 28>	85,725,399 (9/10/2012)	5/28/2013	4/8/2014
OINK.COM <Class 35>	85,137,460 (9/24/2010)	3/8/2011	5/24/2011
OINC <Class 41>	77,628,680 (12/8/2008)	2/2/2010	11/30/2010
OINK <Classes 36, 42>	86,134,798 (12/4/2013)	4/15/2014	10/28/2014
OINK.COM <Class 35>	85,143,000 (10/1/2010)	3/8/2011	.

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
OINK <Classes 9, 35>	85,319,478 (5/12/2011)	10/11/2011	.
OINK <Class 42>	85,319,476 (5/12/2011)	10/11/2011	.
OINK.COM <Class 35>	85,142,994 (10/1/2010)	3/15/2011	.
OINK <Class 10>	78,422,012 (5/20/2004)	2/22/2005	3/28/2006
OINK <Classes 36, 42>	86,264,462 (4/28/2014)	7/15/2014	1/6/2015
OINK.COM <Class 35>	85,143,011 (10/1/2010)	3/8/2011	.
OINK! <Class 25>	78,459,962 (7/30/2004)	6/27/2006	9/19/2006
OINK <Classes 36, 42>	86,136,046 (12/5/2013)	4/15/2014	.
OMFG <Class 25>	77,607,951 (11/5/2008)	4/21/2009	2/9/2010
DP <Class 36>	85,508,563 (1/4/2012)	11/6/2012	1/22/2013
PANAMA RED <Class 30>	78,828,914 (3/3/2006)	10/10/2006	1/30/2007
PANAMA RED <Class 43>	78,829,136 (3/3/2006)	10/10/2006	9/18/2007
PEARL <Class 11>	77,585,174 (10/3/2008)	3/3/2009	.
PEARL <Class 1>	77,056,681 (12/4/2006)	8/4/2009	.
PEARL <Class 36>	76,713,490 (2/19/2013)	1/7/2014	4/14/2015

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
PEARL <Class 21>	86,059,120 (9/9/2013)	3/18/2014	6/3/2014
PEARL <Class 5>	77,738,363 (5/15/2009)	11/23/2010	4/22/2014
PEARL <Class 9>	86,023,971 (7/30/2013)	12/24/2013	3/11/2014
PERL <Class 9>	76,629,502 (1/27/2005)	9/19/2006	12/5/2006
PEARL <Class 9>	86,609,232 (4/24/2015)	8/2/2016	10/18/2016
PEARL <Classes 16, 41>	79,090,090 (6/30/2010)	7/30/2013	10/15/2013
PEARL <Class 31>	78,460,208 (8/2/2004)	10/11/2005	.
PEARL <Class 33>	85,562,392 (3/7/2012)	9/10/2013	11/26/2013
PEARL <Class 9>	77,268,724 (8/30/2007)	7/8/2008	12/9/2008
PEARL <Class 11>	77,794,596 (7/31/2009)	12/29/2009	7/20/2010
PEARL <Class 6>	79,124,069 (10/5/2012)	8/13/2013	10/29/2013
PEARL <Class 9>	78,896,066 (5/30/2006)	12/12/2006	10/16/2007
PEARL <Classes 11, 40>	77,666,230 (2/9/2009)	5/18/2010	10/19/2010
PEARL <Class 21>	78,411,799 (5/1/2004)	10/4/2005	12/27/2005

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
PEARL <Class 12>	86,980,681 (7/2/2015)	11/17/2015	12/6/2016
PEARL <Class 9>	79,116,517 (3/13/2012)	5/14/2013	7/30/2013
PEARL <Class 5>	77,738,367 (5/15/2009)	11/23/2010	4/22/2014
PEARL <Classes 35, 39>	79,097,571 (6/28/2010)	11/1/2011	1/17/2012
PEARL <Class 9>	86,982,089 (7/2/2015)	1/17/2017	5/16/2017
PEARL <Classes 25, 28>	78,717,985 (9/21/2005)	6/6/2006	.
PEARL <Class 28>	76,634,318 (3/25/2005)	12/13/2005	3/7/2006
PEARL <Class 35>	86,681,867 (7/2/2015)	11/17/2015	.
PEARL <Class 30>	77,937,998 (2/17/2010)	9/27/2011	.
PEARL <Class 42>	85,265,339 (3/12/2011)	8/16/2011	2/7/2012
PEARL <Class 35>	78,269,552 (7/2/2003)	8/3/2004	10/26/2004
PEARL <Class 9>	85,849,601 (2/14/2013)	7/9/2013	4/29/2014
PEARL <Classes 16, 41>	76,589,259 (4/29/2004)	4/19/2005	.
PEARL <Class 37>	86,681,873 (7/2/2015)	11/24/2015	.
PEARL <Classes 7, 9>	85,344,072 (6/12/2011)	5/8/2012	12/4/2012

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
PEARL <Class 10>	76,596,658 (6/7/2004)	10/11/2005	4/8/2008
PEARL <Class 9>	85,886,263 (3/26/2013)	2/11/2014	11/25/2014
PEARL <Class 43>	77,252,919 (8/10/2007)	2/12/2008	4/29/2008
PEARL <Class 39>	86,681,879 (7/2/2015)	11/24/2015	.
PEARL <Class 16>	86,467,547 (12/1/2014)	5/12/2015	.
PURL <Classes 9, 35>	78,957,989 (8/22/2006)	4/29/2008	9/29/2009
PEARL <Class 11>	85,048,943 (5/27/2010)	11/30/2010	2/15/2011
PEARL <Class 10>	77,132,134 (3/15/2007)	4/15/2008	.
PEARL <Class 45>	86,681,887 (7/2/2015)	11/24/2015	.
PEARL <Class 8>	85,734,818 (9/21/2012)	2/26/2013	2/11/2014
PEARL <Class 9>	86,681,861 (7/2/2015)	1/17/2017	.
PEARL <Class 10>	77,715,710 (4/16/2009)	2/16/2010	.
PEARL <Class 19>	78,591,198 (3/21/2005)	12/6/2005	2/28/2006
PEARL <Class 35>	77,615,016 (11/14/2008)	3/31/2009	3/30/2010

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
PEARL <Class 31>	77,240,281 (7/27/2007)	1/29/2008	.
PEARL <Class 42>	86,681,886 (7/2/2015)	11/24/2015	.
PEARL <Classes 9, 42, 45>	85,422,980 (9/14/2011)	3/19/2013	7/8/2014
PEARL <Class 25>	79,150,341 (1/31/2014)	9/30/2014	12/16/2014
PEARL <Class 35>	78,268,316 (6/28/2003)	1/20/2004	4/13/2004
PEARL <Class 32>	77,723,495 (4/27/2009)	7/7/2009	12/22/2009
PEARL <Class 18>	85,028,275 (5/2/2010)	4/12/2011	.
PEARL <Class 1>	78,910,267 (6/16/2006)	7/17/2007	4/15/2008
PEARL <Class 10>	85,576,342 (3/21/2012)	8/28/2012	11/13/2012
PEARL <Classes 2, 16>	86,403,502 (9/23/2014)	11/1/2016	1/17/2017
PEARL <Class 7>	85,482,812 (11/29/2011)	6/12/2012	.
PIRL <Classes 38, 42, 44>	77,621,636 (11/25/2008)	6/23/2009	4/6/2010
PEARL <Class 30>	86,401,494 (9/22/2014)	2/24/2015	5/12/2015
PEARL <Classes 9, 35>	86,611,401 (4/27/2015)	9/15/2015	.
PEARL <Class 33>	78,845,424 (3/24/2006)	2/13/2007	7/10/2007

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
PEARL <Class 5>	78,906,596 (6/13/2006)	7/17/2007	6/3/2008
PEARL <Classes 6, 19>	86,416,500 (10/7/2014)	3/10/2015	7/12/2016
PEARL <Class 5>	85,885,588 (3/25/2013)	8/13/2013	10/29/2013
PEARL <Class 9>	77,904,899 (1/5/2010)	5/18/2010	10/5/2010
PEARL <Class 42>	86,981,205 (7/2/2015)	11/24/2015	5/16/2017
PEARL <Class 41>	86,681,882 (7/2/2015)	11/24/2015	.
PEARL <Class 36>	76,699,574 (9/22/2009)	3/9/2010	5/25/2010
PEARL <Class 9>	77,815,721 (8/28/2009)	1/26/2010	.
PEARL <Classes 35, 37, 39, 40, 42, 45>	77,310,501 (10/22/2007)	4/1/2008	6/17/2008
PEARL <Class 9>	78,493,624 (10/3/2004)	8/23/2005	11/15/2005
PEARL <Class 10>	85,952,131 (6/6/2013)	12/31/2013	.
PEARL <Class 12>	86,681,866 (7/2/2015)	11/17/2015	.
PEARL <Class 20>	85,634,714 (5/24/2012)	4/30/2013	7/16/2013
PEARL <Class 37>	76,713,489 (2/19/2013)	1/7/2014	10/20/2015

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
PEARL <Class 10>	77,486,730 (5/29/2008)	8/12/2008	11/29/2011
PEARL.COM <Class 35>	85,596,105 (4/12/2012)	5/7/2013	4/8/2014
PURRRL <Class 8>	85,089,487 (7/21/2010)	12/28/2010	3/15/2011
PEARL <Class 7>	86,775,195 (10/1/2015)	3/8/2016	.
PEARL <Classes 35, 37, 39, 40, 42, 45>	77,310,507 (10/22/2007)	4/1/2008	6/17/2008
PEARL <Class 11>	77,912,189 (1/14/2010)	8/17/2010	3/8/2011
PEARL <Class 36>	76,699,573 (9/22/2009)	3/9/2010	5/25/2010
PEARL NECKLACE <Class 32>	86,062,856 (9/12/2013)	2/24/2015	.
PECKERS <Class 6>	77,918,388 (1/22/2010)	6/8/2010	11/2/2010
PECKERS <Class 41>	77,182,251 (5/16/2007)	12/11/2007	.
PECKERS <Class 43>	77,403,731 (2/22/2008)	7/8/2008	.
PHUC <Class 25>	85,418,294 (9/8/2011)	3/20/2012	6/18/2013
PHUKIT <Class 25>	78,257,504 (6/3/2003)	12/28/2004	3/22/2005
PIE <Class 42>	86,229,409 (3/23/2014)	11/11/2014	1/27/2015

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
PIE <Class 9>	78,716,088 (9/19/2005)	1/12/2010	6/14/2011
PI <Class 41>	77,321,460 (11/5/2007)	7/8/2008	9/23/2008
PIE <Class 35>	76,614,590 (10/5/2004)	11/6/2007	.
P.I.E. <Class 35>	78,800,878 (1/27/2006)	9/19/2006	12/4/2007
PIE <Class 9>	85,439,233 (10/4/2011)	3/13/2012	.
PIE <Class 35>	78,577,149 (3/1/2005)	5/2/2006	7/25/2006
PIE <Classes 9, 43>	86,019,996 (7/25/2013)	5/6/2014	.
PIE <Class 41>	77,007,544 (9/26/2006)	6/17/2008	9/2/2008
PI=E <Classes 36, 41>	78,828,294 (3/3/2006)	4/3/2007	8/3/2010
PIE <Class 35>	77,171,066 (5/2/2007)	7/15/2008	9/30/2008
PYE <Class 9>	79,016,504 (7/26/2005)	5/1/2007	7/17/2007
PIE <Class 35>	86,227,702 (3/20/2014)	9/23/2014	12/9/2014
PINCHE <Class 25>	77,289,894 (9/26/2007)	2/26/2008	.
POKE <Classes 9, 38, 42, 45>	85,981,897 (12/21/2012)	5/7/2013	8/5/2014

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
POKE <Classes 35, 38, 42, 45>	78,920,328 (6/29/2006)	3/25/2008	.
POKE <Class 12>	85,014,483 (4/15/2010)	3/15/2011	11/6/2012
POKE <Class 38>	85,809,236 (12/21/2012)	5/7/2013	.
POKEHER <Class 25>	85,219,680 (1/18/2011)	5/31/2011	.
POON <Class 14>	86,443,589 (11/4/2014)	4/7/2015	6/23/2015
POON <Class 25>	77,151,170 (4/6/2007)	10/9/2007	12/25/2007
POON <Class 41>	77,081,161 (1/11/2007)	10/9/2007	12/25/2007
POOP <Class 25>	77,759,659 (6/15/2009)	10/27/2009	.
POOP <Class 34>	77,168,347 (4/28/2007)	12/4/2007	.
POOP <Class 16>	78,492,778 (10/1/2004)	9/13/2005	.
POOP! <Class 28>	86,050,014 (8/28/2013)	11/5/2013	.
POP SHOTS <Class 33>	85,541,875 (2/14/2012)	9/18/2012	.
POP SHOTZ <Class 28>	77,515,989 (7/7/2008)	12/2/2008	2/17/2009
POPSHOTS <Class 30>	78,413,644 (5/5/2004)	4/26/2005	.
POPSHOTS <Class 33>	85,612,706 (4/30/2012)	9/18/2012	.

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
PRICH <Classes 18, 25>	77,516,144 (7/7/2008)	12/2/2008	10/27/2009
PIE <Classes 35, 41>	86,627,587 (5/13/2015)	10/27/2015	1/12/2016
PULL-OUT <Class 25>	78,676,863 (7/23/2005)	4/11/2006	.
PUNANI <Class 25>	77,396,582 (2/14/2008)	1/6/2009	9/15/2009
PUSS <Class 25>	78,741,135 (10/26/2005)	6/27/2006	7/17/2007
PUSSY <Class 34>	86,758,246 (9/16/2015)	1/26/2016	.
PUSSY <Class 3>	85,262,140 (3/9/2011)	1/17/2012	4/3/2012
RACK <Class 25>	77,263,730 (8/24/2007)	2/17/2009	.
RACK <Class 41>	76,516,281 (5/22/2003)	1/20/2004	1/25/2005
RACK <Class 33>	85,463,590 (11/3/2011)	4/17/2012	.
WRACK <Class 9>	76,707,294 (4/18/2011)	9/6/2011	10/30/2012
RAK <Classes 1, 5>	77,186,360 (5/21/2007)	8/7/2007	.
RACK <Class 35>	77,942,725 (2/23/2010)	8/10/2010	10/26/2010
RAC <Class 42>	77,282,599 (9/18/2007)	3/11/2008	11/18/2008

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
RAC <Class 9>	77,537,110 (8/1/2008)	12/23/2008	.
RETARD <Class 1>	77,185,702 (5/21/2007)	10/23/2007	1/8/2008
RIDEHARD.COM <Class 45>	85,906,303 (4/17/2013)	4/15/2014	.
RIDE HARD <Class 9>	78,584,542 (3/10/2005)	11/8/2005	1/31/2006
RIDE HARD <Classes 16, 25>	78,559,467 (2/3/2005)	12/20/2005	7/11/2006
RIDE HARD <Class 14>	78,561,401 (2/5/2005)	11/1/2005	.
ROADHEAD <Class 28>	85,759,575 (10/22/2012)	4/2/2013	6/18/2013
ROD <Classes 25, 45>	86,668,054 (6/19/2015)	11/10/2015	5/2/2017
ROD <Class 9>	77,954,644 (3/9/2010)	7/27/2010	10/12/2010
ROD'S <Class 30>	77,755,059 (6/9/2009)	3/9/2010	2/15/2011
ROD'S <Class 32>	86,726,980 (8/17/2015)	1/12/2016	5/2/2017
SAC <Class 9>	76,498,516 (3/18/2003)	11/18/2003	2/10/2004
SAKK <Class 27>	85,178,079 (11/16/2010)	4/26/2011	7/12/2011
SAC <Class 20>	78,491,844 (9/29/2004)	9/20/2005	12/13/2005
SAC <Class 41>	77,636,716 (12/19/2008)	4/7/2009	.

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
SAC <Class 25>	78,786,771 (1/6/2006)	4/10/2007	.
SACK <Class 45>	86,491,912 (12/29/2014)	5/26/2015	10/13/2015
SKRU <Class 25>	78,861,474 (4/13/2006)	11/28/2006	2/13/2007
SCREW <Class 33>	76,598,834 (6/23/2004)	7/25/2006	3/27/2007
SCREW <Class 28>	77,784,088 (7/17/2009)	7/2/2013	.
SCREW <Class 16>	78,812,505 (2/10/2006)	7/31/2007	10/16/2007
SCRÜ <Class 28>	78,405,391 (4/21/2004)	2/8/2005	.
SCREW U <Class 41>	77,247,278 (8/4/2007)	2/12/2008	.
SCREW U <Class 8>	76,697,933 (6/16/2009)	1/19/2010	.
SCREW U. <Class 41>	78,264,856 (6/19/2003)	5/11/2004	.
SEX.LOL <Class 35>	86,629,038 (5/14/2015)	10/6/2015	.
SEX <Class 34>	76,512,616 (4/21/2003)	4/13/2004	7/6/2004
SEX <Class 36>	77,816,340 (8/31/2009)	2/2/2010	11/23/2010
S-EX <Class 3>	85,728,643 (9/13/2012)	2/19/2013	5/7/2013

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
SEXXX <Classes 32, 33>	77,516,519 (7/8/2008)	9/22/2009	.
SHIZNIT <Class 8>	86,525,149 (2/5/2015)	6/23/2015	4/26/2016
SHOOT <Classes 25, 28>	78,896,654 (5/31/2006)	6/17/2008	9/2/2008
SHOOT <Classes 38, 41, 42, 44>	79,038,454 (11/14/2006)	5/13/2008	7/29/2008
SHOOT <Class 9>	79,184,395 (12/10/2015)	9/20/2016	2/27/2018
SHOOT! <Class 30>	77,292,920 (10/1/2007)	1/8/2008	.
SHOOT <Class 42>	86,283,613 (5/16/2014)	10/21/2014	7/18/2017
SHOVEABITCH.COM <Class 25>	77,104,125 (2/9/2007)	8/7/2007	.
SHOVEABITCH.COM <Class 41>	77,104,184 (2/9/2007)	8/7/2007	.
SHT <Classes 9, 20>	86,359,800 (8/7/2014)	9/29/2015	12/15/2015
SHT <Class 9>	79,116,574 (3/21/2012)	4/30/2013	7/16/2013
SHT <Class 9>	78,598,132 (3/30/2005)	12/27/2005	.
69 <Classes 6, 9, 12, 14, 16, 21, 24, 25, 26>	79,182,666 (10/30/2015)	5/3/2016	7/19/2016
SKEET <Class 11>	86,288,685 (5/22/2014)	10/14/2014	6/2/2015

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
SLOPPY SECONDS <Class 30>	86,295,160 (5/29/2014)	10/21/2014	.
SL, UT <Class 25>	85,103,853 (8/10/2010)	9/6/2011	11/22/2011
SL, UT <Classes 16, 21>	85,516,498 (1/13/2012)	8/21/2012	11/6/2012
S.L.U.T.S. <Class 16>	78,774,261 (12/15/2005)	8/29/2006	9/18/2007
SLUTS <Class 9>	85,653,958 (6/17/2012)	11/13/2012	1/29/2013
S.L.U.T.S. <Class 25>	77,209,355 (6/19/2007)	10/28/2008	1/13/2009
SNATCH <Class 41>	78,696,232 (8/19/2005)	5/9/2006	11/7/2006
SNATCH <Classes 9, 35, 42, 45>	86,206,331 (2/27/2014)	11/11/2014	.
SNACHE <Class 28>	85,360,840 (6/30/2011)	6/12/2012	8/28/2012
SNATCH MAGNET <Class 41>	77,215,194 (6/26/2007)	12/4/2007	.
SHT <Class 33>	86,110,120 (11/5/2013)	4/1/2014	.
SOFA KING <Class 30>	86,826,008 (11/19/2015)	5/10/2016	7/26/2016
SPUNK <Class 45>	86,245,358 (4/8/2014)	8/26/2014	5/3/2016
SPUNK <Classes 25, 41>	77,723,181 (4/27/2009)	9/29/2009	4/6/2010

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
SPUNK <Class 5>	85,118,979 (8/30/2010)	2/15/2011	.
SPUNK <Class 5>	78,861,311 (4/13/2006)	6/12/2007	.
SPUNK <Class 1>	76,712,611 (10/11/2012)	3/26/2013	6/11/2013
SQURT! <Class 28>	85,695,123 (8/3/2012)	7/23/2013	5/20/2014
SQUIRT <Class 32>	78,354,144 (1/20/2004)	10/19/2004	1/11/2005
SQUIRT <Class 21>	76,576,624 (2/20/2004)	9/5/2006	.
SQUIRT <Class 4>	77,238,585 (7/25/2007)	7/1/2008	9/16/2008
SQUIRT <Classes 9, 42>	77,188,003 (5/23/2007)	10/9/2007	8/5/2008
SQUIRT <Class 32>	85,479,130 (11/22/2011)	5/8/2012	9/18/2012
SQUIRT <Class 5>	77,734,599 (5/12/2009)	4/20/2010	7/6/2010
SQUIRT <Class 30>	85,590,532 (4/5/2012)	11/6/2012	.
SQUIRT <Class 21>	76,603,613 (7/23/2004)	9/20/2005	12/13/2005
SQUIRT <Class 8>	85,277,061 (3/25/2011)	7/5/2011	9/20/2011
SQUIRT <Class 7>	78,486,110 (9/20/2004)	12/13/2005	.
SQUIRT <Class 30>	78,252,881 (5/21/2003)	10/18/2005	1/10/2006

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
SQUIRT <Classes 24, 28>	77,178,092 (5/10/2007)	2/26/2008	7/7/2009
SQUIRT <Class 25>	78,674,209 (7/20/2005)	4/11/2006	7/4/2006
STFU!!! <Class 33>	85,418,950 (9/9/2011)	1/17/2012	.
STFU <Class 13>	86,740,351 (8/28/2015)	1/19/2016	4/5/2016
STFU <Class 25>	85,226,902 (1/26/2011)	5/31/2011	.
STFU <Class 25>	77,794,617 (7/31/2009)	1/12/2010	.
STIFFY <Class 7>	76,688,811 (4/21/2008)	4/7/2009	6/23/2009
STIFFY <Class 5>	85,004,565 (4/1/2010)	8/24/2010	11/9/2010
STIFFY <Class 28>	85,473,834 (11/16/2011)	5/1/2012	2/5/2013
STIFFY <Class 9>	78,825,102 (2/28/2006)	6/12/2007	8/28/2007
STIFFY <Class 6>	78,296,231 (9/4/2003)	6/15/2004	6/7/2005
STIFFY <Class 8>	85,714,065 (8/27/2012)	2/19/2013	5/7/2013
STIFFY <Class 28>	85,443,682 (10/10/2011)	3/20/2012	12/11/2012
STIFFY <Class 28>	85,711,494 (8/23/2012)	2/18/2014	5/6/2014

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
STIFFY <Class 16>	77,218,039 (6/28/2007)	5/11/2010	9/11/2012
STIFFY <Class 8>	85,714,016 (8/27/2012)	2/19/2013	5/7/2013
STUFT <Class 16>	86,614,771 (4/29/2015)	9/15/2015	12/1/2015
STUFFED <Classes 35, 43>	85,540,872 (2/13/2012)	1/15/2013	4/2/2013
STUFT <Class 20>	85,735,699 (9/21/2012)	2/5/2013	4/23/2013
STUNT COCK <Class 25>	78,415,488 (5/8/2004)	7/5/2005	.
SUK <Class 10>	77,396,132 (2/13/2008)	7/29/2008	12/23/2008
SUCKIT. <Class 16>	77,296,697 (10/4/2007)	3/18/2008	3/23/2010
SUCK IT <Class 37>	77,163,940 (4/24/2007)	12/18/2007	.
SUCK IT <Class 33>	77,404,550 (2/23/2008)	9/9/2008	11/25/2008
SUX <Class 30>	78,674,371 (7/20/2005)	3/28/2006	.
SUX <Class 5>	78,674,413 (7/20/2005)	3/28/2006	.
SUXX <Class 33>	77,558,099 (8/28/2008)	8/18/2009	11/3/2009
SUPERWANG <Class 5>	85,962,120 (6/17/2013)	5/13/2014	7/29/2014
SWAMP ASS <Class 3>	86,657,500 (6/10/2015)	4/26/2016	.

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
SUYT <Class 25>	78,648,385 (6/10/2005)	2/21/2006	5/16/2006
TIT <Classes 11, 37>	85,497,106 (12/16/2011)	12/22/2015	10/11/2016
TERRIFIC TETAS <Class 25>	77,056,178 (12/4/2006)	6/26/2007	5/13/2008
THC <Class 5>	78,765,088 (12/1/2005)	8/8/2006	.
THC <Class 25>	86,562,672 (3/12/2015)	7/28/2015	11/29/2016
T.H.C. <Class 28>	86,464,911 (11/25/2014)	5/5/2015	7/21/2015
THC <Class 7>	79,018,422 (9/22/2005)	12/26/2006	7/13/2010
THE D <Class 30>	86,028,193 (8/4/2013)	12/31/2013	12/2/2014
THE D <Class 41>	85,634,349 (5/24/2012)	2/26/2013	5/14/2013
THE D <Class 41>	86,367,614 (8/15/2014)	3/24/2015	.
THE D <Classes 25, 28>	85,470,611 (11/11/2011)	5/15/2012	.
THE D <Classes 41, 43>	85,981,038 (11/11/2011)	5/15/2012	4/1/2014
THE D <Class 25>	85,654,302 (6/18/2012)	1/22/2013	4/9/2013
THE FLUFFER <Class 32>	86,766,202 (9/23/2015)	2/16/2016	5/3/2016

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
THC <Class 41>	86,526,331 (2/5/2015)	7/7/2015	9/22/2015
THE PECKERS <Class 41>	85,074,046 (6/29/2010)	11/23/2010	2/8/2011
THE SHIZNIT <Class 1>	77,954,655 (3/9/2010)	7/13/2010	.
THE SHOCKER <Class 25>	76,687,341 (3/4/2008)	6/10/2008	.
THE SHOCKER <Class 34>	86,451,373 (11/11/2014)	4/28/2015	7/14/2015
TIT <Class 25>	77,577,465 (9/24/2008)	2/17/2009	.
TITMOUSE <Class 41>	77,382,138 (1/28/2008)	6/10/2008	8/26/2008
TITZLING <Class 25>	85,496,065 (12/15/2011)	5/22/2012	9/30/2014
TITZLINGER <Class 25>	85,496,079 (12/15/2011)	5/22/2012	8/26/2014
TOTTIE <Class 25>	78,786,351 (1/6/2006)	3/13/2007	.
UCK <Class 25>	77,887,866 (12/7/2009)	4/27/2010	9/21/2010
UP AND COMING <Classes 14, 25>	77,557,115 (8/27/2008)	1/13/2009	6/8/2010
U.P. YOURS <Class 32>	86,580,969 (3/30/2015)	8/18/2015	11/3/2015
UP YOURS <Class 41>	85,424,057 (9/15/2011)	2/21/2012	5/8/2012
UP YOURS <Class 35>	86,158,873 (1/7/2014)	5/20/2014	.

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
UPYOURS <Class 38>	85,298,597 (4/19/2011)	9/20/2011	12/6/2011
VAGINA <Class 15>	85,726,658 (9/12/2012)	3/5/2013	5/21/2013
VELLHUNGWOOD CELLARS <Class 33>	78,665,764 (7/7/2005)	5/2/2006	.
WANG <Class 10>	76,549,614 (10/3/2003)	8/2/2005	10/25/2005
WEED <Classes 3, 28>	78,774,251 (12/15/2005)	2/5/2008	.
W.E.E.D. <Class 41>	85,218,400 (1/14/2011)	5/31/2011	.
WEED <Class 35>	78,272,765 (7/10/2003)	9/21/2004	12/14/2004
WEED <Class 16>	86,773,909 (9/30/2015)	10/4/2016	.
W.E.E.D. <Class 25>	85,688,696 (7/27/2012)	1/1/2013	10/20/2015
WEED <Class 34>	86,001,903 (7/3/2013)	10/28/2014	3/29/2016
WEED <Class 32>	77,519,631 (7/10/2008)	12/2/2008	.
WEED <Class 3>	86,607,024 (4/23/2015)	9/27/2016	.
WEED <Class 21>	86,588,785 (4/6/2015)	3/22/2016	4/25/2017
WETBOX <Class 34>	85,033,738 (5/9/2010)	3/22/2011	6/7/2011

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
WHORE <Class 3>	78,299,386 (9/11/2003)	6/8/2004	5/31/2005
WIENER <Class 7>	79,010,249 (2/24/2005)	6/13/2006	9/5/2006
WILLY <Classes 16, 41>	77,330,960 (11/15/2007)	4/22/2008	11/11/2008
WILLY <Class 31>	85,236,663 (2/8/2011)	7/12/2011	9/27/2011
WILLY <Class 37>	78,728,932 (10/7/2005)	6/20/2006	6/22/2010
WILLY <Class 3>	86,274,282 (5/7/2014)	1/6/2015	5/24/2016
WILLY <Class 32>	86,112,339 (11/6/2013)	4/15/2014	7/1/2014
WILLY <Class 30>	86,818,853 (11/12/2015)	8/2/2016	.
WILSON <Class 8>	78,402,918 (4/16/2004)	8/9/2005	11/1/2005
WILSON <Classes 9, 18, 24, 25, 28>	77,168,844 (4/30/2007)	10/7/2008	12/23/2008
WILSON <Class 9>	86,415,613 (10/6/2014)	1/20/2015	4/7/2015
WILLSON <Class 9>	78,402,457 (4/15/2004)	6/14/2005	6/6/2006
WILSON <Classes 9, 16, 41>	77,167,686 (4/27/2007)	3/18/2008	6/3/2008
WILSON <Classes 9, 16, 28, 41, 45>	79,049,008 (10/24/2007)	7/6/2010	9/21/2010

Applied-For Word Mark <Int'l Class>	Applied-For Word Mark Serial No. (Application Date)	Publication Date	Registration Date
W JEANS <Class 25>	78,566,187 (2/12/2005)	11/8/2005	.
WILSON <Class 2>	78,418,878 (5/14/2004)	5/31/2005	8/23/2005
WOODY <Classes 14, 18>	85,247,124 (2/20/2011)	8/9/2011	10/25/2011
WOODY <Class 28>	76,581,549 (3/15/2004)	8/9/2005	11/1/2005
WOODY <Class 25>	86,272,718 (5/6/2014)	7/21/2015	10/6/2015
WOODY <Class 12>	76,495,726 (3/3/2003)	11/18/2003	2/10/2004
W DY <Classes 9, 16, 35, 41>	77,502,181 (6/18/2008)	11/11/2008	.
WOODY <Class 8>	77,219,517 (6/29/2007)	9/22/2009	12/8/2009
WOODY <Class 28>	77,161,903 (4/20/2007)	4/29/2008	7/15/2008
WOODEE <Class 28>	78,910,509 (6/16/2006)	11/13/2007	4/7/2009
WOODY <Class 21>	85,741,506 (9/28/2012)	3/5/2013	5/21/2013
WOODI <Class 21>	86,020,169 (7/25/2013)	10/29/2013	1/14/2014

APPENDIX 5

Trademark Applications Consisting of Variations on FUCK CANCER Filed From 2003 Through 2015 That Received a § 1052(a) Immoral-or-Scandalous Refusal

Variation Receiving § 1052(a) Refusal <Int'l Class>	Serial No. (Application Date)	Publication Date	Registration Date
FUCANCER <25>	76,615,171 (10/7/2004)	.	.
F CK CANCER F C <25>	77,437,332 (4/1/2008)	.	.
F CANCER <25>	77,562,888 (9/4/2008)	.	.
FCK CANCER <25>	77,728,361 (5/4/2009)	.	.
F CK CANCER <14,25>	77,805,554 (8/16/2009)	.	.
FUCK CANCER <25,40>	77,835,941 (9/27/2009)	.	.
F CK CANCER <25>	77,851,260 (10/18/2009)	.	.
F CANCER IN THE "A" <14,25>	77,916,465 (1/21/2010)	.	.
F CANCER <25>	77,954,532 (3/9/2010)	5/31/2011	.
F CANCER <25>	77,983,618 (3/9/2010)	5/31/2011	6/10/2014
FCK CANCER FC <25>	78,959,914 (8/24/2006)	.	.
F K CANCER <25>	85,220,344 (1/18/2011)	.	.

Variation Receiving § 1052(a) Refusal <Int'l Class>	Serial No. (Application Date)	Publication Date	Registration Date
FUCK CANCER <16>	85,237,359 (2/8/2011)	.	.
FUCK CANCER <14>	85,786,337 (11/24/2012)	.	.
P.H.U.C. CANCER (PLEASE HELP US CURE CANCER) <25>	85,855,531 (2/20/2013)	.	.
F K CANCER <25>	86,016,028 (7/22/2013)	.	.
FUCANCER <25>	86,038,364 (8/14/2013)	.	.
FUKC CANCER <21,25>	86,181,814 (2/1/2014)	.	.
FUCK CANCER <25>	86,286,757 (5/20/2014)	.	.
F CK CANCER <42>	86,288,375 (5/21/2014)	.	.
FUCK CANCER <25>	86,290,011 (5/23/2014)	.	.
FU CANCER <14,25,35>	86,852,304 (12/17/2015)	.	.

NEW YORK UNIVERSITY
JOURNAL OF INTELLECTUAL PROPERTY
AND ENTERTAINMENT LAW

VOLUME 8

SPRING 2019

NUMBER 2

ESSAY: WHAT REMAINS OF FAIR USE FOR SOFTWARE
AFTER *ORACLE V. GOOGLE*?

SIMON J. FRANKEL AND ETHAN FORREST*

Two recent decisions from the Federal Circuit in the long-running litigation between Oracle and Google have upended the scope of copyright protection afforded to software. In both decisions, the court weighed in heavily on the side of strong copyright protection, even protecting the relatively functional code comprising application programming interfaces (APIs). In its most recent decision, the court found that Google's use in its Android software of certain APIs from Java was not fair use as a matter of law—notwithstanding a jury verdict of fair use. This essay focuses on how the Federal Circuit treated the four statutory fair use factors and suggests that the court's analysis, if applied by other courts, will make it very difficult for any use of software to qualify as a fair use. This is because, at every turn, the court's application of the fair use factors favors the copyright owner, creating copyright risk for any borrowing of copyright code in a new program. It remains to be seen if this approach will impact how software developers build on preexisting programs.

* Simon J. Frankel is a partner with Covington & Burling LLP in San Francisco and a lecturer-in-law at Stanford Law School. Ethan Forrest is an associate with Covington & Burling LLP in San Francisco. The authors are grateful to Sean Howell, an associate with Covington, and Rachel Dallal, a 2018 summer associate at Covington, for helpful assistance. The views expressed here are those of the authors only, and do not necessarily reflect the views of Covington & Burling LLP or any of its clients.

I.	FACTOR ONE: THE PURPOSE AND CHARACTER OF THE USE.....	314
II.	FACTOR TWO: THE NATURE OF THE WORK	317
III.	FACTOR THREE: THE AMOUNT AND SUBSTANTIALITY OF THE USE	319
IV.	FACTOR FOUR: MARKET HARM.....	320
V.	OVERALL IMPLICATIONS.....	322

The *Oracle v. Google* case involved approximately 11,500 lines of code, two tech giants, and the birth of the now-ubiquitous Android operating system.¹ The Federal Circuit’s March 2018 decision marked the culmination of two jury trials, two appeals, and years of litigation.² As the litigation lurches towards a conclusion—a damages trial remains, and Google is currently seeking Supreme Court review³—we pause to consider what the Federal Circuit’s most recent decision may mean for copyright’s fair use doctrine as applied to software.

For decades, courts have sought to achieve a careful balance between the copyright protection afforded to computer code and the functionality that computer code enables.⁴ That is, courts have recognized that although code can reflect expressive choices, it is primarily functional and constrained, at least to some degree, by the specific purposes it is designed to achieve.⁵ Consequently, courts have generally held that defendants accused of infringing software are liable only for literal copying of significant portions of underlying code.⁶

This approach to software—grounded in the primarily functional, rather than expressive, nature of most programming—has often permitted developers to build upon their predecessors’ advances, at relatively minimal risk of infringement liability. Although some in Silicon Valley support this legal landscape, crediting it

¹ *Oracle Am., Inc. v. Google L.L.C. (Oracle IV)*, 886 F.3d 1179 (Fed. Cir. 2018).

² *See Oracle Am., Inc. v. Google Inc. (Oracle II)*, 750 F.3d 1339 (Fed. Cir. 2014).

³ Petition for Writ of Certiorari, *Google L.L.C. v. Oracle Am., Inc.*, No. 18-956 (U.S. Jan. 24, 2019).

⁴ *See, e.g., Lexmark Int’l, Inc. v. Static Control Components, Inc.*, 387 F.3d 522, 535 (6th Cir. 2004) (“In ascertaining this ‘elusive boundary line’ between idea and expression, between process and non-functional expression, courts have looked to two other staples of copyright law—the doctrines of merger and scenes a faire.”).

⁵ *See, e.g., id.* at 548; *Lotus Dev. Corp. v. Borland Int’l, Inc.*, 49 F.3d 807, 815 (1st Cir. 1995), *aff’d*, 516 U.S. 233 (1996); *Comput. Assocs. Int’l, Inc. v. Altai, Inc.*, 982 F.2d 693, 709 (2d Cir. 1992).

⁶ *See, e.g., Apple Comput., Inc. v. Microsoft Corp.*, 35 F.3d 1435, 1439 (9th Cir. 1994), *cert. denied*, 513 U.S. 1184 (“When the range of protectable and unauthorized expression is narrow, the appropriate standard for illicit copying is virtual identity.”); *Comput. Assocs.*, 982 F.2d at 714–15.

with enabling the tech industry's dynamism,⁷ others criticize it for failing to adequately protect the creative efforts of rights-holders.⁸ The recent decision in *Oracle v. Google* seems primed to address the concerns of the latter group by restricting the circumstances under which the fair use defense will protect software that incorporates parts of another program, however seemingly small or functional.

The case centered on Java, a programming platform owned by Oracle but widely used throughout the tech world. In particular, the dispute involved Java's application programming interface, or API, and some of its associated software libraries.⁹ The API is the interface designed to call functions from a different piece of software, and includes a pre-programmed collection of source code packages, each designed to execute a specific function.¹⁰ APIs' function in this context is analogous to shorthand or incorporation by reference, which allow writers to call up complex or dense ideas without re-writing them every time. APIs are integral to the software industry.¹¹ Many APIs let engineers implement new code atop a pre-existing framework with which other programmers are already comfortable and familiar.¹² In other words, they provide a common foundation upon which developers can build compatible products using a mutually comprehensible language.

Oracle generally encourages the incorporation of its Java APIs into new software.¹³ Depending on the circumstances, the company may license such use, or even allow it for free.¹⁴ However, Google did not obtain a commercial license to use the Java APIs in order to develop the Android operating system or comply with

⁷ See Brief Amici Curiae of Am. Comm. for Interoperable Sys. & Comput. & Commc'ns Indus. Ass'n in Support of Appellant Connectix Corp. at 3, *Sony Comput. Entm't, Inc. v. Connectix Corp.*, 203 F.3d 596 (9th Cir. 2000) (No. 99-15852), 1999 WL 33623859, at *3 (expressing concern that providing too much copyright protection for software "would render unlawful software development processes used every day in Silicon Valley").

⁸ See Annette Hurst, *The Report of API Copyright's Death Is Greatly Exaggerated*, 31 HARV. J.L. & TECH. 491, 492–93 (2018) (arguing for a broad interpretation of when software is expressive, and thus entitled to copyright protection); Ralph Oman, *Computer Software as Copyrightable Subject Matter: Oracle v. Google, Legislative Intent, and the Scope of Rights in Digital Works*, 31 HARV. J.L. & TECH. 639, 645 (2018) (arguing that the functional nature of software code should not preclude copyright protection).

⁹ See *Oracle Am., Inc. v. Google Inc. (Oracle II)*, 750 F.3d 1339, 1348 (Fed. Cir. 2014).

¹⁰ See *id.* at 1348–50; *Oracle Am., Inc. v. Google L.L.C. (Oracle IV)*, 886 F.3d 1179, 1186–88 (Fed. Cir. 2018).

¹¹ Brief of Amici Curiae Comput. Scientists in Support of Petitioner at 13, *Oracle Am., Inc. v. Google Inc.*, 750 F.3d 1339 (Fed. Cir. 2014) (No. 14-410).

¹² See *Oracle II*, 750 F.3d at 1349.

¹³ See *Oracle IV*, 886 F.3d at 1187.

¹⁴ *Id.*

Oracle's terms for a free license.¹⁵ Confronted with the magnitude of Android's success, and harboring its own interest in preserving Java's role and relevance in the smartphone and tablet industry, Oracle sued for patent and copyright infringement.

At the initial trial in 2012, the jury split on the two claims, finding copyright infringement but no patent infringement.¹⁶ Following trial, however, the judge delivered a complete victory for Google, ruling as a matter of law that the Java APIs were not copyrightable.¹⁷ Oracle appealed the copyright claim to the Federal Circuit—which had jurisdiction because the original suit included a patent claim and the Federal Circuit has exclusive jurisdiction over all appeals from cases where the original jurisdiction was based, at least in part, on a patent claim.¹⁸ In a controversial 2014 opinion, the panel held that the Java APIs were sufficiently creative to warrant copyright protection, remanding Google's fair use defense to the district court for trial.¹⁹

The jury in the second trial found that Google's reimplementations of the APIs was fair use.²⁰ Once again, Oracle appealed. And once again, the Federal Circuit reversed,²¹ issuing an opinion that—particularly if applied beyond the facts of the Java dispute and adopted by other circuits or the Supreme Court—has the potential to significantly alter the topography of software copyright law by narrowing the applicability of fair use in cases involving code.

Much of the commentary on the decision has focused on the Federal Circuit's approach to the jury's verdict.²² The court gave strikingly little deference to that general verdict finding fair use, explaining that deference was not appropriate as to “legal facts”—only as to “historical facts.”²³ We do not address this issue beyond noting that the Federal Circuit's approach suggests that, going forward, fair use decisions will rest even more firmly in the hands of judges and not juries, giving the court's reasoning additional weight.

¹⁵ *Id.*

¹⁶ Oracle Am., Inc. v. Google Inc. (*Oracle I*), 872 F. Supp. 2d 974, 976 (N.D. Cal. 2012).

¹⁷ *See id.*

¹⁸ 28 U.S.C. § 1295(a)(1) (2012).

¹⁹ Oracle Am., Inc. v. Google Inc. (*Oracle II*), 750 F.3d 1339, 1358-73 (Fed. Cir. 2014).

²⁰ *Oracle IV*, 886 F.3d at 1186.

²¹ *Id.*

²² *See, e.g.,* David Nimmer, *Juries and the Development of Fair Use Standards*, 31 HARV. J.L. & TECH. 563 (2018).

²³ *Oracle IV*, 886 F.3d at 1192–96.

Accordingly, the court's reasoning on the fair use factors is the focus here. Parts I through IV discuss the four statutory fair use factors and how the Federal Circuit interpreted them. Applying the court's logic, three of these four factors would typically—if not always—weigh against a finding of fair use in software cases, while the remaining factor would carry only minimal weight, making fair use a tough argument in most software infringement cases.²⁴ As a result, and as we explain in Part V below, technology companies interested in building new products using another company's APIs are likely to have a harder time proving that any alleged copying was fair use—and may be more reluctant to rely on fair use in their development decisions. Still, subsequent courts may view the Federal Circuit's ruling as a one-off decision, limited to its arguably unique facts and parties.

I

FACTOR ONE: THE PURPOSE AND CHARACTER OF THE USE

The Federal Circuit began its analysis of the jury verdict with the first of the four fair use factors: the purpose and character of the defendant's use.²⁵ As a first step, the court evaluated the degree to which Google's use of the Java APIs was commercial.²⁶ The more that a given use can be described as purely commercial, the more challenging it is to be ruled fair—even though many courts have held that wholly commercial uses do not necessarily negate fair use.²⁷ At trial, Android's commerciality was a disputed factual question before the jury, which heard evidence both of Android's immense success and of Google's practice of making the operating system open-source and available free of charge.²⁸ The jury apparently gave weight to these non-commercial considerations in its general verdict of fair use. Yet the Federal Circuit ultimately held that, because Google's purpose in using the APIs was fundamentally commercial—for use in phones, which are commercial

²⁴ The four non-exhaustive fair use factors as set out in 17 U.S.C. § 107 are:

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work.

²⁵ 17 U.S.C. § 107(1) (2012).

²⁶ *Oracle IV*, 886 F.3d at 1196-97.

²⁷ *See, e.g.*, *Blanch v. Koons*, 467 F.3d 244, 254 (2d Cir. 2006); *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1522 (9th Cir. 1992).

²⁸ *Oracle IV*, 886 F.3d at 1197.

products—any other “non-commercial motives [were] irrelevant as a matter of law.”²⁹

Such reasoning appears to convert the first factor’s commerciality analysis from a spectrum—where non-commercial motives might cut in favor of fair use, despite otherwise commercial features—to a binary choice. If the purpose of the use is meaningfully commercial, other mitigating considerations such as free distribution or open source code become irrelevant as a matter of law.³⁰ This poses a potentially significant hurdle for software cases, where most (if not nearly all) developers have at least partly commercial motives regardless of how freely accessible or modifiable they make their code. These motives render the developers’ software, by the Federal Circuit’s reasoning, entirely commercial. The court’s approach would therefore limit the extent to which a defendant can dispute commerciality in a software case.

The Federal Circuit’s ruling presents defendants with similar obstacles regarding the second element of the first fair use factor, which considers whether the use was “transformative.”³¹ Transformative use—a use that adds something new, altering the purpose or character of the underlying material—generally favors finding fair use.³² But when evaluating the transformative quality of a work, courts must first grapple with the question of what that work actually is. For instance, in this case, is it the original APIs themselves? Or is it the APIs as reimplemented for their new context, a novel smartphone operating system? With software, the approach to this inquiry will generally decide the outcome of the factor one analysis. After all, an API in itself only has one purpose: to let one program talk to another. But in the context of a fuller software ecosystem, an API adapted for one implementation could have very different functionality than it would adapted in another implementation.

Here, the Federal Circuit focused primarily on the purpose of the APIs themselves, rather than on the larger context of how Google had specifically incorporated the APIs into the Android operating system.³³ Google did not appropriate Java code in its entirety. Instead, Google copied key definitional aspects

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.* at 1198 (“[T]he Supreme Court has stated that the ‘central purpose’ of the first fair use factor is to determine ‘whether and to what extent the new work is transformative.’”) (quoting *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 579 (1994)).

³² *See Campbell*, 510 U.S. at 579.

³³ *Oracle IV*, 886 F.3d at 1197–1204.

of Java code including structure, sequence, and organization (SSO) for a specific purpose: clarifying which specific Java methods would be implemented.³⁴ For instance, the math declarations in Android still called up the math methods originally defined in Java, although Google had rewritten the implementation portions of those methods.³⁵ So, the “max” method in Android would find the maximum of two numbers—just as that method did in Java—but the underlying code in Android was totally different from the corresponding Java code. Even so, the court seemed to limit its focus here to *what* Google’s code did, as opposed to *how* the code was written as compared to Oracle’s code.³⁶

By focusing on APIs’ methods in themselves, divorced from the overall context in which they appear, the court may have made it difficult for almost any use of software to qualify as transformative in the fair use analysis. In a sense, all declaratory code structured in a certain way has one primary purpose—to execute the defined function. As Google argued, such code cannot both remain itself and acquire new purpose or use unless its context changes and the original method interacts with new implementations, creating something arguably new and transformative—such as a new type of operating system. But even in such a situation, the copied declaratory code retains its original purpose in a broad sense because it still orders a computer to perform the command for which it was defined. That portion of code was written to command a certain task and regardless of context will always command that task, whether in an operating system, ride-sharing app, or something else.

This is in contrast to other “functional” yet expressive works—a news photograph, for example. Speaking generally, code orders a computer to perform commands, while photographs convey information. But one’s perception of the information a photograph conveys can change significantly depending on the photograph’s use or the context of its presentation. A photograph’s expression of information could be serious in one context or parodic in another, with just a few elements changed. For example, in the Second Circuit’s 1998 opinion in *Leibovitz v. Paramount Pictures Corp.*, a movie studio Photoshopped comic actor Leslie Nielsen’s head onto the body of a naked pregnant woman, to promote the actor’s new film.³⁷ Nielsen’s head aside, the lightning and body positioning were almost identical to those elements from a famous photograph of Demi Moore, taken by

³⁴ Oracle Am., Inc. v. Google Inc. (*Oracle III*), 2016 WL 3181206, at *4–5 (N.D. Cal. June 8, 2016).

³⁵ *Id.* at *3–7.

³⁶ *Oracle IV*, 886 F.3d at 1199–1202.

³⁷ *Leibovitz v. Paramount Pictures Corp.*, 948 F. Supp. 1214, 1215 (S.D.N.Y. 1996).

portraitist Annie Leibovitz. Leibovitz sued Paramount for copyright infringement, but the court ruled the use was fair: compared to Leibovitz's serious portrait, Paramount's poster clearly parodies the original.³⁸ Placed in a new context, such works can serve entirely new purposes. They can communicate a very different message in a different context, even if the underlying work does not change much or at all.

Similarly, software can be used in different contexts to achieve different results. But under the Federal Circuit's analysis, declaratory code always has the same "purpose"—unless, in the somewhat limited example the court offered, the code is used for such a different "purpose" as "teaching how to design an API."³⁹ As the court elaborated, "merely copying the material and moving it from one platform to another without alteration is not transformative," even if the material is used in a new context that, viewed holistically, produces a new and very different work.⁴⁰ Indeed, as the court explained, the fact that "Google wrote its own implementing code [was] irrelevant" to the analysis because the underlying APIs themselves were unaltered.⁴¹

This reasoning suggests that almost any use of software code in a new context—save perhaps uses for instructional purposes—will fail the first fair use prong. At a minimum, this logic suggests that almost no use of pre-existing APIs could be transformative unless its specific function were modified in some way. But this would likely mean that the declaratory code was, to some significant degree, no longer the same code at all.

II

FACTOR TWO: THE NATURE OF THE WORK

Under the second fair use factor, a court analyzes the nature of the copyrighted work.⁴² It evaluates whether the copied material is more creative—and therefore nearer the heart of copyright protection—or more functional, informational, or factual.⁴³ Typically, fair use is "more difficult to establish" when the copied work is

³⁸ *Id.* at 1226.

³⁹ *Oracle IV*, 886 F.3d at 1201.

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² 17 U.S.C. § 107(2) (2012).

⁴³ *See Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 586 (1994).

predominantly creative, but easier to establish when the copied work is less creative.⁴⁴

In this case, the Federal Circuit recognized that the Java APIs were substantially functional, even if they “involved some level of creativity.”⁴⁵ As the Federal Circuit acknowledged, this should usually cut in favor of fair use. Presumably, the jury’s fair use verdict reflected a finding that the APIs at issue were closer to the functional end of the spectrum of creativity. But the court ultimately concluded that factor two should generally not figure significantly one way or the other in the fair use analysis, because giving significance to this factor “could effectively negate Congress’s express declaration—continuing unchanged for some forty years—that software is copyrightable.”⁴⁶

Notably, the Federal Circuit seemed to view the case as being about software generally—not about APIs in particular. Software as a category can include a range of code, from implantation code, to APIs, to simple programs, to functional but highly complex and creative programs, to abstract or purely expressive programs. But the Federal Circuit did not cabin its analysis to APIs or even extremely functional, though still protectable, programs.⁴⁷ Rather, it treated all code as software and all software as protectable, such that its particular degree of creativity should not be discounted at all in the fair use analysis.⁴⁸

Perhaps the Federal Circuit panel felt constrained by its broad 2014 ruling on protectability of APIs, making it harder for the court to draw nuanced lines between expression and functionality in its decision on fair use.⁴⁹ In any event, the court’s approach to the second factor presents a hurdle for software copyright defendants claiming fair use. Given the functional nature of much code, one might presume that this factor should nearly always favor the defendant—whether or not the factor was significant in the overall balancing of factors in a specific case. But the Federal Circuit’s approach essentially reads this factor out of the statute, rendering it at best neutral in software cases.

⁴⁴ *See id.*

⁴⁵ *Oracle IV*, 886 F.3d at 1205.

⁴⁶ *Id.*

⁴⁷ *See id.*

⁴⁸ *See id.*

⁴⁹ *See Oracle Am., Inc. v. Google Inc. (Oracle II)*, 750 F.3d 1339 (Fed. Cir. 2014).

III

FACTOR THREE: THE AMOUNT AND SUBSTANTIALITY OF THE USE

The Federal Circuit's analysis of the third fair use factor, which evaluates "the amount and substantiality of the portion used in relation to the copyrighted work as a whole,"⁵⁰ similarly seems tilted against finding fair use in cases involving software code. At trial, the jury's general verdict apparently reflected a factual determination that Google had copied a relatively small portion of the work at issue—the 37 API packages of the Java codebase.⁵¹ Although the parties had stipulated that only 170 lines of code were necessary for programmers to write in the Java language, Google had copied approximately 11,500 lines of code.⁵² But this was a tiny percentage of the roughly 5 million lines of code in Java as a whole.⁵³

The Federal Circuit, however, did not dwell on whether Google copied only a very small portion of the "copyrighted work as a whole," as the statute says.⁵⁴ In not doing so, the court's approach arguably deviates from the approach most courts have used since the Supreme Court's 1985 decision in *Harper & Row v. Nation Enterprises*, which focuses on the percentage of the whole and significance of what the defendant copied.⁵⁵ Instead, the Federal Circuit was more concerned with the fact that Google had copied certain APIs in their entirety, regardless of the fact that those APIs were a small fraction of the total number of lines of codes comprising the Java programming environment.⁵⁶ This narrow approach mirrored the court's transformative use inquiry, which considered only the copied code by itself, as opposed to in its new context. The court's approach also resulted in a similarly defendant-unfriendly finding. Because Google copied entire APIs, this factor counted against fair use even though what Google copied was not much compared to the "copyrighted work as a whole"—so long as the "work" is limited to constituent pieces of a bigger, more comprehensive, piece of software.⁵⁷

The court also stressed that the portions copied by Google could not be "qualitatively insignificant, particularly when the material copied was important to the creation of the Android platform."⁵⁸ First, this reasoning inverts the way courts

⁵⁰ 17 U.S.C. § 107(3) (2012).

⁵¹ *Oracle IV*, 886 F.3d at 1206.

⁵² *Id.*

⁵³ *Id.*

⁵⁴ 17 U.S.C. § 107(3).

⁵⁵ *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 564–66 (1985).

⁵⁶ *Oracle IV*, 886 F.3d at 1206–07.

⁵⁷ *Id.*

⁵⁸ *Id.* at 1207.

have generally approached the third factor, as it focuses on the significance of the copied material to the *defendant's* work instead of its significance to the *plaintiff's* work.⁵⁹ Second, even focusing on the significance to defendants, Google copied only 37 of the 168 APIs in the Android platform,⁶⁰ meaning even relatively small portions satisfy the significance test the Federal Circuit used. This approach seems to put a heavy thumb on the scale of the fair use analysis. Because practically any copied code will serve a function in the defendant's program, such code will usually be "important."⁶¹ Again, the Federal Circuit's approach, if followed by other courts, makes it likely that the third factor will generally favor the software copyright holder.

IV FACTOR FOUR: MARKET HARM

The fourth fair use factor considers how the defendant's work affects the market for the original, with any market harm cutting against finding fair use.⁶² This market includes potential future markets for derivative uses of the original, including unrealized works that the copyright holders or licensees may develop.⁶³ The Federal Circuit again found that this factor favored Oracle.⁶⁴

The court focused on Android's potential to harm Oracle's efforts in the smartphone industry. Although the jury's general verdict seemingly reflected agreement with Google's argument that the Java APIs' market was limited to desktop and laptop computers, Oracle pointed to evidence that it had licensed Java for use in early smartphones before Google created the more-sophisticated Android operating system.⁶⁵ The Federal Circuit was persuaded that this presented problematic market harm Oracle could have suffered. It stated that smartphones were a "traditional, reasonable, or likely to be developed market" subject to the factor four analysis.⁶⁶ It also pointed to evidence that Android was already being used as a direct substitute for Java—such as when Amazon negotiated a discounted Java licensing

⁵⁹ *See, e.g.*, *Peter Letterese & Assocs., Inc. v. World Inst. of Scientology Enters.*, 533 F.3d 1287, 1314 (11th Cir. 2008); *Consumers Union of U.S., Inc. v. Gen. Signal Corp.*, 724 F.2d 1044, 1050 (2d Cir. 1983).

⁶⁰ *Oracle Am., Inc. v. Google Inc. (Oracle II)*, 750 F.3d 1339, 1350-51 (Fed. Cir. 2014).

⁶¹ *Oracle IV*, 886 F.3d at 1207.

⁶² 17 U.S.C. § 107(4) (2012).

⁶³ *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 590 (1994); *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 568 (1985).

⁶⁴ *Oracle IV*, 886 F.3d at 1210.

⁶⁵ *Id.* at 1209.

⁶⁶ *Id.*

fee from Oracle based on Android being a free alternative.⁶⁷ This, for the court, proved actual market harm.⁶⁸

This may be the right result on the facts before it, but the Federal Circuit's broad approach can be read to suggest that functional code—if not other works—will very often be perceived as having a broad potential market. The court's reasoning appeared to be that almost *any* market where a copyrighted work, or part of it, can be used is within the “potential market” of the copyright holder.⁶⁹ As the court explained, “a market is a potential market even where the copyright owner has no immediate plans to enter it or is unsuccessful in doing so.”⁷⁰ Under this reasoning, once a copyright defendant has succeeded in a market using the plaintiff's work, that market is almost necessarily a “potential market” the plaintiff might have exploited—and has therefore lost—because of the defendant's copying. As a result, the fourth factor will usually favor the plaintiff, as it did here.

The Federal Circuit also emphasized that the two companies had previously been involved in licensing negotiations regarding the potential use of Oracle's Java software in a Google smartphone.⁷¹ Although these negotiations were unproductive, the court regarded their existence as further evidence of Oracle's longstanding interest in entering the smartphone market.⁷² While this reasoning may have a certain logic, it is also puzzling. Courts analyzing fair use have sometimes considered whether the defendant sought permission to copy the plaintiff's work, but they have usually asked this question in the context of the first factor, in looking at the character of the use.⁷³ Cautioning against taking the issue too far, the Supreme Court's decision in *Campbell v. Acuff-Rose* suggested that unsuccessfully seeking permission should not be read to show bad faith inconsistent with fair use. The Court reasoned: “[i]f the use is otherwise fair, then no permission need be sought or granted.”⁷⁴ Perhaps trying to avoid the issue, the Federal Circuit said it was not

⁶⁷ *Id.*

⁶⁸ *Id.* at 1209–10.

⁶⁹ *Id.* at 1210.

⁷⁰ *Id.* (citations omitted).

⁷¹ *Id.* at 1209.

⁷² *Id.* Notably, the negotiations did not concern the limited portions of code Google actually copied—they were about the entirety of the Java APIs, including all interfaces and implementing code. *See Oracle Am., Inc. v. Google Inc. (Oracle III)*, 2016 WL 3181206, at *11 (N.D. Cal. June 8, 2016).

⁷³ *See* Simon J. Frankel & Matt Kellogg, *Bad Faith and Fair Use*, 60 J. COPYRIGHT SOC'Y U.S. 1, 9–12 (2012).

⁷⁴ *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 585 n.18 (1994).

considering that the negotiations were unsuccessful—only that they showed “Oracle’s interest in the potential market for smartphones.”⁷⁵

This explanation arguably proves too much. Of course, there will only be litigation over fair use when licensing negotiations are unsuccessful. Otherwise, infringement claims are unlikely to arise. But the fact that a party approaches a copyright holder and seeks a license does not mean that the copyright holder—here, Oracle—necessarily has an “interest in the potential market.”⁷⁶ Most copyright holders, presented with a request to license their works for new uses, would probably be willing to at least consider negotiating. However, such willingness to negotiate does not mean the copyright holder would have exploited the market on its own. In essence, the Federal Circuit seems to have taken failed license negotiations—which *Campbell* effectively banned from consideration under the first factor—and evaluated them under the fourth factor through the guise of market harm.⁷⁷ Time will tell if other courts adopt this approach.

V

OVERALL IMPLICATIONS

The Federal Circuit’s analysis appropriately focused on the facts before the court. And it may well be that on those facts, reasonable minds could disagree about the appropriate result. But stepping back, the court’s analytical approach to the fair use factors may have the long-term effect of tilting the fair use playing field sharply against defendants in software code cases.

Perhaps most striking, the Federal Circuit’s analysis of the first fair use factor appears to make it very difficult for defendants accused of infringing API packages and their SSO to show they are using the APIs for a new and different purpose, such that it would qualify as “transformative.” Outside of some kind of teaching context, as the Federal Circuit suggested,⁷⁸ the API packages will almost always be serving the same narrow function in the defendant’s work as in the plaintiff’s, even if the overall work where the copied APIs appear or the implementation is new and different. Combined with the court’s analysis of the other three factors—which will almost always either disfavor fair use or be neutral when computer code is at issue—it is difficult to conceive of circumstances where using more than a shred of an SSO or API (other than for teaching, perhaps) can now qualify as fair.

⁷⁵ *Oracle IV*, 886 F.3d at 1209 n.14.

⁷⁶ *Id.*

⁷⁷ *Campbell*, 510 U.S. at 585 n.18.

⁷⁸ *Oracle IV*, 886 F.3d at 1201.

If this understanding of the Federal Circuit's analysis is correct, it may become harder for one developer to use another's APIs in new products. After all, one apparent result of the court's analysis is that it may now be more difficult to make a fair use of software, as compared to use of a more expressive work. If this is the opinion's practical result, *Oracle v. Google* departs from the common view that fair use should be a more accessible defense where, as with software, the disputed material is mostly functional.⁷⁹ Again, only time will tell if that is the effect of the Federal Circuit's decision—or if the decision turns out to be one largely limited to its unusual facts, regarding a discrete portion of functional code, copied to make a new and unusually successful product. It is also possible that courts will look to other copyright doctrines, such as merger or *scènes à faire*, to allow borrowing of APIs to some extent. Such doctrines may become more prominent if fair use fades. For now, however, the potential application of fair use to software appears substantially diminished, and the practical impact of the Federal Circuit's decision on software development remains to be seen.

⁷⁹ See, e.g., *Sony Comput. Entm't, Inc. v. Connectix Corp.*, 203 F.3d 596, 605 (9th Cir. 2000); *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1522 (9th Cir. 1992).

NEW YORK UNIVERSITY
JOURNAL OF INTELLECTUAL PROPERTY
AND ENTERTAINMENT LAW

VOLUME 8

SPRING 2019

NUMBER 2

I “THINK,” THEREFORE I CREATE:
CLAIMING COPYRIGHT IN THE OUTPUTS OF
ALGORITHMS

SAMANTHA FINK HEDRICK*

Artificial intelligence (AI) has often been viewed as either an ally or an adversary—a powerful analytical system to be harnessed or a source of risk to be managed. In copyright law, AI has been treated much the same way, with academic debates focused primarily on whether AI-generated works should be owned by the AI itself, the human programmer who created the AI, or the end user. However, little attention has been paid to how the use of AI in the creative process can affect the validity of ownership claims asserted by any of these human actors in computer-generated works—a question that may have a far greater impact on creative industries.

In this article, I examine whether the use of AI as a tool of creation interferes with a human’s ability to claim copyright in the resulting works. First, I identify the various human actors who could plausibly own the copyright in the creative outputs of AI and evaluate the relative merits of their claims. Second, I analyze the doctrine of authorship to determine whether the use of AI presents a barrier to any human claiming authorship in these outputs, rather than which human should own the copyright in a computer-generated work. Finally, I explain how AI operates in the creative process and the various mechanisms of control available to humans to modify these outputs.

Ultimately, I argue that the humans who create and use AI retain sufficient control over the AI’s “decisions,” and that the use of AI therefore does not constitute a barrier to human ownership of copyrightable computer-generated works. The “original intellectual conceptions” represented in computer-generated works are still those of the humans creating and controlling

* For helpful comments and conversations, I thank Shyam Balganes, Barton Beebe, Mala Chatterjee, Mariano-Florentino Cuellar, Jeanne Fromer, Jared Greenfield, Luke Hedrick, Thomas Kadri, Ari Lipsitz, Giuseppe Mazziotti, Ken Rubenstein, Jason Schultz, Scott Smolka, Christopher Sprigman, Fred von Lohmann, Ari Waldman, and Amy Whittaker. This article also benefited from feedback at the Engelberg Tri-State Region IP Workshop.

the algorithms used in the creative process, not those of the AI itself. Like a camera, AI functions merely as a tool of creation, not as a sentient “author.”

INTRODUCTION	325
I. EENY MEENY MINY MOE: WHO OWNS COMPUTER-GENERATED WORKS?	329
A. <i>I “Think,” Therefore I Am an Author: Computer as Author</i>	333
B. <i>Pygmalion: Programmer as Author</i>	337
C. <i>What Does This Button Do?: User as Author</i>	344
D. <i>You Say Tomato, I Say Tomahto: User vs. Programmer</i>	347
E. <i>The Proof Is in the Data: Data Owner as Author</i>	348
F. <i>Two Great Authors, Better Together: Joint Authorship</i>	349
G. <i>If I Can’t Have It, No One Can: Computer-Generated Works as Belonging to the Public Domain</i>	349
II. I, AUTHOR: WHAT IT TRULY MEANS TO BE AN AUTHOR	350
A. <i>What Is Creativity? Creativity, Originality, Novelty, and Intent</i>	355
B. <i>Programmed to Be Creative: Oxymoron or Truth?</i>	357
C. <i>The Gift of Creativity: Intentional Unpredictability and Randomness</i>	362
III. A JOURNEY TO THE CENTER OF THE ALGORITHM: DEMYSTIFYING THE “BLACK BOX”	366
A. <i>Peeking Behind the Curtain: Mechanisms of Control</i>	369
B. <i>It’s All Greek to Me: The “Black Box” and Explainability in Artificial Intelligence</i>	371
CONCLUSION	374

INTRODUCTION

Artificial intelligence is taking over the world.¹ Some people mean that literally and would have you believe that the reign of humans in the world is swiftly coming to a close.² Others simply mean that nearly every object we interact with in

¹ *AI Takeover*, WIKIPEDIA, http://en.wikipedia.org/wiki/AI_takeover (last visited May 16, 2018). See also Adam Rogers, *The Way The World Ends: Not With A Bang But A Paperclip*, WIRED (Oct. 21, 2017, 7:00 AM), <https://www.wired.com/story/the-way-the-world-ends-not-with-a-bang-but-a-paperclip/> (using a game by Frank Lantz as an example of how extremely intelligent AI asked to optimize a specific output could quickly run amok in its pursuit; that is, “maybe at first it does stuff that looks helpful to humanity, but in the end, it’s just going to turn us into paperclips”). Interested readers can play the paperclip game here: <http://www.decisionproblem.com/paperclips/index2.html>.

² See, e.g., Rory Cellan-Jones, *Stephen Hawking Warns Artificial Intelligence Could End Mankind*, BBC NEWS (Dec. 2, 2014), <http://www.bbc.com/news/technology-30290540>; Matt

the course of our day will soon be part of the networked universe of “smart,” internet-connected devices known as the Internet of Things.³ Wherever we currently are on this spectrum, it is unarguable that this technology is becoming increasingly prevalent and has been steadily entering new areas of our daily lives, some predictable and some surprising. For example, AI is now being used in connection with medical diagnosis,⁴ facial recognition,⁵ smart assistants,⁶ driverless cars,⁷

Chessen, *Artificial Intelligence Will Be the End of Humanity, But Not for the Reasons You Think*, MEDIUM (May 24, 2016), <https://medium.com/short-bytes/artificial-intelligence-will-be-the-end-of-humanity-but-not-for-the-reasons-you-think-482fbfa6858f>; Samuel Gibbs, *Elon Musk: Artificial Intelligence Is Our Biggest Existential Threat*, GUARDIAN (Oct. 27, 2014, 6:26 AM), <https://www.theguardian.com/technology/2014/oct/27/elon-musk-artificial-intelligence-ai-biggest-existential-threat>; TERMINATOR (Orion Pictures 1984); *Westworld: Journey into Night* (HBO television broadcast Apr. 22, 2018).

³ See, e.g., Daniel Burrus, *The Internet of Things Is Far Bigger Than Anyone Realizes*, WIRED (Nov. 2014), <https://www.wired.com/insights/2014/11/the-internet-of-things-bigger/> (discussing “smart cement” and suggesting that the Internet of Things is “going to make everything in our lives from streetlights to seaports ‘smart’”); Shane Greenstein, *The Expanding Internet of Things Creates Significant Challenges for Telecom Companies*, FORBES (Apr. 13, 2017, 1:30 PM), <https://www.forbes.com/sites/quora/2017/04/13/the-expanding-internet-of-things-creates-significant-challenges-for-telecom-companies/#75bb95b8c24e> (discussing the burden on telecommunications companies resulting from the proliferation of sensors in the Internet of Things); Scott Stephenson, *No Place Like Home: The Internet of Things and Its Promise for Consumers*, FORBES (Dec. 18, 2017, 11:41 AM), <https://www.forbes.com/sites/scottstephenson/2017/12/18/no-place-like-home-the-internet-of-things-and-its-promise-for-consumers/#66ab4fcb5fe2> (describing the existing elements of the “connected home”).

⁴ Wojciech Samek, Thomas Wiegand & Klaus-Robert Muller, *Explainable Artificial Intelligence: Understanding Visualizing and Interpreting Deep Learning Models*, ARXIV (Aug. 28, 2017), <https://arxiv.org/pdf/1708.08296.pdf>.

⁵ Tim Macuga, Austl. Ctr. for Robotic Vision, *What Is Deep Learning and How Does It Work?*, COSMOS MAG. (Aug. 24, 2017), <https://cosmosmagazine.com/technology/what-is-deep-learning-and-how-does-it-work>.

⁶ *Cortana*, MICROSOFT, <https://www.microsoft.com/en-us/AI/cortana> (last visited May 14, 2018); *What Is Deep Learning? 3 Things You Need to Know*, MATHWORKS, <https://www.mathworks.com/discovery/deep-learning.html> (last visited May 16, 2018).

⁷ MATHWORKS, *supra* note 6.

imaging historical landmarks,⁸ mastering games,⁹ weather prediction,¹⁰ online ad serving,¹¹ drafting form email responses,¹² creating music,¹³ sculptures,¹⁴ and literature,¹⁵ and even helping the blind navigate the offline, physical world.¹⁶ AI has also already been receiving tremendous scrutiny in areas like bail reform, sentencing, and employment decisions.¹⁷

⁸ Vanessa Ho, 'Heritage Activists' Preserve Global Landmarks Ruined in War, Threatened by Time, MICROSOFT (Apr. 23, 2018), https://news.microsoft.com/transform/heritage-activists-preserve-global-landmarks-ruined-in-war-threatened-by-time/?utm_source=Direct (last visited May 16, 2018).

⁹ *AlphaGo*, DEEP MIND, <https://deepmind.com/research/alphago/> (last visited May 16, 2018); *Watson*, IBM, <https://www.ibm.com/watson/> (last visited May 16, 2018); Macuga, *supra* note 5.

¹⁰ Radu Raicea, *Want to Know How Deep Learning Works? Here's a Quick Guide for Everyone.*, MEDIUM (Oct. 23, 2017), <https://medium.freecodecamp.org/want-to-know-how-deep-learning-works-heres-a-quick-guide-for-everyone-1aedca88076>.

¹¹ *See, e.g., AI-Powered Advertising: From Personalization to Hyper Relevance*, CRITEO (Mar. 12, 2019), <https://www.criteo.com/insights/hyper-relevant-ai-powered-advertising/>; Deepa Naik, *Buying Ads Online — Programmatic Advertising and AI*, MEDIUM (Jan. 9, 2019), <https://medium.com/@humansforai/buying-ads-online-programmatic-advertising-and-ai-59df20e49b85>.

¹² Tim Moynihan, *How Google's AI Auto-Magically Answers Your Emails*, WIRED (Mar. 17, 2016, 6:23 AM), <https://www.wired.com/2016/03/google-inbox-auto-answers-emails/>.

¹³ Annemarie Bridy, *The Evolution of Authorship: Work Made by Code*, 39 COLUM. J.L. & ARTS 395, 397 (2016) (discussing AARON, a music-writing AI); Will Knight, *This AI-Generated Musak Shows Us the Limit of Artificial Creativity*, MIT TECH. REV. (April 26, 2019), <https://www.technologyreview.com/s/613430/this-ai-generated-musak-shows-us-the-limit-of-artificial-creativity/>; James Vincent, *This AI-Written Pop Song Is Almost Certainly a Dire Warning for Humanity: Let's Not Rule It Out, Anyway*, VERGE (Sept. 26, 2016, 7:21 AM), <https://www.theverge.com/2016/9/26/13055938/ai-pop-song-daddys-car-sony>.

¹⁴ *See, e.g., Ben Snell, Dio*, <https://www.phillips.com/detail/BEN-SNELL/NY000219/10> (noting that the sculpture was not only designed by the AI, but also that it was made from the AI, in that the physical computer was ground up and used as a raw material in the work).

¹⁵ *See, e.g., SELMER BRINGSJORD & DAVID A. FERRUCCI, ARTIFICIAL INTELLIGENCE AND LITERARY CREATIVITY: INSIDE THE MIND OF BRUTUS, A STORYTELLING MACHINE* (1999) (discussing BRUTUS, a short-story-writing AI); Annemarie Bridy, *Coding Creativity: Copyright and the Artificially Intelligent Author*, 5 STAN. TECH. L. REV. 1, 16–18 (2012) (discussing BRUTUS).

¹⁶ Heather Kelly, *Google's Plans to Use AI to Help the Blind*, CNN (May 11, 2018, 3:13 PM), <http://money.cnn.com/2018/05/11/technology/google-lookout-app/index.html>.

¹⁷ *See, e.g., Issie Lapowsky, One State's Bail Reform Exposes the Promise and Pitfalls of Tech-Driven Justice*, WIRED (Sept. 5, 2017, 7:00 AM), <https://www.wired.com/story/bail-reform-tech-justice/>; Julia Powles, *New York City's Bold, Flawed Attempt to Make Algorithms Accountable*, NEW YORKER (Dec. 20, 2017), <https://www.newyorker.com/tech/elements/new-york-citys-bold->

As AI continues to infiltrate our daily lives more deeply, many people are understandably calling for increased transparency and accountability. That, however, has been difficult to achieve, partly due to the complexity of the technology and the public's relative inexperience with AI, and partly because these algorithms tend to be proprietary and closely guarded by the companies that create and own them. Furthermore, as AI seemingly becomes more "human," it is increasingly difficult to distinguish between works created by humans and those created by machines. Consequently, questions of ownership over works created with the aid of technology have become more difficult. While a discussion of transparency and accountability in algorithms generally is outside the scope of this article, these issues may guide how we view the claims of ownership that result from the use of such algorithms to create copyrightable works.

Previous scholarship has focused primarily on the push and pull between the claims of the AI and the claims of the humans by exploring arguments that would support a claim that the AI itself should be deemed the author of computer-generated works. In discussing the claims of the human actors, the debate has centered around which human should "win" the copyright instead. My focus in this Article is not about who the exact human author should be (from among the choices identified below). Instead, I focus on whether the interposition of an algorithm between the programmer (or user) and the output should present a barrier to that human's claim of authorship in the output. I conclude that it should not.

Control over the outputs is at the heart of this debate. Even with extremely complex deep-learning algorithms, it is the human programmers and users who write the algorithm's code, decide what kinds of outputs are desired, set the objective functions and other parameters, or otherwise play an active role in shaping the products that result from the creative processes to which AI is applied.¹⁸ These humans are exercising sufficient control such that the "original intellectual

flawed-attempt-to-make-algorithms-accountable; Christopher Bavitz & Kira Hessekiel, *Algorithms and Justice: Examining the Role of the State in the Development and Deployment of Algorithmic Technologies*, BERKMAN KLEIN CTR. FOR INTERNET & SOC'Y HARV. UNIV. (July 11, 2018), <https://cyber.harvard.edu/story/2018-07/algorithms-and-justice>; Vincent Sutherland, *With AI and Criminal Justice, the Devil Is in the Data*, ACLU (Apr. 9, 2018, 11:00 AM), <https://www.aclu.org/issues/privacy-technology/surveillance-technologies/ai-and-criminal-justice-devil-data>.

¹⁸ See, e.g., David Lehr & Paul Ohm, *Playing with the Data: What Legal Scholars Should Learn About Machine Learning*, 51 U.C. DAVIS L. REV. 653 (2017).

conceptions”¹⁹ embodied in the resulting works are truthfully those of the human, not the algorithm. Like a camera in the hands of a photographer, the AI is merely a tool of creation employed by a human with a creative vision—not a sentient being developing “original intellectual conceptions” of its own.

Part I discusses possible options for the allocation of copyright in computer-generated works—to the algorithm,²⁰ the programmer, the user, the data owner, a combination of those entities via joint ownership, or no one (i.e., the public domain)—and summarizes the arguments for and against each option. Part II discusses the doctrinal underpinnings of authorship and creativity. Part III applies the doctrine to algorithms—deep learning algorithms in particular—by delving into their operations and addressing such issues as accountability and transparency.

I

EENY MEENY MINY MOE: WHO OWNS COMPUTER-GENERATED WORKS?

As AI technology has evolved to mimic more and more human capabilities, the question of how to allocate copyright in the works these programs create has become increasingly complicated. Copyrightable, computer-generated works have long vexed scholars and legislators. As Doctor Annemarie Bridy puts it, “we know that these works would be copyrightable if they were done by people, but we don’t know what to do with them if they’re done by computers.”²¹ Both academics and non-academics generally seem willing to attribute some degree of agency, autonomy, or even intent to AI, particularly as the technology becomes more complex, less intuitively explainable, and more human-like in its abilities (or perhaps, in some situations, *less* human-like, as some AI appears to execute tasks that humans would be unable to perform).²² As a result, the interposition of an

¹⁹ *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884).

²⁰ In this Article, “AI,” “algorithm,” “program,” “computer,” and other related terms are used interchangeably. While there are clear differences among them, this Article discusses whether any of these varieties of non-human, digital tools of creation are capable of undermining a human’s claim to their outputs. For the purposes of this Article, there is no difference between them; they are all referring to code that is capable of generating a creative (and potentially copyrightable) work.

²¹ Bridy, *supra* note 13, at 400 (citing U.S. OFFICE OF TECH. ASSESSMENT, *INTELLECTUAL PROPERTY RIGHTS IN AN AGE OF ELECTRONICS AND INFORMATION* 69 (1986) [<https://perma.cc/XUV3-E979>]).

²² *Cf.* Pamela Samuelson, *Allocating Ownership Rights in Computer-Generated Works*, 47 U. PITT. L. REV. 1185, 1205 n.90 (1986) (quoting JOHN HAUGELAND, *ARTIFICIAL INTELLIGENCE: THE VERY IDEA* 4, 9-12 (1985)). Literary works and films have also invoked the idea of autonomous,

algorithm between the human “author” and the creative output feels different from the presence of a tool such as a camera or a paintbrush. The question is: Who should own the copyright in computer-generated works? There are six possible answers to this question: the AI itself,²³ the programmer,²⁴ the user,²⁵ the data owner, some combination through joint authorship,²⁶ or no one.²⁷

This debate has been raging for over fifty years, but no consensus has yet been reached. Indeed, the arguments supporting each outcome remain essentially unchanged from the beginning of the computer age. The Copyright Office was confronted with this precise dilemma as early as 1956, when it refused to register *Push Button Bertha*, a song composed by a Datatron computer, because it was not created by a human and there was no precedent for recognizing an authorship claim by a non-human.²⁸ In 1966, the Register of Copyrights explicitly noted this debate in the office’s 68th annual report, stating that:

The crucial question appears to be whether the “work” is basically one of human authorship, with the computer merely being an assisting instrument, or whether the traditional elements of authorship in the work (literary, artistic, or musical expression or elements of selection,

sentient AI, and this (for now) fictional possibility deserves some attention. *See, e.g.*, STAR WARS (Lucasfilm), HER (Warner Brothers Pictures 2013).

²³ *See, e.g.*, Bridy, *supra* note 13, at 395–401; Kalin Hristov, *Artificial Intelligence and the Copyright Dilemma*, 57 IDEA 431 (2017); Yvette Joy Liebesman, *The Wisdom of Legislating for Anticipated Technological Advancements*, 10 J. MARSHALL REV. INTELL. PROP. L. 153 (2010); Karl F. Milde, Jr., *Can a Computer Be an “Author” or an “Inventor”?*, 51 J. PAT. OFF. SOC’Y 378 (1969). But see James Grimmelmann, *There’s No Such Thing as a Computer-Authored Work - And It’s a Good Thing, Too*, 39 COLUM. J.L. & ARTS 403 (2016).

²⁴ Samuelson, *supra* note 22, at 1205–09.

²⁵ *Id.* at 1200 n.67 (quoting Stephen Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 HARV. L. REV. 281, 284–93 (1970); Ralph S. Brown, *Eligibility for Copyright Protection: A Search for Principled Standards*, 70 MINN. L. REV. 579, 596 (1985)).

²⁶ Samuelson, *supra* note 22, at 1221–24.

²⁷ Daniel Schönberger, *Deep Copyright: Up- and Downstream - Questions Related to Artificial Intelligence (AI) and Machine Learning (ML)*, 10 ZEITSCHRIFT FÜR GEISTIGES EIGENTUM (ZGE)/INTELL. PROP. J. (IPJ) 35 (2018); Samuelson, *supra* note 22, at 1224–28.

²⁸ Bridy, *supra* note 13, at 395; Alex di nunzio, *Push Button Bertha*, YOUTUBE (Jan. 18, 2014), <https://www.youtube.com/watch?v=V-XZKS4BIItI> (originally written in 1956, facilitated by Martin Klein and Douglas Bolitho).

arrangement, etc.) were actually conceived and executed not by man but by a machine.²⁹

In 1974, Congress entered the fray when it created the National Commission on New Technological Uses of Copyrighted Works (“CONTU”) to analyze this issue (along with several others related to the computer revolution, then in its infancy).³⁰ Interestingly, CONTU found that “existing statute and case law adequately cover any questions involved” in computer-aided creation.³¹

In 1986, twelve years after CONTU released its final report, Pamela Samuelson observed:

When one thinks of how widespread are uses of computer programs to generate other works . . . one can see that the stakes of the allocation of ownership rights in computer-generated works are very high indeed. When the stakes are high and the statute ambiguous, the stage would seem to be set for a hot contest.³²

That same year, Congress’ Office of Technology Assessment noted that “[computer-aided creation] greatly complicates the process of determining originality and authorship, and of assigning rights. Similarly, with advances in artificial intelligence, computer-aided design, and computer-generated software, it will become increasingly difficult to determine what creators have actually created.”³³

Yet today, more than three decades after that stage was observed to be set, scholars and policymakers around the world are still grappling with these same questions.³⁴ The discussion has even made its way into pop culture.³⁵ Some countries

²⁹ U.S. COPYRIGHT OFFICE, REGISTER OF COPYRIGHTS, SIXTY-EIGHTH ANNUAL REPORT OF THE REGISTER OF COPYRIGHTS 5 (1966).

³⁰ Samuelson, *supra* note 22, at 1212.

³¹ NAT’L COMM’N ON NEW TECH. USES OF COPYRIGHTED WORKS, Final Report 46 (1979) [hereinafter CONTU FINAL REPORT].

³² Samuelson, *supra* note 22, at 1187 n.4.

³³ U.S. CONG., OFFICE OF TECH. ASSESSMENT, INTELLECTUAL PROPERTY RIGHTS IN AN AGE OF ELECTRONICS AND INFORMATION 301 (1986) [hereinafter OTA REPORT].

³⁴ See, e.g., Schönberger, *supra* note 27; Grimmelmann, *supra* note 23; Bridy, *supra* note 13; Bridy, *supra* note 15.

³⁵ DAN BROWN, ORIGIN 66 (2017) (“Langdon had recently read about . . . teaching computers to create algorithmic art—that is art generated by highly complex computer programs. It raised an uncomfortable question: When a computer creates art, who is the artist - the computer or the

have enacted laws that expressly address the issue of ownership in computer-generated works. For example, the copyright laws in the U.K. and New Zealand stipulate that the entity deemed to be the author of a computer-generated work is “the *person* by whom the arrangements necessary for the creation of the work are undertaken.”³⁶ The copyright laws in France, Germany, Greece, Switzerland, and Hungary are more explicit, expressly limiting authorship to “humans” or “natural persons.”³⁷ Although U.S. copyright law does not currently address this issue directly, the Copyright Office has expressly stated that it will not recognize non-human authors.³⁸

My focus in this article is less about who the exact human author should be, but rather on whether the interposition of an algorithm between the programmer or user and the output should present a barrier to that human (or corporate) being’s claim of authorship in the output. I conclude that it should not. Even with extremely complex deep-learning algorithms, there are human programmers and users who write the algorithm’s code, set the objective functions and other parameters of the algorithm, and decide whether the algorithm is creating the desired outputs or whether it ought to be tweaked. These humans are masterminding the creative process; even complex AI models are simply following the humans’ commands (or at least creative guidelines, criteria, and rules).

General assertions about humans’ claims to AI-generated works cannot be made until the merits of each possible claim of authorship are evaluated. Only then

programmer? At MIT, a recent exhibit of highly accomplished algorithmic art had put an awkward spin on the Harvard humanities course: *Is Art What Makes Us Human?*)”.

³⁶ Copyright, Designs and Patents Act, 1988, c. 48, § 9(3) (U.K.) (emphasis added); *see also* Copyright Act 1994 cl 5(2)(a) (N.Z.); Bridy, *supra* note 13, at 400 (noting that Hong Kong and India (also common law countries) take a similar approach). This language does not choose *ex ante* between the programmer and the user (where they are different people); for reasons discussed in Part I.C *infra*, this is a wise choice by the legislators.

³⁷ Bridy, *supra* note 13, at 400–01 (noting that all of these are civil law countries); Schönberger, *supra* note 27, at 45.

³⁸ COMPENDIUM OF U.S. COPYRIGHT OFFICE PRACTICES § 306 (3d ed. 2014) [hereinafter COMPENDIUM] (the Copyright Office “will register an original work of authorship, provided that the work was created by a human being. . . . Because copyright law is limited to ‘original intellectual conceptions of the author,’ the Office will refuse to register a claim if it determines that a human being did not create the work.”) (quoting *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884)); *see also* *Naruto v. Slater*, 2016 U.S. Dist. LEXIS 11041 (N.D. Cal. Jan. 28, 2016).

can we examine how the use of AI might interfere with any or all of these claims of authorship—and, therefore, ownership.

A. I “Think,” Therefore I Am an Author: Computer as Author

When discussing computer-generated works, many scholars have focused on whether the algorithm itself ought to be recognized as the author of an AI-generated work. There is, of course, a colorable argument that AI is capable of meeting the explicit criteria for copyrightability in its outputs³⁹: (1) a “work of authorship” that falls within the subject matter of the Copyright Act (including the categories listed in section 102);⁴⁰ (2) fixation in a tangible medium of expression;⁴¹ and (3) originality,⁴² which post-*Feist* has two elements of its own—(a) independent creation and (b) a “modicum of creativity.”⁴³

However, deeming the AI to be the author for copyright purposes is nonsensical and impractical. First, the U.S. Copyright Office does not recognize non-human authors.⁴⁴ Remarking on courts in the United States, Bridy noted a “deep-seated . . . assumption that authors are necessarily human.”⁴⁵ As an example, Bridy highlights the District Court for the Northern District of California’s decision in *Naruto v. Slater*, which includes several quotations from Ninth Circuit decisions in

³⁹ There are many different types of outputs for an algorithm (ranging from a simple prediction or number to a full novel). In this article, “outputs” refers to creative works that would be eligible for copyright protection, such as poems, novels, images, music, or even other software.

⁴⁰ 17 U.S.C. § 102 (2012).

⁴¹ *Id.*

⁴² U.S. CONST. art. I, § 8, cl. 8; *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 345 (1991) (“The *sine qua non* of copyright is originality.”).

⁴³ *Feist*, 499 U.S. at 346, 362.

⁴⁴ *Naruto v. Slater*, 2016 U.S. Dist. LEXIS 11041, at *10 (N.D. Cal. Jan. 28, 2016) (“In section 306 of the Compendium, entitled ‘The Human Authorship Requirement,’ the Copyright Office relies on citations from *Trade-Mark Cases*, and *Burrow-Giles* to conclude that it ‘will register an original work of authorship, provided that the work was created by a human being.’ Similarly, in a section titled ‘Works That Lack Human Authorship,’ the Compendium states that, ‘[t]o qualify as a work of ‘authorship’ a work must be created by a human being. Works that do not satisfy this requirement are not copyrightable.’”) (citations omitted); COMPENDIUM, *supra* note 38, §§ 306, 313.2; *Id.* at § 802.5(C) (addressing human authorship of musical works) (“To be copyrightable, musical works, like all works of authorship, must be of human origin. . . . [M]usic generated entirely by a mechanical or an automated process is not copyrightable. For example, the automated transposition of a musical work from one key to another is not registrable. Nor could a musical composition created solely by a computer algorithm be registered.”).

⁴⁵ Bridy, *supra* note 13, at 395.

which the terms “human” and “natural persons” are used in discussing the concept of authorship.⁴⁶

CONTU also noted that “[t]he eligibility of any work for protection by copyright depends not upon the device or devices used in its creation, but rather upon the presence of at least minimal *human* creative effort at the time the work is produced.”⁴⁷ International law also generally agrees on this issue and, as noted above, a number of countries have laws explicitly stating that only human authors will be recognized. It is easy to say that these statutes and policies should simply be changed so that copyright *can* be granted to non-human authors; but in the United States, the reason for limiting authorship to natural persons (and corporate entities comprised of humans) comes directly from the U.S. Constitution and the policy justifications it embodies. The IP Clause of the U.S. Constitution permits Congress to grant copyright protection to “Authors and Inventors” to “promote the Progress of Science and the useful Arts.”⁴⁸ The purpose of copyright law, therefore, is to provide incentives for authors to create so that the public domain of creative works will continue to expand.⁴⁹ Machines, however, cannot be incentivized in the same way that humans can.⁵⁰ Algorithms follow the orders of their programmers and need no further incentives to create. Although it is likely that a human will ultimately benefit commercially from the outputs of AI algorithms—and would therefore be

⁴⁶ *Naruto*, 2016 U.S. Dist. LEXIS 11041, at *8–9; Bridy, *supra* note 13, at 399 n.30.

⁴⁷ CONTU FINAL REPORT, *supra* note 31, at 45 (emphasis added).

⁴⁸ U.S. CONST., art. 1, § 8, cl. 8.

⁴⁹ 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 1.03[A][1] (Matthew Bender & Co., 2018) (“[T]he authorization to grant copyright to individual authors is predicated on the dual premises that the public benefits from the creative activities of authors and that the copyright protection is a necessary condition to the full realization of those creative activities.”).

⁵⁰ See generally OTA REPORT, *supra* note 33, at 76 (“When the element of human labor involved in the processing of information is replaced by automation, the incentive of copyright protection may become entirely disconnected from the authorship that it seeks to inspire. Information that is automatically generated by a computer is ‘authored, if at all, by a program that is indifferent to legal incentives.’”); James Grimmelmann, *Copyright for Literate Robots*, 101 IOWA L. REV. 657 (2016); Samuelson, *supra* note 22, at 1199 (“The system has allocated rights only to humans for a very good reason: it simply does not make any sense to allocate intellectual property rights to machines because they do not need to be given incentives to generate output. All it takes is electricity (or some other motive force) to get the machines into production.”); Schönberger, *supra* note 27, at 46 (“Robots do not need protection, because copyright’s incentives for creativity will and naturally must remain entirely unresponded to by them.”); Mike Masnick, *Another Dumb Idea Out of the EU: Giving Robots & Computer Copyright*, TECHDIRT (June 28, 2016, 3:20 AM), <https://www.techdirt.com/articles/20160624/17260834817/another-dumb-idea-out-eu-giving-robots-computers-copyright.shtml>.

incentivized to create, use, and improve them—the incentives are, at the very least, less direct and their effects are less certain when provided to the machine instead of the human. The way to incentivize a robot to create is to incentivize its programmer to instruct it to create. Granting the copyright to the AI is therefore a roundabout way of serving the incentives of copyright law.

From a practical standpoint, allocating copyright to the algorithm would normally result in ownership of the copyright by the company or individual who owns the AI itself, since the owner of the AI would also own any of the AI's "possessions." In many cases, the owner would be the company that employed the programmer(s) who created the algorithm (as a work made for hire, or otherwise assigned through employment agreements or other contracts). In practice, the only situation where the allocation of the copyright to the AI would change the outcome is when no party holds the copyright in the algorithm's code.⁵¹ Additionally, given that allocating the copyright in the output in this manner also distorts the incentives for the human creators who could be influenced instead, it does not make any practical sense to go down this road.

In addition to rendering initial vesting of the copyright in the AI moot, the ability to transfer ownership of the copyright in the output by transferring ownership of the algorithm also undermines the Copyright Act's protections (e.g., termination of transfers) for initial authors (e.g., the programmer—assuming his or her work on the algorithm was not considered a work made for hire). These protections are intended to ensure that authors are properly incentivized. Interrupting such protections and, therefore, incentives, ought to be accompanied by a serious consideration of the repercussions and whether modifications to existing law would be required in order to preserve the incentives in these situations.

One question on which previous scholarship has focused is whether the work made for hire doctrine can function as a justification for deeming the AI to be the

⁵¹ It is also worth noting that software and computer code is at this point indisputably copyrightable. *Apple Comput., Inc. v. Franklin Comput., Inc.*, 714 F.2d 1240 (3d Cir. 1983), *cert. dismissed*, 464 U.S. 1033 (1984); NIMMER & NIMMER, *supra* note 49, § 2A.10[E] ("Regardless of one's perspectives, there would seem to be no turning back: Congress enacted CONTU's recommendations into law in the 1980 amendment In addition, copyright protection for software has become far too embedded in the world trade order to permit any realistic prospect of its abandonment in the foreseeable future."); Samuelson, *supra* note 22, at 1187 n.5.

legal author of an AI-generated work.⁵² However, this stretches the doctrine to its breaking point. The factors relevant for determining whether someone is an employee include language that, at least as the technology exists today, solely applies to humans. For instance, such phrases as “the extent of the hired party’s discretion over when and how long to work,” “the provision of employee benefits,” and “the tax treatment of the hired party” only make sense when applied to humans.⁵³ The doctrine also requires that the conduct is “actuated, at least in part, by a purpose to serve the master.”⁵⁴ Applying those factors to AI would be illogical, as computers presently cannot exercise discretion over their working hours, have no need for retirement plans or health insurance, and cannot be taxed. Furthermore, these factors denote intentionality and choice, and it would be difficult to plausibly argue that an algorithm possesses either one.

Finally, although it is hotly disputed, a computer is simply not the type of creative “author” that copyright law contemplates. As CONTU concluded in its final report, a computer is more like an inert tool used by a human in the creative process, “completely lacking in creative capabilities while requiring human direction to bring about a creative result.”⁵⁵ Under this rationale, CONTU found “there is no reasonable basis for considering that a computer in any way contributes authorship to a work produced through its use.”⁵⁶

Perhaps this is really just an issue of framing. If we focus on the bare minimum of sufficiency for meeting authorship requirements, AI might pass the test. However, if we look instead at the “human” elements of authorship, AI probably falls short. This could conceivably become a closer case if AI technology becomes more autonomous and “sentient” in the future, but the discussion of control in Part III below still resolves this issue in favor of a human author.

⁵² See, e.g., Bridy, *supra* note 13, at 400 (Bridy, however, uses the work made for hire doctrine as a means of enabling the programmer to retain rights in the work, finding the ultimate grant of copyright to AI to be “impracticable”); Bridy, *supra* note 15, at 3, 26–28.

⁵³ *Cnty. for Creative Non-Violence v. Reid*, 490 U.S. 730, 751–52 (1989).

⁵⁴ *Rouse v. Walter & Assocs., L.L.C.*, 513 F. Supp. 2d 1041, 1056 (S.D. Iowa 2007) (listing whether an employee’s conduct “is actuated, at least in part, by a purpose to serve the master” as one element in determining whether the work was created within the scope of employment, which is itself an element in determining whether the work in question is a work made for hire by an employee).

⁵⁵ Samuelson, *supra* note 22, at 1195 (summarizing CONTU FINAL REPORT).

⁵⁶ CONTU FINAL REPORT, *supra* note 31, at 44.

B. Pygmalion: Programmer as Author

There are two main arguments for allocating copyright in the outputs of algorithms to the programmer(s) of the algorithm itself: (1) the programmer's creative choices in preparing the algorithm (e.g., designing the algorithm, selecting a type of model, setting the objective function and other key parameters, and training and adjusting the algorithm) substantially affect, if not completely determine, the resulting outputs;⁵⁷ and (2) the incentives provided to the programmer align with the fundamental goals of copyright.

David Lehr and Paul Ohm define eight “stages of machine learning”: (1) problem definition; (2) data collection; (3) data cleaning; (4) summary statistics review; (5) data partitioning; (6) model selection; (7) model training (including tuning, assessment, and feature selection); and (8) model deployment.⁵⁸ One of the key design decisions a programmer makes about an algorithm is which model⁵⁹ is best suited to produce the desired outputs.⁶⁰ The programmer also performs the critical task of defining the objective function. This component of the algorithm sets the “goals” of the algorithm and determines the general characteristics of the outputs (e.g., the format and what is being optimized).⁶¹ After defining the objective function, the programmer sets other parameters (e.g., bias and variance, which determine the accuracy and speed of the algorithm)⁶² and selects the datasets that will be used to “train” the algorithm (and decides how to divide the data for training and testing purposes).⁶³ The size of the dataset and representativeness of the data (i.e., how accurate extrapolations from sample data to a broader data set will be) both significantly affect the accuracy of the algorithm's predictions and the usefulness of its outputs.⁶⁴ Before deciding that the algorithm is ready to “go live,” the programmer also makes myriad decisions concerning how and how much to adjust the parameters

⁵⁷ Lehr & Ohm, *supra* note 18, at 669–702.

⁵⁸ *Id.*

⁵⁹ There are many types of models (including supervised and unsupervised models, or reinforcement learning) of varying levels of complexity (from simple computational algorithms to deep learning models (e.g., deep neural networks) that integrate multiple layers of algorithms).

⁶⁰ Lehr & Ohm, *supra* note 18, at 688–95.

⁶¹ *Id.*

⁶² *See id.* at 696–97.

⁶³ *Id.* at 683–84.

⁶⁴ *Id.* at 677–81.

and data.⁶⁵ Only after the programmer has made all of those decisions is the algorithm set loose to create an output “on its own.”⁶⁶

In light of this substantial contribution to—and control over—the form and creative parameters of the outputs, it is easy to see why the programmer is a sensible choice to be the “author” of the algorithm’s outputs. Furthermore, even where the steps between the programmer’s final decisions and the actual moment of a work’s creation are so complicated that humans may not fully comprehend the exact processes (e.g., when using complex neural networks), the choices that the programmer made in the first phases of creation still strongly influence the characteristics of the algorithm’s outputs.⁶⁷ If the programmer (or end user) of the algorithm decides after an output is created that further changes are needed or desired, they can also adjust the parameters or data at that point in order to influence future outputs—even if they do not understand the intermediate steps between those changes and the moment of creation of the outputs. In other words, despite some work being done by the algorithm during the later stages of the creative process, the programmer or the user can still exercise control over the outputs by “tweaking” the parameters.

The idea of recognizing authorship in the user is more readily acceptable to many scholars if the algorithm is conceived of as a tool, like a camera.⁶⁸ A novice photographer can pick up a DSLR camera, put it in “sunset” mode, and effectively capture an autumn-hued landscape photograph, despite the fact that the photo is taken in the broad daylight in spring.⁶⁹ The resulting photograph is not considered any less copyrightable when taken by that novice than it is when taken by a professional photographer who fully understands every special effect implemented

⁶⁵ *Id.* at 695–701.

⁶⁶ *Id.*

⁶⁷ *See generally id.*; *see also infra* Part III.

⁶⁸ *See, e.g.,* Bridy, *supra* note 15, at 5–6, 10 (explaining the causation theory of authorship by referencing *Burrow-Giles* and the justification for copyright in photographs, and further analogizing to computer programmers: “[l]ike the photographer standing behind the camera, an intelligent programmer . . . stands behind every artificially intelligent machine. People create the rules, and machines obediently follow them . . .”); Samuelson, *supra* note 22, at 1195 (discussing CONTU’s comparison of a computer to a camera); CONTU FINAL REPORT, *supra* note 31, at 45 (“The computer may be analogized to or equated with, for example, a camera, and the computer affects the copyright status of a resultant work no more than the employment of a . . . camera . . .”).

⁶⁹ This author has done just this many times using both her digital point-and-shoot and DSLR cameras.

by the camera's software. Why, then, should the use of an algorithm be thought of any differently? Perhaps it is society's romantic, anthropomorphic notions of humanoid robots in science fiction stories that make the automatic processes of an algorithm feel more intentional and thoughtful than they truly are, as though they were genuine "choices."

If the idea to create something (even if reasonably specific, such as a 100-page romance novel set in Paris with a protagonist who owns a cafe) originates from the programmer, but the copyrightable expression of that idea is directly generated by the algorithm, can the programmer claim that AI-generated expression as his or her own? Because the programmer selects the parameters and training data that guide the algorithm in its choice of each word, plot twist, and style choice, I submit that the expression ultimately derives from the programmer. If an author is permitted to claim the accidental variation resulting from a clap of thunder as "his own,"⁷⁰ then certainly the product of the variation resulting from the narrow (or even broad) set of choices a programmer allows for should belong to him or her as well. Returning to the camera analogy, any randomness or rule-based "creativity" in an AI's final output is produced in the same way as the randomness or creativity in a photograph taken using a pre-selected mode on a camera. The resulting image may not exactly match the photographer's initial vision of what it would look like, but it nonetheless follows from his initial choices and parameters—just as the AI's outputs follow from the programmer's initial choices and parameters.

The programmer also breathes whatever life we perceive in AI into it. The programmer's choices in designing and calibrating the algorithm provide the algorithm with all of its "creative" capabilities⁷¹—the algorithm has no ability to create outputs except that which the programmer provides. An algorithm is therefore more an extension of the human programmer's own creative mind than it is an independent, autonomous being capable of originality and creativity. Even when an algorithm generates something H-creative ("historically creative," i.e., never before created by humans),⁷² such creativity is the result of the instructions and capabilities programmed by its creator and is therefore dictated by the (creative) choices of the programmer or user.⁷³

⁷⁰ *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, 191 F.2d 99, 103 (2d Cir. 1951) (quoting *Chamberlin v. Uris Sales Corp.*, 150 F.2d 512, 513 (2d Cir. 1945)).

⁷¹ Samuelson, *supra* note 22, at 1194–96.

⁷² See Margaret Boden, *Creativity: How Does It Work?*, CREATIVITY EAST MIDLANDS *1 (2007); see also Bridy, *supra* note 15, at 12–14.

⁷³ See *infra* Part II.C for a detailed discussion of this issue.

A programmer may also respond to financial incentives in a way that an algorithm does not. Like writers, painters, composers, and other traditional creators, programmers are the very type of “Authors and Inventors” contemplated by the drafters of the Copyright Clause. While an algorithm will blindly follow the instructions given by its programmer (whether to create or to stop creating) and will not be swayed by the prospect of financial gain (unless it is instructed to be), the programmers themselves can be incentivized to create, use, and improve algorithms in order to generate additional works. This is true whether the output is a novel, a song, a painting, or even another AI program.

Furthermore, labor theory, although discredited by the Supreme Court in *Feist* as a basis for copyright protection, logically supports the allocation of copyright to the programmer.⁷⁴ The virtually endless choices described above amount to a substantial expenditure of time, resources, and creativity by the programmer. As Samuelson puts it, the programmer will always be, at the very least, a “substantial contributor to the production of any output.”⁷⁵ Samuelson also discussed—albeit pre-*Feist*—what she termed the “comparative sweat test.”⁷⁶ Although post-*Feist*, labor itself is not dispositive in granting copyright in the work, there is still some logic in comparing the relative creative contributions of various contributors to determine who should be granted ownership of the copyright (provided that the work, and perhaps also the contribution, meets the minimum threshold requirements of copyrightability). For example, the more modern “mastermind” doctrine of joint authorship⁷⁷ rewards the contributor who is deemed to have provided the largest

⁷⁴ Samuelson, *supra* note 22, at 1201 n.74, 1205 n.87. *But see* *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 349–50 (1991). Samuelson’s arguments in favor of copyright ownership by the programmer are based on the programmer being a “substantial contributor to the production of any output.” She argues that the programmer deserves to be rewarded (impliedly, through at least partial ownership of copyright) because the work of programming is “intellectually demanding, as well as time-consuming and expensive for the programmer.” She also notes that “[t]he effort that is put into creation of a copyrightable work is sometimes said to be among the things the copyright laws intend to protect.” It should be noted, however, that that article was written prior to the seminal opinion in *Feist*, which dismissed the idea of using Lockean labor theory as a basis for granting copyright. Samuelson, *supra* note 22, at 1205, 1205 n.87.

⁷⁵ Samuelson, *supra* note 22, at 1205.

⁷⁶ *Id.* at 1205 n.74.

⁷⁷ *Aalmuhammed v. Lee*, 202 F.3d 1227, 1234 (9th Cir. 2000).

creative contribution—the “original intellectual conceptions” or “vision” for the work.⁷⁸

However, some scholars have argued against granting copyright in computer-generated works to the programmer. Samuelson argues that “[t]he programmer creates the *potentiality* for the creation of the output, but not its *actuality*.”⁷⁹ Bridy employs a highly formalistic application of the labor theory to argue that the programmer has *not* expended sufficient labor to create the outputs, noting that the programmer “doesn’t lift a finger to create them.”⁸⁰ Instead, she entirely separates the process (and labor) of creating the algorithm from that of creating the output (after the algorithm becomes operational).⁸¹ CONTU also conceived of the creation of the algorithm and the creation of the ultimate work as distinct processes: “[i]t appears to the Commission that authorship of the program or of the input data is entirely separate from authorship of the final work.”⁸² However, to say that the programmer has expended no “minimal human creative effort”⁸³ to create the work once the algorithm has been made operational is to discount not only all the previous labor expended in building and calibrating the algorithm, but also (and more important to current copyright doctrine) all of the programmer’s creative choices in model selection, parameter setting, data selection and allocation, calibration, testing, the remaining steps from the conception of the algorithm to its final execution, and the ongoing tasks of monitoring and modifying the algorithm once it is operational.⁸⁴

Bridy also objects to granting the copyright in the outputs of an algorithm to its programmer because the algorithm, not the human, is the agent of fixation.⁸⁵ However, this view has been rejected by courts as an obstacle to copyright. Photographs have been deemed copyrightable despite the fact that the camera is the “agent of fixation,”⁸⁶ and novels (or articles like this very one) are still considered

⁷⁸ *Id.*; Lindsay v. The Wrecked & Abandoned Vessel R.M.S. Titanic, 52 U.S.P.Q.2d 1609 (S.D.N.Y. 1999).

⁷⁹ Samuelson, *supra* note 22, at 1209 (first emphasis added).

⁸⁰ Bridy, *supra* note 13, at 398.

⁸¹ *Id.* at 397–98.

⁸² CONTU FINAL REPORT, *supra* note 31, at 45. Interestingly, the analogy the Commission made to drive this point home was to compare the outputs of an algorithm to a translation of a book—thereby implying that the outputs are actually, in some sense, derivative works of the algorithm or of the data.

⁸³ *Id.*

⁸⁴ See generally Lehr & Ohm, *supra* note 18.

⁸⁵ Bridy, *supra* note 13, at 398.

⁸⁶ *Id.*; see also Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53, 58–59 (1884).

copyrightable despite the fact that a computer ultimately fixes the work. Furthermore, in *Lindsay v. The Wrecked and Abandoned Vessel R.M.S. Titanic*, the Southern District of New York held that Lindsay, the film director, was the author of a documentary even though he was not among the film crew who were not only the agents of fixation, but also the humans who actually captured the footage (presumably exercising at least some creative discretion with respect to framing, lighting, focus, etc.).⁸⁷ The mastermind doctrine established in *Lindsay* and developed in *Aalmuhammed v. Lee* allows the human who “superintends” the process, or whose “original intellectual conceptions” the work embodies, to own the copyright, regardless of whether other sentient human beings actively make creative choices and add their own original and creative contributions to the work as a whole (unless there is an express intention to be considered joint authors).⁸⁸ If other humans cannot deprive the mastermind of his or her copyright, then surely an inert algorithm, just like an inert camera, should not either. David Nimmer agrees, stating that:

Given that copyright inheres only in works fixed in a tangible medium of expression, is the “author” to be construed as the party fixing the work? Important as fixation is, we have just seen that originality is the essence of authorship; accordingly, the originator, rather than the fixer, should be deemed the “author.” The distinction between one poet who brandishes a quill (or word processor) and another who dictates to a stenographer cannot call for a differing legal conclusion as to “authorship.” “Poets, essayists, novelists, and the like may have copyrights even if they do not run the printing presses or process the photographic plates necessary to fix the writings into book form.”⁸⁹

As discussed above in Part I.A, one of the main arguments for granting copyright to the AI is the work made for hire doctrine. This, however, is at best an awkward fit for non-human entities. Another benefit of using the mastermind doctrine to allocate the copyright to the programmer or user is that the analysis does not require the AI to be or to act like a human. Specifically, there is no intentionality required on the part of the AI. There is *room* for creativity or even intent on the part of the AI, but unless the algorithm truly conceives of and executes the idea without human guidance (which is not possible with today’s technology, and unlikely to

⁸⁷ *Lindsay v. The Wrecked & Abandoned Vessel R.M.S. Titanic*, 52 U.S.P.Q.2d 1609, 1614 (S.D.N.Y. 1999).

⁸⁸ *Id.*; *Aalmuhammed v. Lee*, 202 F.3d 1227, 1234 (9th Cir. 2000).

⁸⁹ NIMMER & NIMMER, *supra* note 49, § 1.06[A] (quoting *Andrien v. S. Ocean Cty. Chamber of Com.*, 927 F.2d 132, 135 (3d Cir. 1991)).

become possible in the near future), a human is still “masterminding” the process, even if the AI is responsible for intermediate steps and creative decisions. The AI in this scenario is simply executing the “original intellectual conceptions” of the programmer or user, just like the film crew in *Lindsay*⁹⁰ or the sound engineers, makeup artists, costume and set designers, writers, producers, actors, and consultants in *Aalmuhammed*.⁹¹

Bridy’s final argument against granting the copyright to the programmer is that unpredictability in the algorithm leaves the programmer with insufficient control over the output.⁹² However, this, too, is a fallacy. As discussed, the fact that some steps in the creative process are not known or fully understood by the programmer does not negate the programmer’s contributions to the creative process, nor does it prevent the programmer from being the true mastermind of the creative process. A novice photographer who expects his photograph to come out looking like a sunset when he uses “sunset” mode, despite not understanding why or how this process works, nevertheless produces a copyrightable photograph. The same holds true even if the photographer has no idea what effect the “sunset” setting will have on the resulting photograph. Furthermore, even when unpredictability built into the algorithm results in randomness once the algorithm is set free to complete the creative process, the programmer can still adjust later iterations to change and shape future output(s).⁹³ The programmer typically reserves the power to tweak the algorithm later on, meaning that he or she may continue to exercise control over its outputs. Moreover, the Second Circuit rejected the idea that an unpredictable or accidental outcome is not copyrightable. Following its famous reference to a “clap of thunder” that jars a painter’s arm and changes the work, the court unequivocally stated that “[h]aving hit upon such a variation unintentionally, the ‘author’ may adopt it as his and copyright it.”⁹⁴

A final, intriguing argument by Samuelson suggests that the very fact that the algorithm’s code is copyrightable is the reason why the process leading to the

⁹⁰ *Lindsay*, 52 U.S.P.Q. 1609, 1614.

⁹¹ *Aalmuhammed*, 202 F.3d at 1234. *But see* *Garcia v. Google*, 786 F.3d 733 (9th Cir. 2015) (holding that actors may own a copyright in their own performance within a larger motion picture).

⁹² Bridy, *supra* note 13, at 398.

⁹³ Jeff Dean, Keynote Address on Large Scale Deep Learning at Conference on Information and Knowledge Management (“CIKM”), (Nov. 2014), <https://static.googleusercontent.com/media/research.google.com/en//people/jeff/CIKM-keynote-Nov2014.pdf>.

⁹⁴ *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, 191 F.2d 99, 105 (2d Cir. 1951).

creation of an algorithm should be considered to be a separate from the process leading directly to the creation of the output.⁹⁵ Samuelson argues that a programmer should only be allowed to commercialize one of those two creative processes—a form of election doctrine that forces the programmer to choose either to commercialize the software itself or to sell the outputs, but not both.⁹⁶ This idea, while intriguing, seems to bear more on the issue of whether the copyright should also, or instead, be allocated to the user when the programmer chooses to sell the software. It does not, however, present a compelling reason to deny the copyright to the programmer.

C. *What Does This Button Do?: User as Author*

The arguments for and against granting copyright in computer-generated works to the user largely track those for the programmer: the user (if the user and the programmer are different individuals) is likely to have made a substantial contribution to the creative process; the user exercises significant control over the inputs and parameters of the algorithm; and the user is generally responsive to the incentive mechanisms provided by copyright law. The same challenges made to the programmer's claim could be applied to the user's claim as well. Under Samuelson's "comparative sweat test,"⁹⁷ the user has expended even less labor than the programmer did to create the output—although in some instances, the user's labor may also be substantial, since many of the choices around setting the parameters, selecting the data, and calibration of the algorithm may also (or instead) be performed by the user. The algorithm still stands between the user and the output as the agent of fixation, and the same unpredictability exists for the user as for the programmer, perhaps even to a greater degree, since the user is more likely to be in the position of the novice photographer than an experienced code master.

However, users possess certain unique qualities. First, the user is best positioned to bring the outputs to market,⁹⁸ and may therefore be better positioned

⁹⁵ Samuelson, *supra* note 22, at 1207–09.

⁹⁶ *Id.*

⁹⁷ *See supra* note 76 and accompanying text.

⁹⁸ Samuelson, *supra* note 22, at 1200 n.67 (“Machines may not need rights to be induced to generate output, but that, of course, does not mean that no one needs incentives in order for products of generator programs to be made available.”); Schönberger, *supra* note 27, at 51; OTA REPORT, *supra* note 33, at 158 (“In the marketplace for printed works, governed by copyright, the incentive to produce was linked to the incentive to disseminate printed copies as widely as possible; for selling copies was how producers generated income.”).

than the programmer to fulfill the goals of copyright.⁹⁹ After all, copyright is not intended simply to encourage more works to be *created*, but also for them to be *disseminated*.¹⁰⁰ If works were hidden away in secret private libraries, that would not “promote the Progress of Science and the Useful Arts,”¹⁰¹ because no one else would be able to build off of the knowledge contained within those works or to find inspiration in them. Therefore, it may be better to allocate ownership to the person who can not only produce additional works but can also be motivated by the financial incentives of copyright to disseminate those works.

Second, in some instances, the user may set the parameters and provide data for the algorithm in ways that vastly change the output, and may even affect the way the algorithm operates.¹⁰² In other words, the same software provided to two different users could result in two wildly different sets of outputs, depending on the creative choices made by the user, and regardless of the choices previously made by the programmer.

Third, although the algorithm still stands between the user and the outputs, the user is the human closest to the moment of fixation and therefore holds a stronger claim to being regarded as the agent of fixation. Samuelson, for example, compares the user to the person who records a jazz improvisation session (and therefore fixes the work).¹⁰³ In that sense, the user is fixing the work of both the programmer and

⁹⁹ Samuelson, *supra* note 22, at 1227 (arguing that publishers are the true creators of value by bringing works to market, and therefore deserve (and usually receive) the lion’s share of the profits).

¹⁰⁰ See NIMMER & NIMMER, *supra* note 49, § 1.03(A); see also *Eldred v. Ashcroft*, 537 U.S. 186, 244 (2003) (Breyer, J., dissenting) (“The Copyright Clause and the First Amendment seek related objectives—the creation and dissemination of information. When working in tandem, these provisions mutually reinforce each other, the first serving as an ‘engine of free expression,’ the second assuring that government throws up no obstacle to its dissemination.” (citation omitted)); *Harper & Row Publishers v. Nation Enters.*, 471 U.S. 539, 558 (1985) (“[I]t should not be forgotten that the Framers intended copyright itself to be the engine of free expression. By establishing a marketable right to the use of one’s expression, copyright supplies the economic incentive to create and disseminate ideas.”); *Acuff-Rose Music, Inc. v. Campbell*, 754 F. Supp. 1150, 1153 (M.D. Tenn. 1991) (“To foster the widespread dissemination of ideas, the copyright system is ‘designed to assure contributors to the store of knowledge a fair return for their labors.’”) (quoting *Harper & Row*, 471 U.S. at 546). While publication is no longer required by copyright law in order to receive protection, dissemination remains one of the primary motivations behind offering copyright incentives to authors.

¹⁰¹ U.S. CONST., art. 1, § 8, cl. 8.

¹⁰² Lehr & Ohm, *supra* note 18, at 677–81.

¹⁰³ Samuelson, *supra* note 22, at 1202.

the algorithm, and would have a claim to the copyright even if she did not mastermind the entire creative process. However, as discussed above in Part II.B, courts have not accepted the agent of fixation theory.

Finally, the user makes additional decisions regarding the selection and editing of outputs when determining which to bring to market and disseminate, and which to destroy or discard.¹⁰⁴ Since one of the advantages of algorithms is their ability to operate at scale (and therefore produce vast quantities of potentially copyrightable works), the user will typically need to curate the outputs rather than flood the market with large numbers of works of varying quality. These choices represent originality and creativity of their own.

One additional argument against the user as author centers on a line of cases holding that users of video games are not authors of the resulting audiovisual work, even when their interaction with the software influences the output.¹⁰⁵ In *Midway v. Artic International*, a prominent early video game case, the Seventh Circuit rejected the claim that the video game’s players became authors of the resulting audiovisual work. As the court noted:

The question is whether the creative effort in playing a video game is enough like writing or painting to make each performance of a video game the work of the player and not the game’s inventor.

We think it is not. . . . The player of a video game does not have control over the sequence of images that appears on the video game screen.¹⁰⁶

In other words, if the programmer places sufficient limitations or constraints on the creative process of the end user—or the AI—it could be argued that the programmer should still be considered the author. The resulting works still represent the programmer’s “original intellectual conceptions”¹⁰⁷ because those works can only be conceived and created within the bounds of the creative environment established by the programmer.

¹⁰⁴ See, e.g., *id.* at 1216–19 (suggesting that the user’s claim to the copyright would actually be as a derivative work of the raw outputs of the algorithm). This formulation of the right trivializes the user’s contribution and does not sufficiently recognize the elements of control discussed below in Part II.

¹⁰⁵ See, e.g., *Midway Mfg. Co. v. Artic Int’l, Inc.*, 704 F.2d 1009, 1111–12 (7th Cir. 1983).

¹⁰⁶ *Id.* at 1011–12.

¹⁰⁷ *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884).

D. You Say Tomato, I Say Tomahto: User vs. Programmer

As between the programmer and the user, the decision of who the copyright should be allocated to is fact-dependent, and would likely differ based on the nature of the software.¹⁰⁸ For example, on the one hand, it would be extremely unfair if a piece of software's terms of service demanded ownership of the copyright in all outputs of a word processing program, since the copyrightable expression clearly belongs to the user. The only hook for the programmer claiming the copyright would be as the agent of fixation, which was firmly rejected above.¹⁰⁹ On the other hand, if a program dispenses a story or a song at the mere press of a button by the user (such as the program that created *Push Button Bertha*),¹¹⁰ there might be a stronger argument for the programmer to own that copyright, both on its own merits and relative to the argument for authorship by the user.¹¹¹ In situations where an algorithm produces very different outputs depending on the parameters and inputs selected by the user (e.g., Alfred Knipe's *Great Automatic Grammatizator*¹¹²), the user's claim to sole ownership of the ensuing work may be stronger than that of the programmer because, in this scenario, the algorithm functions just like any other machine, tool, or instrument that facilitates the creation of copyrightable works by human authors (e.g., a piano or a camera).

Furthermore, this issue is likely to be resolved *ex ante* through licensing agreements between these parties, thereby rendering these arguments moot.¹¹³ However, it is worth questioning the fairness of such licensing arrangements, especially in light of the proliferation of contracts of adhesion in today's increasingly online world. But that is a topic for another paper and another day.

¹⁰⁸ For a detailed analysis of this issue, see Grimmelman, *supra* note 23, at 409–12.

¹⁰⁹ As a more specific example, a programmer (or, more likely, a massive team of programmers) created both Microsoft Word and Google Docs, but that does not mean that they own or should own the copyrightable expression in, say, this article.

¹¹⁰ Bridy, *supra* note 13, at 395.

¹¹¹ One version of this argument can be seen in cases that allow the programmer to retain copyright in randomly-generated levels of video games, or even in the version of the game that is produced by the user's interaction with the software. *See, e.g.,* Micro Star v. FormGen Inc., 154 F.3d 1107, 1111–14 (9th Cir. 1998); Midway Mfg. Co. v. Artic Int'l, Inc., 704 F.2d 1009, 1111–12 (7th Cir. 1983).

¹¹² ROALD DAHL, *The Great Automatic Grammatizator*, in *THE UMBRELLA MAN AND OTHER STORIES* (1996).

¹¹³ Samuelson, *supra* note 22, at 1187 n.3.

Finally, substantial evidentiary issues are likely to further complicate this decision. It may be difficult to determine which algorithm created a particular work, thereby creating uncertainty as to which programmer may lay claim to the output. It might even be difficult to determine whether the work was created by *any* algorithm (as opposed to having been created solely by a human). As the “Turing test” for artwork becomes easier for AI to pass as technology improves, this will only become more difficult.¹¹⁴

Given the fact-dependency of this decision, blanket assumptions in favor of either the programmer or the user are unhelpful and misleading. Attempting to make this decision *ex ante*, without a specific case and fact pattern before us, is putting the cart before the horse. Therefore, I will refer to them collectively or nearly interchangeably throughout the remainder of this paper. This distinction is also unnecessary for the ultimate question this article seeks to resolve: not *which* human should own the copyright in a computer-generated work, but rather whether the use of AI presents a barrier to *any* human claiming authorship in the outputs.

E. The Proof Is in the Data: Data Owner as Author

Both the quantity and quality of the data used to train an algorithm play a crucial role in determining the accuracy and quality (and therefore the value) of the algorithm itself,¹¹⁵ and the outputs of an algorithm can vary significantly based on the data on which the algorithm performs.¹¹⁶ Therefore, it may make sense in certain situations for the owners of that data to receive at least partial ownership rights in the outputs created through the use of that data.¹¹⁷ This author was unable to find any published articles arguing for ownership of the outputs of AI by the data owner.¹¹⁸ However, this option would also likely be moot in practice, since such allocations of ownership almost certainly could and would be made through licensing agreements for the use of such data.

¹¹⁴ Bridy, *supra* note 13, at 399.

¹¹⁵ Dean, *supra* note 93, at 4; Lehr & Ohm, *supra* note 18, at 664–81 (“[A]n algorithm is, at the end of the day, only as good as its data.”).

¹¹⁶ Lehr & Ohm, *supra* note 18, at 664–78, 677–81.

¹¹⁷ *But see* CONTU FINAL REPORT, *supra* note 31, at 45 (“It appears to the Commission that authorship of the program *or of the input data* is entirely separate from authorship of the final work” (emphasis added)).

¹¹⁸ For example, neither Samuelson, *supra* note 22, nor Grimmelman, *supra* note 23, mentioned the possible claim of the data owner in their reasonably thorough discussions of the range of potential authors.

Furthermore, when data is being used subject to a claim to a fair use justification, whether transformative or technological (e.g., a corpus of novels being used for the purposes of understanding language structure and patterns of conversation),¹¹⁹ that use undermines any data owner's claim for ownership in the outputs, just as an author or publisher owning the rights in a novel would not have a claim to ownership in the search results or product features of Google Books, or a photographer would in an image search engine.¹²⁰

F. Two Great Authors, Better Together: Joint Authorship

Another option is to grant joint authorship to some combination of the categories discussed above. For example, assuming that they are not one and the same, both the programmer and user will have substantially contributed to the creative process. Similarly, if the AI, as an independent entity, is granted copyright in the ultimate work, there is a strong argument that the programmer and user will also have made substantial contributions to the work. Courts would have to decide whether such an arrangement would satisfy the *Aalmuhammed* test¹²¹ in the absence of an expressed intent by the AI, and whether an intention by the programmer and user to merge their contributions with those of the AI into a unitary work would be sufficient. Finally, in the absence of a contract for the use of the data on which the algorithm was trained or operated, one could make an argument for joint authorship by the data owner and any of the other parties. However, the *Aalmuhammed* intent bar would be difficult to meet in this situation, unless joint authorship was expressly made a condition of a license or grant of access to the data.

G. If I Can't Have It, No One Can: Computer-Generated Works as Belonging to the Public Domain

If none of the other actors discussed above are successful in arguing doctrinally that they are entitled to authorship over the work, dedicating the outputs of AI to the public domain might be a sensible solution. The ultimate goal of

¹¹⁹ Richard Lea, *Google Swallows 11,000 Novels to Improve AI's Conversation*, GUARDIAN (Sept. 28, 2016, 5:00 AM), <https://www.theguardian.com/books/2016/sep/28/google-swallows-11000-novels-to-improve-ais-conversation>.

¹²⁰ See *Authors Guild v. Google Inc.*, 804 F.3d 202 (2d Cir. 2015); *Perfect 10, Inc. v. Amazon.com, Inc.* 508 F.3d 1146 (9th Cir. 2007).

¹²¹ See *supra* note 88 and accompanying text.

copyright law is to expand the public domain of creative works,¹²² and this approach initially seems to further that goal.

However, the problem with this approach is that it undermines the utilitarian view of copyright law, which is the dominant view in the United States and suggests that copyright's exclusive rights provide authors with economic incentives to create additional works, thereby (at least eventually) enriching the public domain.¹²³ If humans are not adequately incentivized to create AI in the first place, or to spend the requisite time and resources gathering data to train or improve it, then fewer works will be created, undermining the goal of increasing the public domain. Without financial incentives, it is likely that fewer companies and engineers would decide to create, improve, or use AI to generate creative works. There are other incentives, of course, such as fame, academic respect, commercial gain through sales to other users, and a pure desire to create, but they would likely not inspire the same type, quality, or scale of creation as traditional incentives would.¹²⁴ Even if such incentives were sufficient, there is no reason to treat AI's outputs any differently from other means of creation.

II

I, AUTHOR: WHAT IT TRULY MEANS TO BE AN AUTHOR

Perhaps even more intriguing than who should be deemed the author of a computer-generated work is the question of what it means to be an "author" in the first place, and how our existing doctrine is (or should be) applied in the age of AI. Although "author" is not defined in the Constitution or the Copyright Act,¹²⁵ caselaw has provided several answers. In *Burrow-Giles Lithographic Co. v. Sarony*, the Court defined an author as "he to whom anything owes its origin; originator; maker; one who completes a work of science or literature."¹²⁶ By this definition, an

¹²² See NIMMER & NIMMER, *supra* note 49, § 1.03[A].

¹²³ See, e.g., *Harper & Row Publishers v. Nation Enters.*, 471 U.S. 539, 558 (1985). Cf. Jeanne Fromer, *Expressive Incentives in Intellectual Property*, 98 VA. L. REV. 1745 (2012); Christopher Jon Sprigman, *Lecture: Copyright and Creative Incentives: What We Know (and Don't)*, 55 HOUS. L. REV. 451, 465 (2017).

¹²⁴ See, e.g., Eric E. Johnson, *Intellectual Property and the Incentive Fallacy*, 39 FLA. ST. U. L. REV. 623, 628-31 (2012) (summarizing the incentive theory).

¹²⁵ Russ Versteeg, *Defining "Author" for Purposes of Copyright*, 45 AM. U. L. REV. 1323, 1326 (1996) ("Who is an author? In other words, what does a person have to do in order to be characterized as an 'author' for purposes of copyright? This seemingly simple question is actually complex.").

¹²⁶ *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884).

algorithm could be considered an author. However, the Court went on to say in the same case that “writings” refers to all forms of expression “by which the ideas in the mind of the author are given visible expression”¹²⁷ and that works are copyrightable “so far as they are representatives of original intellectual conceptions of the author.”¹²⁸

In 1999, the District Court for the Southern District of New York reiterated the focus on the “original intellectual conceptions” of an author in a decision upholding a documentary film director’s claim to the film’s copyright, despite the actual footage having been shot by other members of his crew.¹²⁹ There, the *Lindsay* court concluded that

[W]here a plaintiff alleges that he exercised such a high degree of control over a film operation . . . such that the final product duplicates his conceptions and visions of what the film should look like, the plaintiff may be said to be an ‘author’ within the meaning of the Copyright Act.¹³⁰

With respect to ownership of the outputs of algorithms, it is easy to draw an analogy to the *Lindsay* case: the algorithm functions as the film crew (or perhaps even the camera), while the programmer or user of the algorithm functions as the director and, therefore, the author. To be sure, someone claiming to be an author “must supply more than mere direction or ideas,”¹³¹ but, in general, the extent to which a programmer or user exercises control over the operation of the algorithm is likely to meet this bar.

Even more apropos is the “superintendence” or “mastermind” doctrine formulated in *Aalmuhammed v. Lee*, which posits that a contributor must “superintend” the work in order to be considered an author.¹³² The case addressed a

¹²⁷ *Id.*

¹²⁸ *Id.*

¹²⁹ *Lindsay v. The Wrecked & Abandoned Vessel R.M.S. Titanic*, 52 U.S.P.Q.2d 1609, 1613 (S.D.N.Y. 1999) (citing *Burrow-Giles*, 111 U.S. at 58).

¹³⁰ *Id.* at 1613.

¹³¹ *Erickson v. Trinity Theatre, Inc.*, 13 F.3d 1061, 1071 (7th Cir. 1994); *see also* 28 U.S.C. § 102(b) (2012).

¹³² *Aalmuhammed v. Lee*, 202 F.3d 1227, 1234 (9th Cir. 2000) (“[A]n author ‘superintends’ the work by exercising control.”) (citing *Thomson v. Larson*, 147 F.3d 195, 202 (2d Cir. 1998)); *Burrow-Giles v. Sarony*, 111 U.S. 53, 61 (1884) (“Lord Justice Cotton said: ‘In my opinion,

claim of joint authorship by a consultant who made various contributions to the film, including writing two scenes. The Ninth Circuit found that the consultant “did not at any time have superintendence of the work”¹³³ and therefore could not be considered an author of the film. Together with *Lindsay*, these decisions suggest that even if the algorithm is deemed to have some creative ability and to have contributed to the copyrightable expression in the final work, the human who orchestrates the process—whose vision the algorithm brings to life—may still be considered the “mastermind.”¹³⁴

This conclusion is further supported by Bridy’s “authorship-as-causation” concept, which suggests that the decisions in *Burrow-Giles* and other authorship cases are consistent with the view that the author is “the motive force without which [the work] could not have come into existence.”¹³⁵ Indeed, the *Burrow-Giles* Court referred to the author as “the cause of the picture.”¹³⁶ The effects of a programmer’s or user’s choices in designing and guiding an algorithm certainly support the concept of the programmer or user as the proximate “cause” of the work (including, most importantly, the underlying expression).

As the foregoing analysis makes clear, one way to determine whose creativity is represented in the expression of the final work is from the perspective of control (e.g., the mastermind doctrine). Another lens through which to analyze the process is creativity itself: if the decisions that inject the requisite originality or creativity into the output result from the choices made by a human programmer, then there should be no barrier to authorship vesting in that human. If, however, the creative elements of the output instead arise from decisions and learnings made by the

“author” involves originating, making, producing, as the inventive or master mind, the thing which is to be protected.”).

¹³³ *Aalmuhammed*, 202 F.3d at 1235.

¹³⁴ It is interesting to note that *Aalmuhammed* also held that joint authors must “intend their contributions be merged into inseparable or interdependent parts of a unitary whole.” *Id.* at 1231. To meet that requirement in this context, the AI would have to be seen as possessing the capacity for true “intent” and would have to actually intend that its contributions be fused into a whole with those of its human creators or users. However, if the algorithm is seen instead as a tool, or even as a helpful crew member, then the analysis might be more like that in *Lindsay*, where the human’s “original intellectual conceptions” have been embodied in the work, and the human is therefore the author—just as *Lindsay* was for that documentary film. *See Lindsay*, 52 U.S.P.Q.2d at 13–14.

¹³⁵ Bridy, *supra* note 15, at 5.

¹³⁶ *Burrow-Giles*, 111 U.S. at 61.

algorithm alone, then perhaps its human programmer or user has no rightful claim to authorship after all.

One challenge to a human's claim of authorship in computer-generated works is that an algorithm lies between the actions of the purported author and the expression itself. However, as discussed above, the programmer and the user both contribute substantially to the creativity and expression of the resulting work. As will be discussed in Part II.B, the parameters a programmer selects, the data on which he or she chooses to train the algorithm, the type of work he or she directs the algorithm to produce, and many more decisions in the process are all decidedly creative choices.¹³⁷

Furthermore, the fact that a user does not mastermind every detail of the creative process does not undermine his or her claim of ownership and can be rebutted through analog examples. For example, a photographer who manages to capture the perfect lighting without understanding how their camera operates would not forfeit his or her copyright in the resulting work. As Bridy put it, “[l]ike the photographer standing behind the camera, an intelligent programmer . . . stands behind every artificially intelligent machine.”¹³⁸ Similarly, while the camera crew in *Lindsay* and the other contributors to the film in *Aalmuhammed* certainly made some creative choices in the films' creation, that does not undermine or interfere with the directors' claims in the final work.

As between the creator or user of the algorithm and the algorithm itself, there should really be no debate. It is not the “mind”¹³⁹ of the algorithm that conceives of or creates a work. An algorithm simply follows the parameters that the programmer or user has programmed into it. The programmer or user therefore “superintends” and “masterminds” the work of the algorithm, providing it with parameters that guide its functionality and data that determines its trajectory. As James Grimmelmann astutely observed, “[a]nything an author does with a computer she could in theory do without it. . . . Computers make some kinds of creativity practically feasible, but they do not make anything newly possible.”¹⁴⁰

Furthermore, these decisions to guide the algorithm on its course should overcome any unpredictability in the output of the algorithm. For example, imagine

¹³⁷ Grimmelmann, *supra* note 23, at 408.

¹³⁸ Bridy, *supra* note 15, at 10.

¹³⁹ *Burrow-Giles*, 111 U.S. at 58 (“By writings in that clause is meant the literary productions of those authors . . . by which the ideas in the mind of the author are given visible expression.”).

¹⁴⁰ Grimmelmann, *supra* note 23, at 407; *see also* Bridy, *supra* note 15, 10–12 (discussing algorithmic composition by humans).

that Jackson Pollock, bored of flinging paint at the canvas, decided instead to build a machine with a little scoop that could hold paint and, when cranked, would fling the paint forward toward the canvas. Pollock would select the colors and load them up, and could decide to tilt, move, or rotate the canvas for the desired effect, but the actual painting would occur at the whim of physics, determined by factors such as the weight of the paint or the strength of the wind. One would be hard pressed to argue that Pollock's use of the paint-flinging machine would interfere with his ownership of the resulting painting. Even if Pollock did not use the machine, his own act of flinging paint at, or spilling it onto, the canvas still contains an inherent degree of randomness. Therefore, this is simply an example of an algorithm or machine mimicking human behavior, or substituting for human labor.

Next, imagine that an engineer builds an algorithm that fills in a certain number of pixels on a screen at random. The number of pixels and the possible colors with which the pixels may be filled are selected by the user, but the actual selection of the pixels and pixel colors is done at random by the AI. Would anyone argue that the programmer should not own the resulting work? If a "clap of thunder" jarring one's arm is sufficient to be considered "original,"¹⁴¹ how then could this type of planned, intentional randomness (or intentional "unpredictability") be any less original, or any less the "original intellectual conception" of the author?

As algorithms become more complex and more decisions are made "by" the algorithm rather than the programmer, there is a stronger argument to be made that the resulting work is no longer the "original intellectual conception" of the programmer. However, the strength of this argument is mitigated by the fact that the programmer or user can still manipulate the outputs by adjusting the algorithm's parameters, or by feeding the algorithm different data. So long as the programmer or user retains that type of control, it seems the process is still analogous to the pixel program or the paint-flinging machine, albeit at a larger scale and with a greater degree of programmed "randomness." Unpredictability within selected parameters, or even inherent randomness throughout the process should not hinder the human programmer's right to claim copyright in the work created—especially when the randomness is intentionally included. This is even true of *unintended* randomness, just as the result of the happy coincidence of a clap of thunder was considered copyrightable.

¹⁴¹ Alfred Bell & Co. v. Catalda Fine Arts, Inc., 191 F.2d 99, 105 (2d Cir. 1951).

A. What Is Creativity? Creativity, Originality, Novelty, and Intent

Although there are many definitions of creativity, several key elements have consistently been identified across different perspectives and definitions.¹⁴² In the context of copyright, the Supreme Court has only required a finding of “originality,”¹⁴³ without defining that term clearly. The only guidance offered by the Court is a requirement that the expression contain “more than a *de minimis* quantum of creativity”¹⁴⁴ (modifying its initial suggestion that original simply meant independently created¹⁴⁵) and a definition of “originality” as “the personal reaction of an individual upon nature . . . something irreducible, which is one man’s alone.”¹⁴⁶

The Seventh Circuit, however, has provided a framework that breaks down creativity into three distinct elements of originality, creativity, and novelty:

A work is original if it is the independent creation of its author. A work is creative if it embodies some modest amount of intellectual labor. A work is novel if it differs from existing works in some relevant respect. For a work to be copyrightable, it must be original and creative, but need not be novel.¹⁴⁷

It is worth noting that, unlike patent law, copyright does not require novelty. In *Alfred Bell*, the Second Circuit firmly rejected novelty as a requirement of copyright, holding that originality (at least under copyright law) does *not* mean “startling, novel or unusual, a marked departure from the past . . . [or] highly unusual in creativeness.”¹⁴⁸ The legislative history of the Copyright Act of 1976 clearly shows that Congress agreed with the Second Circuit’s view: “This standard [of

¹⁴² See Bridy, *supra* note 15, for a thorough discussion.

¹⁴³ *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 345–46 (1991); *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 250 (1903); *Burrow-Giles*, 111 U.S. at 58–60.

¹⁴⁴ *Feist*, 499 U.S. at 363.

¹⁴⁵ See *Burrow-Giles*, 111 U.S. at 57 (“An author . . . is ‘he to whom anything owes its origin; originator; maker; one who completes a work of science or literature.’”).

¹⁴⁶ *Bleistein*, 188 U.S. at 250 (in the context of an artist drawing something from the physical world, such as a nature landscape).

¹⁴⁷ *Baltimore Orioles, Inc. v. Major League Baseball Players Ass’n*, 805 F.2d 663, 668 n.6 (7th Cir. 1986); see also *Burrow-Giles*, 111 U.S. at 59 (“[T]he remainder of the process is merely mechanical, with no place for novelty, invention or originality.”).

¹⁴⁸ *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, 191 F.2d 99, 102 (2d Cir. 1951).

originality] does not include requirements of novelty, ingenuity, or esthetic merit . . .¹⁴⁹

An algorithm can easily satisfy this low bar for originality. An algorithm relies on the data on which it is trained and the rules it is given, which makes it possible to verify that the output does not duplicate the expressive content of those inputs. Novelty is also easily met because an algorithm is capable of creating something H-creative (new to the world).¹⁵⁰ The difficult question is whether an algorithm exhibits sufficient “intellectual labor,” or whether we would deem an algorithm to be capable of exhibiting *any* intellectual labor, or true creativity, at all.

In addition to the three elements of creativity identified by the Seventh Circuit, there appears to be another factor that has been present throughout the history of copyright law but has not received much attention. That unspoken requirement is intent. In 1884, the Supreme Court noted that the low bar for copyrightability meant that in an infringement claim, the author must prove “facts of originality, of intellectual production, of thought, and conception on the part of the author.”¹⁵¹ Even *Feist*’s “minimal degree of creativity”¹⁵² and “some creative spark”¹⁵³ suggests that the author must actually intend for a work to be creative (if only minimally), or at least for it to be the type of work that it *is* (i.e. intend the work have the characteristics it does, with the court deciding whether it is actually “creative” after the fact).

Nearly seventy years after *Burrow-Giles*, however, the Second Circuit flatly rejected any intentionality requirement when it suggested that “bad eyesight or defective musculature, or a shock caused by a clap of thunder”¹⁵⁴ could produce sufficient originality to make the work copyrightable. The court went on to explicitly state that originality could be achieved by the author “unintentionally.”¹⁵⁵ Despite *Bell*’s explicit rejection of intent as a requirement, the language from the other cases just discussed—including the later-decided case of *Feist*—seems to support the idea that an author must act with some degree of intentionality during the creative process. Furthermore, this reasoning does not necessarily conflict with the holding of *Bell*, since the painter intended to paint. Perhaps intent applies to the decision to

¹⁴⁹ H.R. REP. NO. 94-1476, at 51 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5664.

¹⁵⁰ Boden, *supra* note 72, at *7; *see also* Bridy, *supra* note 15, at 12–14.

¹⁵¹ *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 60 (1884).

¹⁵² *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 345, 348, 362 (1991).

¹⁵³ *Id.* at 345.

¹⁵⁴ *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, 191 F.2d 99, 105 (2d Cir. 1951).

¹⁵⁵ *Id.*

create in the first place, or to the decision to bring the creative work to market, but not to the specific expression or the mode of creation.

Although not explicitly endorsed as a requirement for copyrightability, the language used by scholars discussing the originality requirement has also invoked the idea of the author's intent to create. Samuelson argues that “[c]onceiving a work is part of what traditional copyright doctrine has meant by authorship and creativity, without which rights should not inure in the programmer.”¹⁵⁶ Bridy also rejects *Bell's* accidental creation standard and interprets *Burrow-Giles* to mean that “creativity must be purposive or intentional.”¹⁵⁷ Therefore, identifying the source of this intention (presumably a human) could affect the determination of whose creativity a work represents.

B. Programmed to Be Creative: Oxymoron or Truth?

There are many examples of highly “creative” AI today, including AARON, a program that writes music,¹⁵⁸ and BRUTUS, a program that writes short stories.¹⁵⁹ However, the debate over whether AI can ever truly be creative has been raging for decades, ever since science fiction writers conceived of the idea of a “creative” robot.¹⁶⁰

One side of the debate posits that creativity is an “intrinsically human space,”¹⁶¹ and that no computer will ever truly be able to achieve it no matter how good the AI gets at *imitating* it. Ada Lovelace perhaps said it best when she observed that “the analytical engine has no pretensions whatever to originate anything. It can do only whatever we know how to order it to perform.”¹⁶² CONTU, in its Final Report, echoed this sentiment when it firmly stated that:

¹⁵⁶ Samuelson, *supra* note 22, at 1209.

¹⁵⁷ Bridy, *supra* note 15, at 8.

¹⁵⁸ *Id.* at 21–22, 24.

¹⁵⁹ *Id.* at 16–18 (including a story that certainly comes close to passing the Turing test, if not clears it with flying colors).

¹⁶⁰ See, e.g., Schonberger, *supra* note 27, at 39, 47 (discussing Isaac Asimov's works).

¹⁶¹ *Id.* at 47.

¹⁶² Bridy, *supra* note 13, at 398 (citing Richard Taylor, Note G., *in* Scientific Memoirs, Selected from the Transactions of Foreign Academies of Science and Learned Societies, and from Foreign Journals 722 (1837)). Lovelace was a collaborator with Charles Babbage in developing the Analytical Engine, and recognized by many as being one of the first computer programmers. *Ada Lovelace*, Wikipedia, https://en.wikipedia.org/wiki/Ada_Lovelace (last visited May 16, 2018).

[T]here is no reasonable basis for considering that a computer in any way contributes authorship to a work produced through its use. The computer . . . is an inert instrument, capable of functioning only when activated either directly or indirectly by a human. When so activated it is capable of doing only what it is directed to do in the way it is directed to perform.¹⁶³

CONTU further noted that “[i]n every case, the work produced will result from the contents of the data base, the instructions indirectly provided in the program, and the direct discretionary intervention of a human involved in the process.”¹⁶⁴ One can argue that the language in the Compendium of U.S. Copyright Office Practices also supports this position. Section 306 states that “[b]ecause copyright law is limited to ‘original intellectual conceptions of the author,’ the Office will refuse to register a claim if it determines that a human being did not create the work.”¹⁶⁵ In other words, only a human being can form “original intellectual conceptions,” and non-human creators (e.g., monkeys and dolphins—or AI) cannot. Finally, CONTU further asserted that no matter how “complex and powerful” computers may be, “it is a human power they extend.”¹⁶⁶ Thus, even when computers exceed the capacity of humans to create in a certain way, they are still merely tools amplifying their human users’ capabilities.

Furthermore, Lovelace adherents emphasize that it is the programmer who creates the algorithm’s capacity to create.¹⁶⁷ An algorithm does not think on its own. Any capacity for “thought” comes from its code and can be controlled by the

¹⁶³ CONTU FINAL REPORT, *supra* note 31, at 44.

¹⁶⁴ *Id.*

¹⁶⁵ COMPENDIUM, *supra* note 38, § 306.

¹⁶⁶ CONTU FINAL REPORT, *supra* note 31, at 45.

¹⁶⁷ *See, e.g.*, Bridy, *supra* note 15, at 10 (“Like the photographer standing behind the camera, an intelligent programmer . . . stands behind every artificially intelligent machine.”). Bridy also explains that:

According to the Court’s reasoning in *Burrow-Giles*, the machine taking the picture mediated but neither negated nor co-opted the process of artistic production, which could be traced quite directly back to the governing consciousness and sensibility of the photographer, the person behind the lens who posed the subject just so and altered the lighting just so. The camera functioned merely as an instrument, a means to the end of realizing the human operator’s creative vision, which is the basis for copyright in the resulting photograph.

Id. at 5–6.

programmer.¹⁶⁸ For example, even as Bridy praises AARON as an example of an extremely creative AI, she also discusses how Harold Cohen, AARON's inventor, altered AARON's musical style over time. As Bridy notes, "[i]ndeed, it was Cohen, through AARON's changing code, who redefined the outer bounds of AARON's artistic capacity."¹⁶⁹ Even the most sophisticated forms AI may be refined by engineers to adjust the outcomes.¹⁷⁰ Finally, as discussed in greater detail in Part II.C below, algorithms can be programmed to exhibit apparent creativity as the result of built-in randomness and other rules, including commands to break certain rules in order to create more unique works. However, that creativity is still the result of those rules and of the creative choices made by the programmer and the user.

The other side of the debate compares human thought to algorithms and code. Proponents posit that creativity is entirely programmable and that the language of AI reflects this. We speak of artificial *intelligence* and *neural* networks because algorithms are capable of mimicking human thought processes so accurately that we perceive AI as being able to "think" just as we do. Alan Turing himself suggested that "the only way by which one could be sure that a machine thinks is to be the machine and feel oneself thinking."¹⁷¹ This line of reasoning tends to raise existential questions about whether humans are just computers ourselves. Indeed, the word "computer" originally referred to humans performing mechanical mathematical tasks.¹⁷² John Haugeland found the fact that an algorithm owes its existence and capabilities to a programmer close to irrelevant in determining whether it should be

¹⁶⁸ See also David Shultz, *Which Movies Get Artificial Intelligence Right*, SCI. MAGAZINE (July 17, 2015, 8:30 AM), <http://www.sciencemag.org/news/2015/07/which-movies-get-artificial-intelligence-right> ("All the experts are quick to point out that robots do not change their programming, and the notion that they could spontaneously develop new agendas is pure fiction. Hutter says the underlying goals programmed into the machine are 'static.' 'There are mathematical theories that prove a perfectly rational goal-achieving agent has no motivation to change its own goals.'").

¹⁶⁹ Bridy, *supra* note 13, at 397. It is worth noting that Bridy ironically then concluded that Cohen was *not* the author of AARON's outputs because he didn't fix the works (AARON did), because the outputs were unpredictable, and because Cohen "d[id]n't lift a finger to create them." See also Knight, *supra* note 13 (suggesting that AI-generated music is not creative, despite reflecting and approximating existing creative works like the music of the Beatles). *But see supra* Part I.B for a rejection of each of these points.

¹⁷⁰ For example, engineers can adjust the weights and connections of the layers in deep neural networks in order to adjust the outcomes. See Jeff Dean, *supra* note 93, at 14–23.

¹⁷¹ Alan M. Turing, *Computing Machinery and Intelligence*, 49 MIND 433 (1950), <http://cogprints.org/499/1/turing.html>.

¹⁷² See Bridy, *supra* note 13, at 397.

considered the creative force behind its outputs, asking why “an entity’s potential for inventiveness [should] be determined by its ancestry . . . and not by its own manifest competence.”¹⁷³ He further derided the notion that “when we’re creative, it’s all our own, but when a computer printout contains something artistic, that’s really the programmer’s artistry, not the machine’s,” implying that AI deserves credit for its own “creative” work.¹⁷⁴

Bridy invokes the concept of algorithmic creation (where works are created by following a precise set of rules, with little or no discretion exercised in the process of creation), pointing out that since humans could produce the same works in the same way by hand, computers are therefore shortcuts for the labor, but not for the creative choices.¹⁷⁵ When this view is taken to its extreme, true creativity ends where the rules and parameters governing the creative process have been determined and the process of production begins, without the exercise of any further discretion or choice.¹⁷⁶ If neither pure randomness nor pure obedience to predetermined rules is creativity (both of which, of course, are debatable), then algorithmic creation is not creative. The resulting works still exhibit *creativity* and the choices of parameters, forms, and rules are unquestionably creative, but the same cannot be said of the steps between finalizing the rules and completion of the work. If Samuelson and Bridy are correct that the creation of the algorithm and the creation of the outputs are entirely separate processes,¹⁷⁷ then the AI has exhibited no creativity.

One interesting consequence of taking this view is that it undermines the arguments set out above for why copyright is limited to human authors. Many authorities have limited authorship to humans, but the reasons provided tend to invoke a requirement of sentience. If AI can truly “think” in the same way humans can, then these arguments might be weakened. For example, Bill Patry states that “a work *owing its form to the forces of nature . . . is not registrable.*”¹⁷⁸ The Copyright Office similarly refuses to register works created by non-human authors “[b]ecause copyright law is limited to ‘original intellectual conceptions of the author.’”¹⁷⁹ A work made by an AI would not “ow[e] its form to the forces of nature”¹⁸⁰ any more

¹⁷³ Samuelson, *supra* note 22, at 1205 n.90 (quoting JOHN HAUGELAND, *ARTIFICIAL INTELLIGENCE: THE VERY IDEA* 4, 9–12 (1985)).

¹⁷⁴ *Id.*

¹⁷⁵ See Bridy, *supra* note 13, at 397.

¹⁷⁶ *Id.*

¹⁷⁷ See *infra* Part I.B.

¹⁷⁸ 2 WILLIAM F. PATRY, *PATRY ON COPYRIGHT* § 3:19 n.1 (2019) (emphasis added).

¹⁷⁹ COMPENDIUM, *supra* note 38, § 306 (quoting *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884)).

¹⁸⁰ PATRY, *supra* note 178.

than would a human-generated work. Furthermore, if we accept that human thought is algorithmic and can be imitated by AI, then perhaps AI is also capable of generating “original intellectual conceptions.”

The final missing piece would be incentives, because copyright aims not only to encourage creation, but to incentivize it financially. If we accept that AI can be trained to think like a human, as Turing suggests, then we might posit that it can be trained to respond to financial incentives as well. Setting the objective function to maximize revenue might be one way to achieve this—if the AI’s strength is producing creative works and it discovers (or is told) that copyright is one way to maximize profits from those works, then it could be trained to be “motivated” by similar incentives to humans.¹⁸¹ However, this once again depends on the control that the human programmers are exerting over the functionality of the AI.

AI is unquestionably capable of producing “creative” works. AARON’s music and BRUTUS’ short story¹⁸² would likely pass Bridy’s “Turing Test for creativity,”¹⁸³ as many people would have difficulty telling the computer-generated works apart from human-generated works. However, whether the AI is legally creative is a different question, and a much more difficult one. This is especially true with respect to the type of creativity required in order for the creator to have sufficient “original intellectual conceptions” to be deemed the “author” under copyright law. As Bridy put it, “[w]e might not say that AARON is creative, but we can say that AARON’s painting exhibits creativity.”¹⁸⁴ Likewise, if we think of an algorithm as a tool (like a camera), the works created “by” that tool unquestionably meet the *Feist* bar of independent creation plus a modicum of creativity. We do not question whether the human who pressed the button is the author; it is assumed that the requisite modicum of creativity came from the human and not the machine. On the one hand, although it is easy to say that the works exhibit originality, creativity, and novelty, it is very difficult to plausibly demonstrate intentionality on the part of the AI (as opposed to the programmer or user). On the other hand, it is also clear that the operations performed by the algorithm are the source, if not the proximate cause, of the work. In this sense, the algorithm is also the agent of execution of the idea. The key question is therefore whether it is the machine that takes the concept from an idea to copyrightable expression, or whether the programmer or user exercises

¹⁸¹ The creator of the algorithm, however, would be wise to closely cabin the means of maximizing the objective function. See, e.g., *Universal Paperclips*, DECISIONPROBLEM.COM, <http://www.decisionproblem.com/paperclips/> (last visited Apr. 13, 2019) (illustrating the potential dangers of setting objective functions without further supervision of the AI).

¹⁸² See Bridy, *supra* note 15, at 16–18.

¹⁸³ Bridy, *supra* note 13, at 399.

¹⁸⁴ *Id.*

sufficient “control” to be considered the mastermind of the process and claim the expression as well as the idea.

Thus, the question is really *whose* “original intellectual conceptions” are represented in the resulting work when a human programmer or user interacts with a complex algorithm to generate a copyrightable work. If creativity is programmable—if novelty, randomness, and independent creation are sufficient—then it is possible for AI to be creative in the sense recognized by copyright doctrine. It is also then possible to make a colorable argument that the work in fact represents the “original intellectual conceptions” of the AI and not the human—or those of both. These questions, however, are unlikely to be resolved any time soon. In the meantime, control is perhaps our best proxy for determining whose conceptions (and creativity) the expression represents.

C. *The Gift of Creativity: Intentional Unpredictability and Randomness*

One of the biggest hurdles to a human claiming copyright in the outputs of an algorithm is the concept of unpredictability, including both randomness and the ability of computers to exceed human capabilities (e.g., in speed, scale, and discrete skills such as pattern recognition).¹⁸⁵ As a practical concern, if the human claiming authorship cannot show that he conceived of and controlled the output, it would be difficult to establish that it truly represents his “original intellectual conceptions.” Deep neural networks and other complicated AI are capable of breathtakingly complex computations, and perhaps in some circumstances even exceed the abilities of their human programmers. The outputs—and the process for creating them—may even become more complicated than the human brain is able to comprehend, predict, or intend. However, this is simply a difference in degree, not a difference in kind.

The language used by engineers and scholars to describe AI reflects this view. CONTU noted that it is “a human power [AI] extend[s].”¹⁸⁶ Grimmelmann states that “[a]nything an author does with a computer she could in theory do without it. . . . Computers make some kinds of creativity practically *feasible*, but they do not make anything newly *possible*.”¹⁸⁷ Jeff Dean holds a similar view, suggesting that “[a]nything humans can do in 0.1 sec, the right big 10-layer network can do too.”¹⁸⁸ Jason Tanz goes even further, claiming that “[s]oon we won’t program computers.

¹⁸⁵ See, e.g., DEEP MIND, *supra* note 9; IMB, *supra* note 9; Macuga, *supra* note 5.

¹⁸⁶ CONTU FINAL REPORT, *supra* note 31, at 45.

¹⁸⁷ Grimmelmann, *supra* note 23, at 407.

¹⁸⁸ Jeff Dean, *supra* note 93, at 26.

We'll train them like dogs.”¹⁸⁹ While it is certainly possible that computers in the future will be unmoored from the capabilities of humans and able to accomplish things that are truly different in kind from what a human is capable of, that day is not yet upon us.¹⁹⁰ Even if (or when) it is, the reality is that the AI will remain responsive to programmers' or users' adjustments to the parameters, data, variable weights, and other components, which allows those humans to retain control over the outputs, if not the exact steps of the creative process itself. The programmer also makes the decision to use those particular capabilities in the first instance.

Since the novice photographer discussed in Part I.B and thunderstruck painter discussed in *Alfred Bell* are no less authors than a creator who fully understands how to execute their vision and does so flawlessly, we can also dismiss the notion that an unknown or unknowable result undermines copyright in traditional forms of creation. Forms of accidental or random creation are nonetheless recognized as copyrightable works, whether it be the result of the paint flung at the canvas (whether by a machine or by Jackson Pollock himself) or random selection and coloring of pixels by a simple algorithm.

One specific form of unpredictability, however, has greatly troubled scholars and has received a lot of attention in the context of AI: randomness. It is common to program randomness into an algorithm's choices, particularly when the output is a creative work. There are certainly creative software programs that do not utilize randomness—a camera behaves the same way each time you take a photograph with the same settings, and a word processor inserts the precise letter that corresponds to the key you press.¹⁹¹ However, many other programs are intentionally coded to include randomness. For example, in 1956, Martin Klein built an algorithm to compose music. He adopted six rules—three from Mozart and three from his own observations of music.¹⁹² The algorithm started the process by selecting a note at random, and then followed a clear set of steps until all six rules of composition were satisfied. The decision to begin the song with a randomly selected note helps make

¹⁸⁹ Jason Tanz, *Soon We Won't Program Computers. We'll Train Them Like Dogs*, WIRED (May 17, 2016, 6:50 AM), <https://www.wired.com/2016/05/the-end-of-code>.

¹⁹⁰ See, e.g., Ron Miller, *Artificial Intelligence Is Not as Smart as You (or Elon Musk) Think*, TECHCRUNCH (July 25, 2017), <https://techcrunch.com/2017/07/25/artificial-intelligence-is-not-as-smart-as-you-or-elon-musk-think/>.

¹⁹¹ Note that either one *could* be programmed to inject randomness into the user's creations—the programmers have simply chosen not to do so.

¹⁹² Martin Klein, *Syncopation in Automation*, RADIO-ELECTRONICS, June 1957, at 36, <http://www.americanradiohistory.com/Archive-Radio-Electronics/50s/1957/Radio-Electronics-1957-06.pdf>; see also Bridy, *supra* note 13, at 395–96.

the body of resulting works more interesting. If, alternatively, every song started with a G, the possible number and variety of outputs would be severely reduced.

BRUTUS and other literary machines are doing something similar, albeit on a far more complicated scale and manner than the computer that generated *Push Button Bertha*. These AI are following rules of creation. The apparent creativity in their outputs comes from the variety of rules from which the machines are allowed to choose and the vast vocabulary they are given. However, the output is still precisely what their human creators intended: a story of a particular format and genre that mimics the language structure of human storytelling. The rules may be drawn from other human creations (e.g., human-generated stories), but the choices among those rules, possible data sets, and other parameters are the true creative choices that determine the end result.

Another reason for intentionally introducing randomness into an algorithm's choices is to increase the likelihood of discovering something H-creative.¹⁹³ For example, imagine an algorithm that tells a football coach what play to call next. Presumably, the coach wants the play call that will maximize the chances of his team winning. The data on which the algorithm would be trained would likely be play calls from actual past games, along with the results (labeled data). However, you could also allow the algorithm to test options and decide which would lead to more positive outcomes (reinforcement learning).¹⁹⁴ Particularly in the latter scenario, to ensure that the algorithm is able to find the "best" play call, it should consider *all* possible play calls. Limiting the algorithm's choices to those that have actually been made in the past restricts the algorithm's options. For example, if no coach in the history of football has ever chosen to punt on second down, and the algorithm is restricted to play calls present in the data set, the algorithm will never recommend punting on second down. However, if it is programmed such that it is allowed to

¹⁹³ See Schönberger, *supra* note 27, at 42 ("Another attempt to approximate creativity tested against the criteria of 'response uniqueness' and understood as 'the ability to do the unexpected or to deviate from rules' is the introduction of randomness into the algorithmic process.").

¹⁹⁴ These choices may be represented in the model selected for the algorithm. Feeding the algorithm data that is labeled as a positive outcome or a negative outcome and having it learn from the sheer scale of the data would be a form of supervised learning, and allowing it to test options and learn by winning or losing would be a form of reinforcement learning. See Lehr & Ohm, *supra* note 18, at 673, 676–77, 676 n.83; Dean, *supra* note 93, at 10.

learn by choosing a play from the full panoply of play calls available, it may discover that punting on second down would be sensible in certain situations.¹⁹⁵

Some argue that introducing randomness or other forms of unpredictability divests the human programmer or user of the requisite control over the resulting work. For example, in 1964, the Copyright Office refused to register a design for a tile floor because it had been generated by a machine using random geometric patterns. The Register of Copyrights asserted that “the ‘design’ does not constitute the ‘writing of an author’”¹⁹⁶ because it had been created by a machine and not by a man. Bridy also interprets Ada Lovelace’s famous quote¹⁹⁷ as supporting a definition of creativity as “the ability to do the unexpected or to deviate from rules. Some think computers can do this if their code incorporates elements of randomness, so that they make choices about composition that are governed at least in part by chance.”¹⁹⁸ However, even if we accept this definition of creativity, accidental creation is not a bar to copyrightability.¹⁹⁹ The fact that an accident was an intentional one rather than a truly unexpected “clap of thunder” only buttresses the conclusion that the programmer’s “original intellectual conceptions” are represented. Had randomness or unpredictability been a bar to creativity, Jackson Pollock would have been unable to claim copyright in any of his works, as he could not have known precisely where each drop of paint would fall on the canvas, or the shape that every splatter would take upon contact. To claim copyright, control over a work must be sufficient, but not complete.

¹⁹⁵ If the data set included all past NFL games, this play call would in fact be available to the algorithm, as this example is based on a real NFL game where the Philadelphia Eagles (in)famously punted on second down against the Washington Redskins in 1986. It was on second and 40, followed four penalties, resulted in a blocked kick and a turnover for a touchdown. *See 2nd Down Punt, Eagles-Redskins 1986*, YOUTUBE (Mar. 7, 2015), https://www.youtube.com/watch?v=kO2ILLMWEKs&feature=player_embedded (commenters uniformly denouncing the play as one of the worst plays (and worst drives) in NFL history).

¹⁹⁶ U.S. COPYRIGHT OFFICE, REGISTER OF COPYRIGHTS, SIXTY-SEVENTH ANNUAL REP. OF THE REGISTER OF COPYRIGHTS 7–8 (1964) (discussing the then-pending mandamus suit of *Armstrong Cork Co. v. Kaminstein*). Armstrong brought a suit to compel registration, but it was dismissed when Armstrong refused to reveal details about the way the machine operated, which it considered a trade secret.

¹⁹⁷ *See supra* note 162 and accompanying text.

¹⁹⁸ Bridy, *supra* note 13, at 399 (citing DAVID LEVY, *ROBOTS UNLIMITED: LIFE IN A VIRTUAL AGE* (2005)).

¹⁹⁹ *See, e.g., Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, 191 F.2d 99, 105 (2d Cir. 1951).

III

A JOURNEY TO THE CENTER OF THE ALGORITHM: DEMYSTIFYING THE “BLACK BOX”

AI is often referred to as a “black box” because it is difficult to access or understand,²⁰⁰ which leads to two major concerns. First, AI can be very complicated. In fact, as deep learning and neural network technology advances, we may reach a point where AI is so complex that human beings are incapable of fully understanding every step of the process between creation of the algorithm and creation of the algorithm’s output.²⁰¹ Second, the proprietary nature of algorithms and, accordingly, their tendency to be protected as trade secrets²⁰² makes it difficult for anyone other than the owner to understand and challenge any aspect of an algorithm’s operation, from bias and discrimination in employment or sentencing decisions²⁰³ to copyright infringement. This lack of transparency also interferes with the ability to parse out which elements of the decision come from the algorithm, which come from the data,

²⁰⁰ See, e.g., FRANK PASQUALE, *THE BLACK BOX SOCIETY: THE SECRET ALGORITHMS THAT CONTROL MONEY AND INFORMATION* (Harv. Univ. Press 2015); Danielle Keats Citron & Frank Pasquale, *The Scored Society: Due Process for Automated Predictions*, 89 WASH. L. REV. 1 (2014) (defining black boxes as algorithms that transform data sets (inputs) into outputs without giving the user any information about how they do so); Roger Allan Ford & W. Nicholson Price II, *Privacy and Accountability in Black-Box Medicine*, 23 MICH. TELECOMM. TECH. L. REV. 1, 11 n.38 (2016) (describing some algorithms as being either “unavoidably opaque” or “deliberately opaque”); Lehr & Ohm, *supra* note 18; see also John Searle, *Minds, Brains and Programs*, 3 BEHAV. & BRAIN SCI. 417 (1980) (discussing his famous “Chinese Room” experiment and the possibly false assumptions we draw when we can’t access or can’t understand the steps the algorithm is taking).

²⁰¹ See, e.g., Kalev Leetaru, *In Machines We Trust: Algorithms Are Getting Too Complex to Understand*, FORBES (Jan. 4, 2016, 10:18 AM), <https://www.forbes.com/sites/kalevleetaru/2016/01/04/in-machines-we-trust-algorithms-are-getting-too-complex-to-understand/#5c5b55d633a5>; Marianne Lehnis, *Can We Trust AI if We Don’t Know How It Works?*, BBC NEWS (June 15, 2018), <https://www.bbc.com/news/business-44466213>. But see Phil Wainewright, *Why Humans Will Always Be Smarter Than Artificial Intelligence*, DIGINOMICA (Feb. 15, 2018), <https://diginomica.com/why-humans-will-always-be-smarter-than-artificial-intelligence/>.

²⁰² See, e.g., U.S. COPYRIGHT OFFICE, *supra* note 196, at 7 (discussing *Armstrong Cork Co. v. Kaminstein*, No. 119-64 (D.D.C. filed Jan. 16, 1964), later dismissed because Armstrong did not wish to disclose how the machine operated, which it considered a trade secret).

²⁰³ For a detailed discussion of how copyright law affects access to data sets that could mitigate bias in algorithms, see Amanda Levendowski, *How Copyright Law Can Fix Artificial Intelligence’s Implicit Bias Problem*, 93 WASH. L. REV. 579 (2018).

and which come from the programmer's choices in setting the parameters (e.g., the relative weights of the variables). These are valid concerns, and both must be addressed by developers and users of AI technology in order for AI to continue to advance and flourish.

However, these arguments do not logically support withholding copyright ownership from the programmers and users of algorithms. With respect to proprietary algorithms and claims of trade secrecy, one option is to allow social and political pressure to shape laws (or self-regulatory frameworks) around transparency and accountability. Another would be to allow economic pressure from consumers to incentivize companies to voluntarily provide the transparency and accountability that users desire. Either option would be better aligned with the purposes of copyright law than withholding copyright from the programmer or user of the algorithm. Choosing to allocate copyright to the AI itself (or to the public domain) simply because the public does not fully understand how it functions would disincentivize human programmers and users to create both the AI and AI-generated works, resulting in fewer works being disseminated to the public, inhibiting AI development, and losing tremendous benefits to society that AI makes possible.

However, if the human "mastermind" is truly unable to understand or exercise sufficient control over the creative process due to the sophistication of the technology itself, that could undermine their claim to ownership in the expression of the resulting work. After all, if "the traditional elements of authorship in the work (literary, artistic, or musical expression or elements of selection, arrangement, etc.) were actually conceived and executed not by man but by a machine,"²⁰⁴ then the expression could not be said to duplicate the "conceptions and visions"²⁰⁵ of the human claiming authorship. Therefore, the real question is whether humans are capable of sufficiently controlling the creative outputs of the algorithms that they create and use.

Deep learning is one form of machine learning and among the most complex forms of AI that exist today. Jeff Dean describes it as "[a] collection of simple trainable mathematical units, which collaborate to compute a complicated function."²⁰⁶ Deep learning is compatible with many algorithmic models, including

²⁰⁴ U.S. COPYRIGHT OFFICE, *supra* note 29, at 5.

²⁰⁵ *Lindsay v. The Wrecked & Abandoned Vessel R.M.S. Titanic*, 52 U.S.P.Q.2d 1613 (S.D.N.Y. 1999).

²⁰⁶ Dean, *supra* note 93, at 12.

supervised, unsupervised, and reinforcement learning.²⁰⁷ It can be used for tasks like pattern recognition for modeling human speech, vision, language understanding, predictions of online user behavior, or translation.²⁰⁸ Deep learning requires massive amounts of data and tremendous computing power.²⁰⁹ One common form of deep learning is neural networks, which have multiple layers of algorithms. Each layer performs a mathematical function on the data, and the layers are then connected to each other.²¹⁰

When enlisting algorithms in the creative process, the first steps include such decisions as setting the objective function and other parameters (e.g., variance and bias) and training the algorithm on one or more data sets.²¹¹ There is, however, a conceptual gap between the decision that the algorithm is ready to go live and the actual creation of output(s). For example, if a user purchases software that writes music on demand, this gap would be the set of steps between clicking the “create” button and seeing the sheet music the software produces. With respect to the hypothetical algorithm discussed earlier that fills in pixels on a screen according to instructions the user selects, the conceptual gap would include the steps after the user chooses the number of pixels and the colors, but before the final artwork appears on the screen. The crucial question is whether the ability to understand those intervening steps—or at least to control them—is a prerequisite to claiming authorship over the copyrightable expression in that work.

How much conceptual distance is too far a leap from the initial instructions provided by the programmer and the output of the algorithm? Does “learning” by a machine in the interim increase that distance? What is truly “unpredictable,” as opposed to being the intended (if only vaguely planned or conceived) result of the

²⁰⁷ *Id.*

²⁰⁸ *Id.* at 2, 10, 24.

²⁰⁹ MATHWORKS, *supra* note 6 (“When choosing between machine learning and deep learning, consider whether you have a high-performance GPU and lots of labeled data. If you don’t have either of those things, it may make more sense to use machine learning instead of deep learning.”).

²¹⁰ See Chris Woodford, *Neural Networks*, EXPLAIN THAT STUFF! (last updated April 4, 2019), <https://www.explainthatstuff.com/introduction-to-neural-networks.html>; see also Nikhil Buduma, *Deep Learning in a Nutshell—What It Is, How It Works, Why Care?*, KDNUGETS (Jan. 2015), <https://www.kdnuggets.com/2015/01/deep-learning-explanation-what-how-why.html>.

²¹¹ Lehr & Ohm, *supra* note 18, at 696–701.

programmer's instructions? What transforms the AI from an inert tool into an intentional, creative being capable of authorship?²¹²

Admittedly, the mere setting of guidelines and rules for creation does not provide us with clear answers to any of these questions.²¹³ For example, the person who organizes a writing competition will set the length of submissions, the topic, and other creative constraints, but, in the absence of a voluntary contract to the contrary, he or she would not own the works written and submitted by other human authors. In contrast, the choices made by a programmer in creating, configuring, and training an algorithm that would produce these same stories go far beyond the rules of a simple contest. The computer must follow the rules set by its programmer, and it can only learn from the data fed by the programmer or user. It cannot bring a tremendous wealth of inexact, volatile, and unintentional human experiences to the creative process the way a human author does. Even if it has been trained for hundreds of years on vast quantities of data, and even if it far exceeds in *scale* what a human would be capable of in hundreds of lifetimes, it is still beholden to that universe of data and cannot exceed the capabilities granted to it by its programmer(s) and the knowledge or data provided to it by its user(s).

A. Peeking Behind the Curtain: Mechanisms of Control

It is important to note that creative control does not require full and complete understanding of the operations of the algorithm. For example, the novice photographer selecting a setting without understanding what it does or how it works will still be able to use those settings to manipulate the output (perhaps through trial

²¹² See, e.g., OTA REPORT, *supra* note 33, at 69 (“The proportion of the work that is the product of the machine, and the proportion that is the product of a human may vary. In many cases, as with word processing programs, the machine contributes little to the creation of a work; it is ‘transparent’ to the writer’s creativity. But with some programs, such as those that summarize (abstract) written articles, the processing done by the computer could constitute ‘an original work of authorship’ if it were done by a human being.”); Samuelson, *supra* note 22, at 1195–96 (questioning “whether interactive computing employs the computer as a co-creator, rather than as an instrument of creation”); Schönberger, *supra* note 27, at 41, 44 (“[S]ome of these systems have alienated themselves from human creatorship to a degree of autonomy where the contribution of the robot is substantial enough to acknowledge the artificial agent as co- or even main creator. . . . [I]t remains to be seen whether the initial programming of an artificial agent will keep sufficient legal proximity to the resulting work, even if the program has further developed possibly on its own account and to a degree of autonomy not predicted at its launch.”).

²¹³ *Erickson v. Trinity Theatre, Inc.*, 13 F.3d 1061, 1071 (7th Cir. 1994) (stating that an author “must supply more than mere direction or ideas”).

or error, or through sheer luck). The same holds true for extremely complicated deep learning algorithms—a programmer can still maintain control even without a complete understanding of its operations. For example, the programmer can adjust the variable weights,²¹⁴ provide the algorithm with different training data to correct perceived bias,²¹⁵ or adjust the objective function (i.e., the metric that the algorithm is trying to maximize).²¹⁶

Furthermore, the criticism that algorithms are opaque is unpersuasive when one considers the alternative: a volatile and unpredictable human being. Between the finalization of parameters and the actual creation of the work, the actions of a human who makes similar decisions or creates similar works are equally obscure. In fact, when a human is the creator, it is *less* possible to interrogate the results and determine which variables influenced the decision or creation. The doctrine of subconscious copying²¹⁷ illustrates this point. With an algorithm, on the one hand, one can examine its inputs and see exactly what “inspired” the output, as well as verify that no copyrightable expression was duplicated from its inputs. A person, on the other hand, brings to the process a lifetime of experiences and unmeasurable inputs, with no practical way to determine whether the creation was truly independent, making the author more vulnerable to an accusation of “subconscious” copying. Nor is there an obvious way to adjust the inputs if desired—a person cannot delete memories at will, or avoid incorporating an input to which they have already been exposed. Similarly, with respect to bias and discrimination, an algorithm has no malicious or moral responses that influence the outputs—it simply follows rules. The rules themselves, or the data inputs, could contain bias, but that is caused by *human* and not algorithmic error.²¹⁸ Furthermore, many other criticisms or flaws of algorithms can be found in human behavior as well. For example, overfitting (when an algorithm learns a rule that is too specific and makes predictions that are not generalizable to other sets of data) could be analogized to some forms of PTSD, where innocuous loud noises or sudden movements may be perceived as serious and imminent threats (as a result of a “rule” learned from a single negative experience or set of experiences).

²¹⁴ See Dean, *supra* note 93, at 21–23; Raicea, *supra* note 10.

²¹⁵ Lehr & Ohm, *supra* note 18, at 665, 684, 696, 698–700.

²¹⁶ *Id.* at 671–77.

²¹⁷ See, e.g., *Selle v. Gibb*, 741 F.2d 896 (7th Cir. 1984).

²¹⁸ See, e.g., EXECUTIVE OFFICE OF THE PRESIDENT, *BIG DATA: SEIZING OPPORTUNITIES, PRESERVING VALUES* (2014) at 60 (recommending that “the federal government’s lead civil rights and consumer protection agencies should expand their technical expertise to be able to identify practices and outcomes facilitated by big data analytics that have a discriminatory impact on protected classes, and develop a plan for investigating and resolving violations of law.”).

Finally, and perhaps most significantly, there are methods of accountability that can identify, for example, which variables are most important to an individual outcome of the algorithm, or which variables are most important to all decisions across the board. To be effective, accountability measures must keep up as algorithms become more complex over time, but encouraging companies and individuals to create *responsibly* is still preferable to not encouraging them to create. Failures of explainability or accountability are not excuses to deny programmers and users copyright in the outputs of the algorithms they create and use; they will neither make the technology any more transparent nor advance the goals of copyright law.

B. It's All Greek to Me: The "Black Box" and Explainability in Artificial Intelligence

Without understanding how an algorithm operates and how it interacts with human programmers and users, we cannot determine whether the AI has done so much to generate the creative expression in the work that a human can no longer be considered the author. To determine whether this line exists and where it might lie, it is necessary to dissect the ubiquitous "black box" arguments, which suggest that no human can truly understand the inner workings of an algorithm between the setting of parameters and the creation of output.²¹⁹ This leap from inputs to outputs is a critical step but has not been addressed in legal literature in great depth.²²⁰ In the future, one obstacle for potential authors of computer-generated works will be their inability to understand and describe to others how the algorithm analyzes its inputs, makes decisions, and creates its outputs.

Lehr and Ohm refer to this as the "explainability" of the algorithm and define it as "the ability of machine learning to give reasons for its estimations."²²¹ They suggest two viable ways in which programmers can currently explain an algorithm: they can either "describe how important different input variables are to the resulting predictions," or "describe how increases or decreases in the various input variables translate to changes in the outcome variable."²²² In other words, one approach identifies the most important variables for the algorithm's individual decisions and outputs, and the other looks at the relationship between the variables, comparing them to each other as well as to the outcome. The first provides "partial dependence

²¹⁹ See, e.g., Citron & Pasquale, *supra* note 200; PASQUALE, *supra* note 200; Lehr & Ohm, *supra* note 18, at 706 n.193; Ford & Price, *supra* note 200.

²²⁰ See, e.g., Lehr & Ohm, *supra* note 18, at 704–05.

²²¹ *Id.* at 705–06.

²²² *Id.* at 708–09.

or individual conditional expectation plots,”²²³ and focuses on identifying those variables that were most important to a particular decision or prediction. The other includes options such as “variable importance plot[s],”²²⁴ which provide insight into which variables were most significant across the data set. However, Lehr and Ohm acknowledge that these approaches may not work for deep learning algorithms.²²⁵ Thus, additional methods will need to be developed for more complex models.

There are also a number of methods being developed to help make AI—and deep neural networks in particular—more explainable. The field is referred to as XAI—explainable AI.²²⁶ David Gunning of DARPA optimistically notes that:

New machine-learning systems will have the ability to explain their rationale, characterize their strengths and weaknesses, and convey an understanding of how they will behave in the future. . . . These models will be combined with state-of-the-art human-computer interface techniques capable of translating models into understandable and useful explanation dialogues for the end user.²²⁷

Katherine McTole describes five specific methods for achieving XAI: learning semantic associations; generating visual explanations; local, interpretable, model-agnostic explanations; rationalizing neural predictions; and explainable reinforcement learning.²²⁸ An article in *Science Magazine* suggests that “[j]ust as the microscope revealed the cell . . . researchers are crafting tools that will allow insight into the [sic] how neural networks make decisions” and describes three approaches to achieving explainability: building in a “transparent layer” that helps control the neural networks, “probing” the network by varying the inputs in an attempt to understand which variables are most important to a particular decision, and using more neural networks to understand how other neural networks are operating (for

²²³ *Id.* at 710.

²²⁴ *Id.* at 708.

²²⁵ *Id.* at 709–10.

²²⁶ *Explainable Artificial Intelligence*, WIKIPEDIA, https://en.wikipedia.org/wiki/Explainable_Artificial_Intelligence (last visited May 16, 2018).

²²⁷ David Gunning, *Explainable Artificial Intelligence*, DEF. ADVANCED RES. PROJECTS AGENCY, <https://www.darpa.mil/program/explainable-artificial-intelligence> (last visited May 18., 2019) (providing a useful visual representation of the effect that explainable AI can have on the creative process in Figure 2).

²²⁸ Katherine McTole, *Bonsai Speaks on Explainability of Deep Learning at SF Meetup*, MEDIUM (Jan. 27, 2017), <https://medium.com/@BonsaiAI/bonsai-speaks-on-explainability-of-deep-learning-at-sf-meetup-bef4c8a4e14e>.

example, by exposing knowledge gaps in the AI's logic).²²⁹ Ultimately, the hope is that these XAI methods will result in the equivalent of an fMRI for the AI's artificial "brain," allowing us to see how it operates while it is "thinking."

In addition, programmers are facing mounting pressure to explain how their algorithms work in many areas of law and life. Lawyers and advocates call for increased explainability and human oversight in automated bail and sentencing decisions;²³⁰ medical patients clamor for increased transparency in automated diagnostic processes;²³¹ and Gunning emphasizes the importance of XAI in allowing the military "to understand, trust, and effectively manage this emerging generation of artificially intelligent partners."²³²

Another example of public calls for transparency came in August 2017, when New York City Councilman James Vacca, chair of the Council's technology committee, introduced a bill proposing that the source code of any algorithm that a city agency uses to make automated decisions be made available to the public. Vacca stated, "[i]f we're going to be governed by machines and algorithms and data, well, they better be transparent."²³³ While that bill did not pass in its original form, New York City has now created a task force to make recommendations on "which types of algorithms should be regulated, how private citizens can 'meaningfully assess' the algorithms' functions and gain an explanation of decisions that affect them personally, and how the government can address 'instances in which a person is harmed' by algorithmic bias."²³⁴ Similar calls for transparency are being made across the globe. For example, the European Union's General Data Protection Regulation mandates that a data subject has the right to request human intervention in automated decisions that have a substantial or legal effect on the data subject.²³⁵

²²⁹ Paul Voosen, *How AI Detectives Are Cracking Open the Black Box of Deep Learning*, SCI. MAGAZINE (July 6, 2017, 2:00 PM), <http://www.sciencemag.org/news/2017/07/how-ai-detectives-are-cracking-open-black-box-deep-learning>.

²³⁰ BEN BUCHANAN & TAYLOR MILLER, BELFER CTR. FOR SCI. & INT'L AFF., MACHINE LEARNING FOR POLICYMAKERS 32-43 (2017), <https://www.belfercenter.org/sites/default/files/files/publication/MachineLearningforPolicymakers.pdf>.

²³¹ See Samek, Wiegand & Muller, *supra* note 4.

²³² David Gunning, *supra* note 227.

²³³ Powles, *supra* note 17.

²³⁴ *Id.*

²³⁵ Regulation (EU) 2016/679 of the European Parliament and the Council of 27 April 2016 on the Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free

As these pressures increase, programmers will find new ways of improving explainability for AI. As the use of AI becomes increasingly commonplace and the public becomes better acquainted with how algorithms work, what seems incomprehensible today will make more sense in the future. Programmers will find new ways to translate the AI's "thoughts" into a language we can understand. Programmers might even find ways to have the algorithm explain itself to us, thus obviating the need for humans to analyze formulas and decipher patterns themselves.²³⁶ Consequently, the rules that algorithms create from their training data sets will become easier to discover and understand, and the "black box" will become increasingly transparent.

CONCLUSION

AI is getting closer and closer to passing the Turing test for creative works every day. As AI continues to approximate human capabilities, the question of who should own the copyright in computer-generated works will only become more complex. The crux of the issue is whether there is any point at which the programmer and user have yielded so much control over the creative process to the AI that the human programmer or user can no longer claim copyright in the expression of the resulting work. After all, if the idea is the programmer's, but the expression is the "original intellectual conception"²³⁷ of the AI—that is, "conceived and executed not by man but by a machine"²³⁸—then it is difficult to justify a programmer's claim of ownership.

Given the current state of AI technology, I conclude that such a threshold does not exist. Even with the most complex deep neural networks, human programmers and users still retain sufficient control over the creative process such that the resulting work can be said to embody their "original intellectual conceptions." Even when the process includes unpredictability (e.g., due to the complexity of the technology or the relative inexperience of the user) or randomness (intentional or otherwise), the programmer and user retain the ability to adjust the algorithms' parameters, variable weights, and other factors in order to exercise control over the output. AI is also more a glass box than a black box, and it will only continue to become more transparent as societal pressure and technological demands spur the development of XAI.

Movement of Such Data, and Repealing Directive 95/46/EC (General Data Protection Regulation), 2016 O.J. (L 119/1) 13–14.

²³⁶ Lehr & Ohm, *supra* note 18, at 706.

²³⁷ *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884).

²³⁸ U.S. COPYRIGHT OFFICE, *supra* note 29, at 5.

Furthermore, the incentives inherent in the copyright bargain—and the very rationale for the existence of copyright law—are only advanced when copyright is allocated to a human, whether that is the programmer, user, data owner, or a combination of them. Otherwise, human programmers and users will not be incentivized to create, improve, and use “creative” AI. Thus, even if or when AI does reach a point where it could truly be developing “original intellectual conceptions” of its own, granting copyright to an algorithm would not further the purposes of copyright law; nor does it fit well with its incentive structure. AI has already changed the world, and it will continue to do so in the future—the question is whether we will properly harness its potential for creativity.

NEW YORK UNIVERSITY
JOURNAL OF INTELLECTUAL PROPERTY
AND ENTERTAINMENT LAW

VOLUME 8

SPRING 2019

NUMBER 2

SPEAKING ABOUT POLITICS, A FIREABLE OFFENSE?
THE LEGALITY OF EMPLOYEE SPEECH RESTRICTIONS
IN THE ENTERTAINMENT INDUSTRY

CHLOE L. KAUFMAN*

Despite the commonly shared belief that Americans have an undeniable right to freedom of speech, private-sector employees receive no constitutional protection for employer regulations of or reactions to their speech and federal and state statutes provide extremely limited protections. Consequently, on-air professionals in the entertainment industry, including Curt Schilling, Kathy Griffin, Colin Kaepernick, Jemele Hill and Tomi Lahren have been terminated, suspended or otherwise retaliated against after making expressions of political speech deemed controversial by the public and their respective employers.

Tomi Lahren's dispute against her employer demonstrates the severity of a private employer's ability to restrict political speech under U.S. law. By analyzing Lahren's complaint and the existing legal framework, this Note highlights how private employers' unrestricted power disproportionately affects employees in the entertainment industry, risks a chilling effect on private employee speech across industries, and consequently cuts against the foundational values of American democracy.

* J.D. Candidate, New York University School of Law, 2019; B.A., History of Art, summa cum laude, University of Pennsylvania, 2016. The author would like to thank the 2018-19 Editorial Board of the Journal of Intellectual Property & Entertainment Law and Professor Day Krolik for their invaluable assistance in the editing process.

INTRODUCTION.....	377
I. LAHREN V. BECK.....	383
A. <i>Wrongful Termination Suit</i>	385
B. <i>Settlement</i>	387
II. LEGAL PROTECTIONS FOR PRIVATE EMPLOYEE POLITICAL SPEECH.....	388
A. <i>Shortcomings of the First Amendment</i>	388
B. <i>Federal Statutory Protection for Employee Political Speech</i>	391
1. <i>National Labor Relations Act</i>	391
2. <i>Federal Voter Protection Laws</i>	391
C. <i>State Statutes Protection for Employee Political Speech</i>	393
1. <i>Protections for Political Activity</i>	393
2. <i>Protections Against Private Discrimination Based on Politics</i>	395
3. <i>Protections for Political Speech</i>	398
i. Connecticut’s Free Speech Statute.....	399
ii. Narrow Judicial Interpretation of Connecticut’s Free Speech Statute.....	400
iii. Additional Limitations of Connecticut’s Free Speech Statute....	402
III. CONSEQUENCES AND PROPOSED SOLUTIONS.....	403
A. <i>Chilling Effect of Inadequate Protection for Private Employee Political Speech in the Entertainment Industry</i>	403
B. <i>Proposals</i>	406
1. <i>Contractual Solutions</i>	406
i. Negotiate for Protections in the Employment Contract.....	406
ii. Collective Bargaining for Enhanced Speech Protection.....	406
2. <i>Statutory Solutions</i>	406
i. Amend Title VII to Include “Political Beliefs” as a Protected Class.....	407
ii. Federal Statute Protecting Employee Speech Relating to Public Concern.....	407
iii. State Statutory Solution.....	407
CONCLUSION.....	407

INTRODUCTION

“I can say what I want—it’s a free country” is a familiar phrase in the United States. This schoolyard retort and its variations are emphatically repeated and believed by American citizens. Children and adults alike frequently utter the phrase to end both petty arguments and serious debates. The prevalence of this aphorism is a reflection of the significance of the First Amendment in American society. Freedom of expression, widely recognized as one of the most cherished

constitutional rights,¹ is more than just an aspirational value, it is the foundation on which American democracy rests.

Representative government depends upon an open marketplace of ideas. The ability to express and exchange ideas is essential to establishing an informed and engaged public, who can in turn elect officials to effectively represent their interests. Justice Brennan, a staunch defender of the freedom of speech and a key figure in the development of modern First Amendment doctrine, recognized that the First Amendment “was fashioned to assure unfettered interchange of ideas for the bringing about of political and social changes desired by the people.”² Moreover, Justice Brennan acknowledged that “speech concerning public affairs is more than self-expression; it is the essence of self-government.”³ Because of the interdependent relationship between freedom of speech and democratic governance, the Supreme Court has consistently recognized that speech relating to public concern is entitled to special protection.⁴

However, despite the importance of the First Amendment, the state action doctrine limits First Amendment protection to the actions of the government.⁵ Since the First Amendment does not extend to the private sector, private-sector employees receive no constitutional protection for employer regulations of or reactions to their speech.⁶ The combination of the increasing privatization of the workforce, the rise of technological innovations enabling employees to work beyond the physical boundaries of the office, and the burgeoning of social media have introduced new issues regarding private employee speech, particularly speech relating to public concern.

Numerous on-air professionals in the entertainment industry have learned the hard way that the pervasive “I can say what I want—it’s a free country” sentiment is not true in reality.⁷ This American belief in unbounded freedom of speech is

¹ See Mark T. Carroll, *Protecting Private Employees' Freedom of Political Speech*, 18 HARV. J. LEGIS. 35 (1981).

² *Roth v. United States*, 354 U.S. 476, 484 (1957).

³ *Garrison v. Louisiana*, 379 U.S. 64, 74-75 (1964).

⁴ See *NAACP v. Claiborne Hardware Co.*, 458 U.S. 886, 913 (1982); *Carey v. Brown*, 447 U.S. 455, 467 (1980).

⁵ *State Action Requirement*, LEGAL INFO. INST., https://www.law.cornell.edu/wex/state_action_requirement (last visited Mar. 27, 2019); see, e.g., *Hurley v. Irish-Am. Gay, Lesbian & Bisexual Grp. of Bos., Inc.*, 515 U.S. 557 (1995).

⁶ See *State Action Requirement*, *supra* note 5.

⁷ See Richard Sandomir, *ESPN Fires Schilling Over Offensive Post*, N.Y. TIMES, Apr. 21, 2016, at B11; William Cummings, *Tomi Lahren Settles Lawsuit with Glenn Beck, 'The Blaze,' USA TODAY* (May 1, 2017, 6:40 PM), www.usatoday.com/story/news/politics/onpolitics/

misguided because, as discussed *infra*, a significant portion of American society, those working in the private sector, cannot say whatever they want. Private employers have an unconstrained ability to censor the speech of their employees and retaliate against their employees for speech at or outside of the workplace.

Admittedly, there are certain limitations on speech in the private employment context that are reasonable and often deemed necessary to maintain a safe and productive work environment and to protect an employer's brand and values. For example, it is important that employees follow specific employer-provided directions for communicating with clients and coworkers at the workplace. Still, private employers' unbounded ability to limit expressions relating to public life and government outside of the workplace threatens a foundational American value in the freedom of expression and the system of democratic governance.

The termination and suspension of employees in the entertainment industry for expressing political speech is not a new issue. However, the heightened political divide within Trump's America has brought the employment status of entertainers who make controversial, and in some cases distasteful, statements regarding public life and politics to the forefront of the twenty-four-hour news cycle. Curt Schilling, Kathy Griffin, Colin Kaepernick, Jemele Hill, and Tomi Lahren are a sampling of high-profile, on-air professionals who have recently been terminated, suspended, or otherwise retaliated against after making expressions of political speech deemed controversial by the public and their respective employers.⁸ While the speech conveyed by each of these individuals varied in substance, form, and decency, the expressions all constituted a communication of views and opinions on public life.

ESPN fired Major League Baseball analyst Curt Schilling in April 2016 after he shared a post on his Facebook page that commented on the then-current debate surrounding a proposed North Carolina law to bar transgender people from using bathrooms not matching the gender on their birth certificates.⁹ The post included a meme of a man in a wig and women's clothing that says, "LET HIM IN! to the

2017/05/01/tomi-lahren-settles-glenn-beck-lawsuit/101177334/; Kevin Draper, *If ESPN Wants to Discipline Jemele Hill, She Might Have Law on Her Side*, N.Y. TIMES (Sept. 15, 2017), <https://www.nytimes.com/2017/09/15/sports/jemele-hill-espn.html>; Sandra Gonzalez, *CNN Fires Kathy Griffin*, CNN (May 31, 2017, 2:37 PM), <http://money.cnn.com/2017/05/31/media/cnn-kathy-griffin>; see also Sophie Tatum, *Trump: NFL Owners Should Fire Players Who Protest the National Anthem*, CNN (Sept. 23, 2017, 4:05 PM), <https://www.cnn.com/2017/09/22/politics/donald-trump-alabama-nfl/index.html>.

⁸ See Sandomir, *supra* note 7; Cummings, *supra* note 7; Draper, *supra* note 7; Gonzalez, *supra* note 7; Tatum, *supra* note 7.

⁹ See Sandomir, *supra* note 7.

restroom with your daughter or else you're a narrow-minded, judgmental, unloving racist bigot who needs to die."¹⁰ Schilling added his own commentary below the image: "A man is a man no matter what they call themselves. I don't care what they are, who they sleep with, men's room was designed for the penis, women's not so much. Now you need laws telling us differently? Pathetic."¹¹

One month after Schilling's termination, comedian and actress Kathy Griffin posted on her Instagram and Twitter accounts an image of herself holding a fake, but nonetheless realistic and gory, decapitated head of President Trump.¹² Although the comedian explained on Twitter that she created the image to mock the "Mocker in Chief," the violent image struck a chord with the public.¹³ Following the backlash, CNN terminated Griffin from her 10-year contract as the co-host of the network's annual New Year's Eve program, Squatty Potty fired her as the company's marketing spokesperson, and the venues for Griffin's remaining scheduled tour dates canceled her upcoming engagements.¹⁴

In August 2016, Colin Kaepernick, then-quarterback of the San Francisco 49ers, sat on the bench during the national anthem before the start of a game. Kaepernick explained his rationale to NFL Media:

I am not going to stand up to show pride in a flag for a country that oppresses black people and people of color To me, this is bigger than football and it would be selfish on my part to look the other way. There are bodies in the street and people getting paid leave and getting away with murder.¹⁵

Then on September 1, 2016, instead of sitting, Kaepernick decided to kneel during the anthem.¹⁶ This action inspired other players to follow suit and incited a national controversy. While some praised Kaepernick for his courage, others

¹⁰ *Id.*

¹¹ *Id.*

¹² Gonzalez, *supra* note 7.

¹³ Sandra Gonzalez, *Kathy Griffin: 'I Beg for Your Forgiveness' for Gruesome Anti-Trump Photo Shoot*, CNN (May 31, 2017 1:32 PM), <https://www.cnn.com/2017/05/30/entertainment/kathy-griffin-trump-tyler-shields/index.html>.

¹⁴ Gonzalez, *supra* note 7.

¹⁵ Steve Wyche, *Colin Kaepernick Explains Why He Sat During National Anthem*, NFL (Aug. 28, 2016, 4:33 PM), <http://www.nfl.com/news/story/0ap3000000691077/article/colin-kaepernick-explains-protest-of-national-anthem>.

¹⁶ Billy Witz, *This Time, Colin Kaepernick Takes a Stand by Kneeling*, N.Y. TIMES (Sept. 1, 2016), <https://www.nytimes.com/2016/09/02/sports/football/colin-kaepernick-kneels-national-anthem-protest.html>.

perceived this action as disrespectful to the American flag. Public opinion polls suggested that many fans boycotted the NFL in response to these protests.¹⁷ President Trump expressed his views at a rally, saying that team owners should fire players who kneel during the national anthem.¹⁸

The Trump administration maintained a similar stance when White House press secretary Sarah Huckabee Sanders weighed in on the employment of Jemele Hill, an ESPN sportscaster, after Hill tweeted, “Donald Trump is a white supremacist who has largely surrounded himself w/ other white supremacists.”¹⁹ Sanders claimed that by posting this tweet, Hill committed a “fireable offense.”²⁰ While Hill was not fired for her disparaging comments about the President, ESPN did consider it to be a violation of their social media policy.²¹ About a month later, in fact, ESPN sanctioned Hill with a two-week suspension for violating their social media policy once again—this time, by suggesting on Twitter that fans should boycott the Dallas Cowboys’ advertisers in retaliation for Cowboys’ owner Jerry Jones’ statement about benching NFL players who “disrespect the flag.”²²

The firing of political commentator, Tomi Lahren, is one of the most provocative employment terminations immediately following a highly-publicized expression of political speech. Two days after Lahren expressed her opinion that the government should not make abortion illegal, her employer, TheBlaze, a conservative media organization, suspended her self-titled show, *Tomi*, and revoked her access to her social media accounts. Lahren sued TheBlaze for wrongful termination.²³ However, the parties came to a settlement before going to trial.²⁴

¹⁷ Mike Ozanian, *Confirmed: NFL Losing Millions of TV Viewers Because of National Anthem Protests*, FORBES (Oct. 5, 2016, 12:58 PM), <https://www.forbes.com/sites/mikeozanian/2016/10/05/confirmed-nfl-losing-millions-of-tv-viewers-because-of-national-anthem-protests/#7efac3e3226c>.

¹⁸ Tatum, *supra* note 7.

¹⁹ Jemele Hill (@jemelehill), TWITTER (Sept. 11, 2017, 8:54 PM), <https://twitter.com/jemelehill/status/907391978194849793>.

²⁰ Draper, *supra* note 7.

²¹ Kevin Draper & Ken Belson, *Jemele Hill Suspended by ESPN After Response to Jerry Hones*, N.Y. TIMES (Oct. 9, 2017), <https://www.nytimes.com/2017/10/09/sports/football/jemele-hill-suspended-espn.html>.

²² *Id.*

²³ Alana Abramson, *Tomi Lahren Sues Glenn Beck for Wrongful Termination over Abortion Comments*, FORTUNE (Apr. 7, 2017), <http://fortune.com/2017/04/07/tomi-lahren-glenn-beck-the-blaze-wrongful-termination-abortion/>.

²⁴ Cummings, *supra* note 7.

Lahren's employment dispute demonstrates the severity of a private employer's ability to restrict political speech under U.S. law and the particular challenges facing professionals in the entertainment industry. This Note analyzes Lahren's legal complaint against TheBlaze to demonstrate the near limitless ability for private employers to restrict and retaliate against an employee's political speech in certain, if not all, jurisdictions. Further, this Note highlights how this unrestricted power disproportionately affects employees in the entertainment industry, risks a chilling effect on private employee speech across industries, and consequentially cuts against the foundational values of American democracy.

Part I offers context to the argument by providing an overview of the history of Tomi Lahren's employment with TheBlaze, the details of her employment contract, the facts and circumstances preceding her suit, her legal claims against TheBlaze, and the public details of her settlement.

Part II discusses the limited nature of existing constitutional, federal, and state statutory protections for private employee political speech, such as Lahren's. This section discusses the First Amendment's inability to protect private employee speech and analyzes the narrow and scattered existing federal protections, as well as the varying state statutory protections, for political expression. While the extent of many states' protection for private employee political expression is limited to electoral activity (including Texas, the state in which Lahren filed suit), some states have enhanced statutory safeguards. To illustrate, this section will focus on Connecticut's free speech statute, which is by far the most protective statute. In doing so, this section demonstrates the need for even greater protection for political speech because of the nature of employer-employee relations in the entertainment industry.

Part III highlights the consequences of insufficient protections for private employee political speech in the entertainment industry as well as the broader consequences for private employees in general. This section also proposes possible solutions to this pressing issue. The two most plausible solutions that can and should be implemented by private parties are (1) for employees, especially those like Lahren who are hired to discuss controversial topics, to negotiate with their employers to include protections against retaliation for expressions of speech relating to politics in their employment contracts and (2) for unions to collectively bargain for enhanced speech protections for members. Legislation may offer a third possible solution. Since employer restriction of speech relating to politics is of immense importance to American democracy and is an issue facing employees across industries, a statutory solution would be ideal because it would protect all employees, not just those who have the foresight or bargaining power to negotiate for protection. Admittedly, a statutory solution would not provide immediate protection and perhaps is not

realistic because of political gridlock and the challenges involved in garnering support for proposed legislation. That said, Congress could, at least in theory, address this pressing issue by either (1) amending the federal anti-discrimination law to include “political beliefs” as a protected class or (2) enacting a federal free speech statute based on Connecticut’s employee speech protection law. Alternatively, state legislatures could enact state versions of either of these statutes.

I LAHREN V. BECK

Tomi Lahren is a conservative political commentator who prides herself on her self-proclaimed ability to represent and connect with the people of Middle America.²⁵ Lahren’s media career catapulted immediately after graduating from college when an interview for an internship at One America News Network resulted in an offer to host her own show.²⁶ At only twenty-two-years-old, Lahren began hosting the self-titled *On Point with Tomi Lahren*, which reached an average of fifteen million American homes.²⁷ Lahren rapidly developed social media fame amongst the conservative media.²⁸

In September 2015, less than two years after Lahren began *On Point*, she signed a two-year employment contract with TheBlaze as a “broadcast host commentator” for *Tomi*, a new self-titled one-hour television program to be aired on BlazeTV, and as an “online video commentator and writer” for TheBlaze.com.²⁹ Lahren’s forthright patriotism, incendiary demeanor, and right-leaning opinions resonated with her conservative viewers.³⁰ She became best-known for her three-minute segments called “Final Thoughts,” which one BBC journalist characterized as “biting, outlandish, dripping with sarcasm and - depending on your political perspective - either righteous and rousing or obnoxious and infuriating.”³¹

²⁵ Tomi Lahren Labels Herself ‘The Voice of Middle America’ on ‘The View,’ NEWSONE (Mar. 17, 2017), <https://newsone.com/3697068/tomi-lahren-makes-first-appearance-on-the-view/>.

²⁶ Christy Hammond, *Rapid City Woman Anchors Political Talk Show at 22*, RAPID CITY JOURNAL (Sept. 21, 2014), https://rapidcityjournal.com/lifestyles/local/rapid-city-woman-anchors-political-talk-show-at/article_a59b782a-2f96-5b4a-9dad-a7b920d4e79d.html.

²⁷ *Id.*

²⁸ Kyle Chayka, *Tomi Lahren Has Some Thoughts*, RINGER (Oct. 12, 2016, 9:15 AM), <https://www.theringer.com/2016/10/12/16039472/tomi-lahren-profile-499f9e1930f9>.

²⁹ Complaint at Exhibit A, *Lahren v. Beck*, No. DC-17-04087 (Tex. Dist. Ct. Dallas Cty. filed Apr. 7, 2017).

³⁰ Hammond, *supra* note 26.

³¹ Mike Wendling, *Tomi Lahren: The Young Republican Who's Bigger than Trump on Facebook*, BBC NEWS (Nov. 30, 2016), www.bbc.com/news/world-us-canada-38021995.

A little over a year into her contract with TheBlaze, Lahren denied to reporters that differences in opinion amongst employees caused tension in the studios. She stated: “Luckily we have an environment where we can disagree.”³² Ironically, less than three months after that interview, TheBlaze publicly denounced and suspended Lahren as a host and a contributor because of a one-off expression of her political views which she had made while sitting as a guest on another TV show.³³

In the lawsuit Lahren filed against TheBlaze, she alleged that her suspension resulted from her guest appearance on *The View*, a mainstream daytime television show targeted towards female viewers, on March 17, 2017.³⁴ During the political segment of the show, Lahren answered the hosts’ questions about her rise to fame and her views on highly-debated issues, with a particular emphasis on those involving women’s rights.³⁵ Towards the end of the segment, one of the hosts, Sunny Hostin, observed, “You call yourself a conservative Republican and a constitutional conservative, but you also consider yourself pro-choice.”³⁶ Stunned, another host, Paula Faris, interjected, “Are you? You’re pro-choice?”³⁷ Unruffled by the question, Lahren answered in the affirmative and collectedly reconciled her position as a pro-choice conservative:

I’m pro-choice and here is why. I am a constitutional, you know, someone that loves the Constitution. I am someone that is for limited government, so I can’t sit here and be a hypocrite and say I’m for limited government but I think the government should decide what women do with their bodies. Stay out of my guns, and you can stay out of my body as well. . . . And you know, I get a lot of attacks from conservative women as well. Equal hate from all sides for me.³⁸

Immediately after her appearance on *The View*, Tomi alleged that she was “applauded for her participation by her producer” who was present for her appearance and that she “received several congratulatory emails from [TheBlaze] employees.”³⁹ However, Lahren’s pro-choice statements stirred a fervent public backlash on social media. Conservatives accused Lahren of being inconsistent in her

³² *Id.*

³³ Complaint, *supra* note 29, at 4-5.

³⁴ *Id.* at 4.

³⁵ *The View: Tomi Lahren* (ABC television broadcast Mar. 17, 2017).

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*

³⁹ Complaint, *supra* note 29, at 4.

beliefs and of having “#NoPrinciples.”⁴⁰ The day after the episode aired, Lahren posted on her Twitter account, “I speak my truth. If you don’t like it, tough. I will always be honest and stand in my truth.”⁴¹ Lahren’s followers expressed disappointment in her statement by replying to the tweet with posts such as “conservative values will never include a pro-abortion stand”⁴² and “so you’re a fake. How sad. I, like many, looked up to you. What a disappointment.”⁴³

A. WRONGFUL TERMINATION LAWSUIT

On April 7, 2017, Lahren filed a complaint for breach of employment contract in the District Court of Dallas County, Texas against her employer, TheBlaze (referenced in the complaint as “TBI”), and the company’s founder, Glenn Beck.⁴⁴ Since Lahren’s employment contract only allowed termination for cause, she alleged that TheBlaze breached the contract by terminating her without sufficient cause.⁴⁵ She argued that termination for her political expression on *The View* did not fall under any of the contractually agreed upon provisions constituting cause.⁴⁶

Lahren’s legal complaint alleged that a few days after the airing of the episode and the Twitter backlash, TheBlaze’s Human Resources Director/Supervisor informed her that she was “suspended indefinitely and that she need not return to TBI’s office(s), all because of her pro-choice opinions expressed on *The View*.”⁴⁷ The complaint further alleged that several days after that notice, Lahren received another call informing her that “her employment was terminated, she would have no more shows, but TBI would nevertheless continue to pay [her salary].”⁴⁸ Lahren was also instructed to remain silent, and TheBlaze allegedly forced her to “go dark” on social media by withdrawing access to her social media accounts and prohibiting her from making any public comments.⁴⁹

⁴⁰ The Reagan Battalion (@ReaganBattalion), TWITTER (Mar. 17, 2017, 6:27 PM), <https://twitter.com/ReaganBattalion/status/842864932311982080>.

⁴¹ Tomi Lahren (@TomiLahren), TWITTER (Mar. 18, 2017, 11:04 AM), <https://twitter.com/TomiLahren/status/843115966477164544>.

⁴² @shejambert, TWITTER (Mar. 18, 2017, 12:01 PM), <https://twitter.com/shejambert/status/843130237818982402>.

⁴³ @Jali_Cat, TWITTER (Mar. 20, 2017, 8:47 PM), https://twitter.com/Jali_Cat/status/843987443653271552.

⁴⁴ Complaint, *supra* note 29.

⁴⁵ *Id.*

⁴⁶ *Id.* at Exhibit A §11.

⁴⁷ *Id.* at 4.

⁴⁸ *Id.*

⁴⁹ *Id.* at 4-5.

Lahren claimed that she was wrongfully terminated by TheBlaze; however, whether she was even in fact “terminated” from her employment is subject to debate. Although TheBlaze canceled *Tomi*, revoked Lahren’s employment duties, and withheld access to her social media accounts, TheBlaze agreed to continue to pay her salary, which is a strong indication of her continued employment with TheBlaze.⁵⁰ Still, while the factual issue of whether or not Lahren was formally terminated is debatable, her suspension from employment and the retaliation she experienced from TheBlaze and its employees is indisputable.

TheBlaze and Beck’s actions and inactions following Lahren’s expression of her personal political views on *The View* clearly constituted retaliation against Lahren. In addition to suspending her show, preventing her from accessing her social media accounts, and terminating her email account, Beck went so far as to use his own Twitter account and Glennbeck.com as platforms to publicly chastise Lahren for the political views and opinions she expressed on *The View*.⁵¹

Furthermore, as Lahren’s employer, TheBlaze and Beck allowed for harassment in the workplace. Days after her appearance on *The View*, Lahren returned to the office to find that co-workers had affixed yellow caution tape stretched in the formation of an “X” to her dressing room door.⁵² There is no doubt that Beck’s public rhetoric and opinions about Lahren’s statements encouraged and condoned such behavior by employees within TheBlaze’s office. Moreover, in response to Lahren’s statements made on *The View*, TheBlaze published a scathing article which inaccurately portrayed her as having “suddenly reversed course on abortion,”⁵³ misrepresented her stance on abortion,⁵⁴ and accused her of pandering to *The View*’s mainstream audience.⁵⁵

⁵⁰ *Id.* at 4.

⁵¹ Glenn Beck (@glennbeck), TWITTER (Mar. 20, 2017, 12:16 AM), <https://twitter.com/glennbeck/status/843677593719242752?s=20>; Glenn Addresses Tomi Lahren's Pro-Choice Stance on 'The View,' GLENNBECK.COM (Mar. 20, 2017), <https://www.glennbeck.com/2017/03/20/glenn-addresses-tomi-lahrens-pro-choice-stance-on-the-view/>.

⁵² Complaint, *supra* note 29, at 5.

⁵³ Lahren had publicly shared these same pro-choice views on abortion months prior to her appearance on *The View*, and Lahren alleged that TheBlaze knew of these expressions and never took any issue with it. Complaint, *supra* note 29, at 4.

⁵⁴ Lahren’s position is not that abortion is an okay practice, but rather that the government should not have a role in deciding whether or not it is acceptable. *The View: Tomi Lahren*, *supra* note 35.

⁵⁵ Matt Walsh, *Pro-Lifers Aren't the Ones Being Hypocrites, Tomi.*, THEBLAZE (Mar. 20, 2017, 2:56 PM), www.theblaze.com/contributions/pro-lifers-arent-the-ones-being-hypocrites-tomi (“Tomi Lahren . . . went on *The View* this past Friday, suddenly reversed course on abortion, . . .

Both Beck's conduct as well as TheBlaze's apparently retaliatory measures invalidated Lahren in her professional capacity and undermined her ability to reach her social media audience. At the same time, Lahren was prevented from working for any other employer because her employment agreement with TheBlaze remained in place. In the article that TheBlaze published the day after the controversial episode of *The View* aired, the author Matt Walsh, a colleague of Lahren, stated, "as far as I know, [Lahren] is the only pro-choicer" at TheBlaze.⁵⁶ TheBlaze's decision to publish this article, in conjunction with Beck's Twitter posts and the retaliatory actions taken against Lahren, suggests the company had a *de facto* policy of promoting pro-life positions and, as argued in court filings, that Beck and TheBlaze had been subjecting employees to a "political-opinion litmus test."⁵⁷

B. SETTLEMENT

Lahren, Beck, and TheBlaze announced having reached an out-of-court settlement on May 1, 2017.⁵⁸ The agreement formally released Lahren from her contract and allowed her to keep the Facebook page associated with her time as a pundit for TheBlaze, which had amassed more than four million followers by the time of the agreement.⁵⁹ However, the agreement also required that Lahren return all "intellectual property" owned by TheBlaze that had been posted on the Facebook page.⁶⁰

Although this settlement prevented Lahren's lawsuit from going to trial and rendered the questions of fact moot, both the legal issues raised and not raised in the litigation that would have otherwise proceeded warrant further scrutiny. The underlying rationale for Lahren's claim against TheBlaze was the retaliatory action taken against her almost immediately after she expressed political views that did not align with those of her employer or of the network's core viewership. Although Lahren's complaint made reference to her "First Amendment" expressions and "free speech" rights, her cause of action was not speech infringement or employment discrimination. Rather, the complaint was for wrongful termination "without cause" and material breach of employment contract.⁶¹

and basked in the patronizing applause from the liberal audience . . . when given the spotlight on a mainstream network . . .").

⁵⁶ *Id.*

⁵⁷ Complaint, *supra* note 29, at 5; Walsh, *supra* note 55.

⁵⁸ Cummings, *supra* note 7.

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ Complaint, *supra* note 29, at 3-12.

Lahren did not raise a cause of action for speech infringement or discrimination because she could not have done so. There is no federal statute or Texas state law which protects private employees' political speech, such as Lahren's statements on *The View*. Although this case should be about freedom of expression, it could not have been adjudicated along those lines because the First Amendment does not regulate the actions of private organizations and the speech protections provided for by existing federal and state statutes are largely insufficient.

II

LEGAL PROTECTIONS FOR PRIVATE EMPLOYEE POLITICAL SPEECH

Tomi Lahren's complaint raised important and complicated issues regarding the intersection of American employment law and freedom of political expression, particularly for private employees in the entertainment industry. In light of the plethora of highly-publicized employment terminations and suspensions in the entertainment industry resulting from political expression and the Trump administration's suggestion that these are "fireable offenses,"⁶² Lahren's legal dispute with TheBlaze raises an important question: can a private-sector employer lawfully fire or reprimand an employee for expressing political speech, simply because the employer does not agree with the statement or because the speech could affect profits? The simple answer is yes. An employer may impose restrictions on speech relating to politics and decide to terminate employment based on expression of such speech, absent any specific state statutory protections or a specific contractual agreement. In fact, employers are able, and have even been encouraged by legal counsel,⁶³ to limit employees' speech relating to politics and topics of public concern, with few statutory restrictions.

A. SHORTCOMINGS OF THE FIRST AMENDMENT

The First Amendment of the United States Constitution declares that "Congress shall make no law . . . abridging the freedom of speech"⁶⁴ This guarantee of freedom of speech is commonly misunderstood as an unlimited right, extending to all situations. The state action doctrine limits this right to free speech to protection against abridgement by the government, not by private actors.⁶⁵ This

⁶² See Draper, *supra* note 7.

⁶³ William B. deMeza Jr. & Kenneth A. Jenero, *Politics in the Workplace: What Must Employers Allow?*, HOLLAND & KNIGHT (July 19, 2016), www.hklaw.com.

⁶⁴ U.S. CONST. amend. I.

⁶⁵ See, e.g., *State Action Requirement*, *supra* note 5; *Hurley v. Irish-Am. Gay, Lesbian & Bisexual Grp. of Bos., Inc.*, 515 U.S. 557, 566 (1995) (noting the First Amendment only provides protections against state action).

limited application of the First Amendment allows private employers to monitor, restrict, and retaliate against the speech of their employees to the extent allowed by other statutory or contractual provisions. In other words, speech by a public employee receives First Amendment protection because the government's position as employer entails state action, while speech by a private employee, such as Lahren, does not receive First Amendment protection because there is no state action involved. Had Lahren been an employee of the government, she would have been able to claim that her employer violated her First Amendment rights. The state action doctrine has a disproportionate adverse effect on professionals in the entertainment industry because the industry is predominately composed of private employees.⁶⁶ The state action doctrine is particularly burdensome for entertainers, for many of whom expressing ideas and opinions is central to their career value.

The risk of employer retaliation or termination posed by the lack of constitutional protection for entertainers' speech is exacerbated by the at-will employment doctrine. In the United States, with the exception of Montana, employment relationships are presumed to be at-will.⁶⁷ This conception of the employer-employee relationship originated in the early twentieth century to protect employees' rights by preventing an employee from being confined to a specific

⁶⁶ *Arts, Entertainment and Recreation: NAICS 71*, U.S. BUREAU OF LAB. STAT., <https://www.bls.gov/iag/tgs/iag71.htm#workforce> (presenting "data on the number of establishments in arts, entertainment, and recreation").

⁶⁷ The general rule that an employer may terminate an at-will employment contract for any reason without thereby incurring legal liability has been stated in scores of cases. See, e.g., *Hinrichs v. Tranquillaire Hosp.*, 352 So. 2d 1130, 1131 (Ala. 1977) (noting Alabama abides by the "general rule" that termination of an "at will" employment contract, even if "done from bad motives or with bad intent toward the person so injured," does not give rise to liability); *Wynne v. Ludman Corp.*, 79 So. 2d 690, 691 (Fla. 1955) (affirming appellant's employment termination did not present a cognizable claim given "uncontradicted" evidence the employment was terminable "at will"); *Roemer v. Zurich Ins. Co.*, 323 N.E.2d 582, 585-86 (Ill. App. Ct. 1975) ("We must . . . assume that the legal relation between the parties was an employment at will. . . . Consequently, plaintiff had no cause of action . . . for mere termination of his employment at any time . . . with or without cause."). *But cf.* *Jackson v. Minidoka Irrigation Dist.*, 563 P.2d 54, 57 (Idaho 1977) ("The employment at will rule is not, however, an absolute bar to a claim of wrongful discharge. As a general exception . . . an employee may claim damages . . . when the motivation for the firing contravenes public policy."); *Lorson v. Falcon Coach, Inc.*, 522 P.2d 449, 457 (Kan. 1974) (finding the fact of termination of at-will employment does not support actionable claims for lost wages but could support an actionable claim of promissory reliance for expenses reasonably induced by the agreement, such as claimant's moving and storage costs). See generally *W. E. Shipley, Annotation, Employee's Arbitrary Dismissal as Breach of Employment Contract Terminable at Will*, 62 A.L.R.3d 271, 271-73 (1975) ("[F]ew legal principles would seem to be better settled than the broad generality that an employment for an indefinite term is regarded as an employment at will which may be terminated at any time by either party for any reason or for no reason at all.").

employer by allowing the employee to leave at any time without being held liable for damages.⁶⁸ However, the flexibility this creates for employees also allows employers to terminate an employment relationship without cause, unless otherwise limited by a statute, public policy, or an agreement between the parties.⁶⁹ In the modern economy, however, the balance of power has shifted to employers because of limited mobility in the labor market and the small number of corporations dominating the industry, limiting the employment opportunities available.⁷⁰ This shift in the power dynamic is particularly apparent in the entertainment industry, where television and film are dominated by a small number of media outlets and where each sport has only one prominent professional league.⁷¹

Since speech by private employees is not protected by the First Amendment and employers may terminate employees without cause, absent any additional statutory or contractual protection, private employees may be fired merely for saying something with which their employer disagrees.⁷² Moreover, as demonstrated by the private employee who was fired for having a bumper sticker advocating a presidential candidate affixed to the back of her car, this unprotected speech is not limited to verbal expression.⁷³

In this particularly contentious political climate, it is not uncommon for an employer to disagree with their employees' political opinions. This reality demonstrates the necessity to enact statutes which protect political speech, such that private employers would be unable to fire employees merely for expressing opposing political beliefs outside of the workplace.

There are existing federal and state statutes which limit a private employer's ability to retaliate against an employee's speech, however these laws are under inclusive, vary greatly in scope from state to state, and generate unpredictable results.⁷⁴ The present maze of statutes and balancing tests requires private employees

⁶⁸ See, e.g., *Watson v. Gugino*, 98 N.E. 18 (N.Y. 1912).

⁶⁹ See Paul M. Secunda, *Constitutional Employment Law: Zimmer's Intuition on the Future of Employee Free Speech Law*, 20 EMP. RTS. & EMP. POL'Y J. 393 (2016).

⁷⁰ *Id.* at 405-06.

⁷¹ See Mara Lesemann, *The World's Top 10 Entertainment Companies (CMCSA, CBS)*, INVESTOPEDIA (Feb. 4, 2016), www.investopedia.com/articles/investing/020316/worlds-top-10-entertainment-companies-cmcsa-cbs.asp.

⁷² Jeannette Cox, *A Chill Around the Water Cooler: First Amendment in the Workplace*, 15 INSIGHTS ON L. & SOC'Y 12 (2015).

⁷³ Timothy Noah, *The Insubordinate Bumper Sticker*, SLATE (Sept. 14, 2004), www.slate.com/articles/news_and_politics/chatterbox/2004/09/bumper_sticker_insubordination.html.

⁷⁴ See *infra* Sections II.B, II.C; see also 10 LEX K. LARSON, LARSON ON EMPLOYMENT DISCRIMINATION § 171.08 (2d ed. 2019).

to conduct advanced legal research and analysis before determining whether they are protected under the law against employment retaliation for expressing political opinions.⁷⁵

B. FEDERAL STATUTORY PROTECTION FOR EMPLOYEE POLITICAL SPEECH

Generally, there is an absence of direct federal protection for private employee political expression or private political discrimination.⁷⁶ The First Amendment is only applicable to public employees because of the state action doctrine,⁷⁷ and anti-discrimination statutes such as Title VII are silent on politics. Despite the lack of legislation directly protecting political speech in private-sector employment, a hodgepodge of federal statutes provides narrow protections for specific instances of private employee political expression. Labor law professor Cynthia Estlund playfully analogizes the tenuous protections for expression afforded to private-sector employees resulting from these disconnected sources of law as “islands of protection in a sea of employer discretion.”⁷⁸ The following statutes curtail the near-omnipotent power of private employers to discipline, discriminate, or terminate an employee for their political speech or activity. However, the failure of these federal statutes to protect Tomi Lahren’s speech demonstrates their insufficiency.

1. National Labor Relations Act

Congress enacted the National Labor Relations Act (NLRA) in 1935 “to protect the rights of employees and employers, to encourage collective bargaining, and to curtail certain private-sector labor and management practices, which can harm the general welfare of workers, businesses and the U.S. economy.”⁷⁹ Section 7 outlines the rights of private employees to include “the right to self-organization, to form, join, or assist labor organizations, to bargain collectively . . . and to engage in other concerted activities for the purpose of collective bargaining or other mutual aid or protection.”⁸⁰ Section 8(a)(1) deems it an unfair labor practice for an employer “to interfere with, restrain, or coerce employees in the exercise of the rights guaranteed in section 7.”⁸¹

⁷⁵ 10 LARSON, *supra* note 74, § 171.08.

⁷⁶ *Id.*

⁷⁷ *See State Action Requirement, supra* note 5.

⁷⁸ Cynthia L. Estlund, *Free Speech and Due Process in the Workplace*, 71 IND. L.J. 101, 113 (1996).

⁷⁹ *National Labor Relations Act*, NAT’L LAB. REL. BOARD, <https://www.nlr.gov/resources/national-labor-relations-act> (last visited Mar. 29, 2019).

⁸⁰ National Labor Relations Act of 1935 § 7, 29 U.S.C. § 157 (2012).

⁸¹ National Labor Relations Act § 8.

Within the scope of these rights, the NLRA protects private employee expression related to the workplace, including speech regarding wages, hours, and union rights.⁸² Therefore, employee speech relating to the terms of employment that also happens to be political in nature is protected under the NLRA. However, any political speech that is unrelated to labor organization or the bargaining process, but rather “aimed at broad social change, affecting employees beyond their work relationship as members of a political community” is likely unprotected.⁸³ The limited scope of the NLRA does not reach Lahren’s speech because her comments regarding government involvement in the regulation of abortions are in no way related to her terms of employment with TheBlaze. The NLRA’s inability to protect Lahren’s speech demonstrates the inadequacy of this federal statute to protect private employee political speech.

2. Federal Voter Protection Laws

Since the founding of the United States, Congress has passed constitutional amendments and a variety of federal laws to protect the most treasured form of political expression: the right to vote.⁸⁴ Federal voter protection laws serve to protect American citizen’s right to vote and to facilitate the exercise of that right. While there is no federal law requiring employers to give workers time off to vote, it is a federal crime to intimidate, threaten, or coerce someone for the purpose of interfering with their voting behavior in federal elections or to use financial inducements to get someone to vote or not vote a certain way.⁸⁵ Consequently, it is illegal for employers to use promises of jobs, promotions, or financial rewards to induce specific voting behavior on the part of employees.⁸⁶

While the risk of federal criminal prosecution for interfering with employee voting behavior is an effective tool to protect private employees’ rights to express political preferences through casting a ballot, voting is only one aspect of political expression. What good is protecting an employee’s right to vote if discourse amongst citizens on the candidates and the issues on which their platforms rest is severely restricted? The fact that protection for political expression is limited to voting risks a chilling effect on free political discourse amongst private-sector employees, which in turn limits the public’s ability to cast informed votes. In order to safeguard voting

⁸² See Ann C. McGinley & Ryan P. McGinley-Stempel, *Beyond the Water Cooler: Speech and the Workplace in an Era of Social Media*, 30 HOFSTRA LAB. & EMP. L.J. 75 (2012).

⁸³ See Carroll, *supra* note 1, at 52.

⁸⁴ See, e.g., U.S. CONST. amends. XV, XIX; 42 U.S.C. § 1973.

⁸⁵ 18 U.S.C. § 594.

⁸⁶ BRUCE BARRY, *SPEECHLESS: THE EROSION OF FREE EXPRESSION IN THE AMERICAN WORKPLACE* 112 (2007).

rights and uphold core democratic values, it is necessary that employees in both the public and private sector enjoy the right to speak more freely about politics. Since the protection of voting rights is dependent upon legal protection to speak about politics, this right ought to be reinforced and safeguarded by law.

C. STATE STATUTES PROTECTION FOR EMPLOYEE POLITICAL SPEECH

The existing state statutory protections for political speech and activity vary widely in substance and scope.⁸⁷ States protect political expression by way of various statutory schemes, such as laws that safeguard political activities (including state civil rights acts which prohibit political discrimination),⁸⁸ laws that protect employee speech generally,⁸⁹ and laws that specifically protect speech relating to political topics.⁹⁰ The following section provides an overview of the range of existing state legal protections available to private employees. The variety of these state laws and the range of state-specific conditions and definitions adjoining these statutes demonstrate the confusion and inconsistency of protection. Because of the diversity of state statutory schemes, whether an employee's political expression is protected is highly dependent on the state in which the employment issue arises.

1. Protections for Political Activity

Some states provide protection for employee political activity outside of the workplace. The definition of "political activity," however, differs from state to state. The most literal and narrow definition of "political activity" is the exercise of voting rights, and the extent of protection for employee electoral activity varies across states. The majority of states provide some provision to allow employees to take time off to vote, but the details of these laws vary: disparities appear in how much time is guaranteed, whether that time is paid, or what the consequences for violations are.⁹¹ Additionally, some states prohibit employers from taking adverse action against an employee based on whom the employee voted for or for refusing to reveal how the employee voted.⁹²

⁸⁷ See *infra* Sections II.C.1–II.C.3. See generally BARRY, *supra* note 86.

⁸⁸ See *infra* Section II.C.1. See generally BARRY, *supra* note 86.

⁸⁹ See *infra* Section II.C.3.i.

⁹⁰ See *infra* Section II.C.2.

⁹¹ Lisa Natele-Piazza, *Do Employees Get Time Off to Vote?*, SOC'Y FOR HUM. RESOURCE MGMT. (Aug. 22, 2016), www.shrm.org/resourcesandtools/legal-and-compliance/state-and-local-updates/pages/state-voting-leave.aspx.

⁹² See, e.g., TEX. ELEC. CODE ANN. § 276.001 (West 2010).

In Texas, the state in which Lahren filed her complaint, statutory protection for employee political expression is limited to electoral activities.⁹³ For example, under section 276.001 of the Texas Election Code, it is unlawful for an employer to retaliate against an employee for voting for or against a candidate or refusing to reveal how the employee voted with the threat of removing a benefit of employment. Under section 276.004, it is unlawful for an employer to prohibit an employee from voting by refusing to permit the employee from being absent from work on election day to attend the polls or by subjecting or threatening to subject the employee to a penalty for attending the polls on election day to vote.⁹⁴ While guaranteeing a private employee's ability to vote is essential to a well-functioning democracy, this voting right is still dependent on an open exchange of political ideas.

New York Labor Law's definition of "political activities" is broader than just voting rights. New York's definition for "political activities" includes "(i) running for public office, (ii) campaigning for a candidate for public office, [and] (iii) participating in fund-raising activities for the benefit of a candidate, political party or political advocacy group."⁹⁵ New York prohibits discriminating against employees on the basis of political activities as follows:

[I]t shall be unlawful for an employer or employment agency to refuse to hire, employ or license, or to discharge from employment or otherwise discriminate against an individual in compensation, promotion or terms, conditions or privileges of employment because of . . . an individual's political activities outside of working hours, off of the employer's premises and without use of the employer's equipment or other property.⁹⁶

Similarly, section 1101 of the California Labor Code provides that "[n]o employer shall make, adopt, or enforce any rule, regulation, or policy . . . [f]orbid[ding] or prevent[ing] employees from engaging or participating in politics or from becoming candidates for public office" or "[c]ontroll[ing] or direct[ing] . . . the political activities of affiliations of employees."⁹⁷ Section 1102 states that "[n]o employer shall coerce or influence or attempt to coerce or influence his employees through or by means of threat of discharge or loss of employment to adopt or follow or refrain from adopting or following any particular course or line of political action

⁹³ *Id.* §§ 276.001, 276.004.

⁹⁴ *Id.* § 276.004.

⁹⁵ N.Y. LAB. LAW § 201-d (McKinney 2015).

⁹⁶ *Id.*

⁹⁷ CAL. LAB. CODE § 1101 (West 2011).

or political activity.”⁹⁸ The California Labor Code does not provide a statutory definition for “political activity,” but the California Supreme Court has construed an expansive reading of the term.⁹⁹ The court reasoned that because the California legislature enacted Section 1101 in response to the potential for employers abusing their economic power to interfere with the political activities of their employees, the purpose of the Section 1101 is to protect the fundamental right of employees’ political activity without interference from employers.¹⁰⁰ The court concluded that Sections 1101 and 1102 cannot be “narrowly confined to partisan activity”¹⁰¹ and defined the boundaries of the term as activity “related to or connected with the orderly conduct of government and the peaceful organization, regulation and administration of the government.”¹⁰² In support of this conclusion, the court highlighted the United States Supreme Court’s recognition that “political activities” can include participation in litigation, the wearing of symbolic armbands, and the association with others for the advancement of beliefs and ideas.¹⁰³ Under this broad interpretation, the California Supreme Court recognized the “struggle of the homosexual community for equal rights,” especially in relation to employment, as a “political activity” within the meaning of the California Labor Code.¹⁰⁴

Other states provide a middle ground level of protection for political activity, falling in between the broad protections afforded in New York and California and the states which lack any protection for political speech beyond federal voting rights. For instance, in Nevada, it is unlawful “for any person, firm or corporation doing business or employing labor in the State of Nevada to make any rule or regulation prohibiting or preventing any employee from engaging in politics or becoming a candidate for any public office in this state.”¹⁰⁵ In Minnesota, an employer may not threaten employment against an individual because of his/her political affiliations and contributions.¹⁰⁶

2. *Protections Against Private Discrimination Based on Politics*

State civil rights laws offer another legislative approach for protecting private employee political expression, and some jurisdictions have amended their respective

⁹⁸ *Id.* at § 1102.

⁹⁹ *Id.*

¹⁰⁰ *Gay Law Students Ass'n v. Pacific Tel. & Tel. Co.*, 595 P.2d 592, 610 (Cal. 1979).

¹⁰¹ *Id.*

¹⁰² *Lockheed Aircraft Corp. v. Superior Court*, 171 P.2d 21, 24 (Cal. 1946).

¹⁰³ *Gay Law Students Ass'n*, 595 P.2d at 610.

¹⁰⁴ *Id.*

¹⁰⁵ NEV. REV. STAT. ANN. § 613.040 (West 2014).

¹⁰⁶ MINN. STAT. ANN. § 10A.36 (West 2013).

civil rights acts by adding “political beliefs” and “political affiliations” as protected classes. For example, the District of Columbia Human Rights Act (“DCHRA”) includes “political affiliation” as a protected class against discriminatory practices¹⁰⁷ and defines “political affiliation” as “the state of belonging to or endorsing any political party.”¹⁰⁸ Despite the promising nature of this statutory solution, the D.C. Court of Appeals—in *Blodgett v. University Club*—severely limited the scope and thrust of the amended law by constructing a narrow definition of “political affiliation.”¹⁰⁹ There, the court concluded that an individual’s involvement with a right-wing group called the National Alliance did not constitute a “political affiliation” because of the lack of evidence that the group was a political party “under any ‘ordinary sense and with the meaning commonly attributed to’ that term.”¹¹⁰ Under this constricted definition, “political affiliation” includes only affiliations with groups that nominate candidates for recognized public elections, such as the Democratic and Republican parties. Therefore, under the D.C. Court of Appeal’s definition, participation with groups such as Planned Parenthood or the National Rifle Association would not be protected under the DCHRA, even though the ideals of the groups are strongly aligned respectively with the Democratic and Republican parties and both organizations present views on pressing issues of public concern. In other words, the court held that political expression is not protected under the DCHRA, and therefore determined that actions such as signing a petition are not protected unless a plaintiff can show discrimination on the basis of membership of a political party.¹¹¹ Under this definition of “political affiliation,” Lahren’s expression on government involvement in abortion would not be protected, despite its distinctly political nature. Even though Lahren’s pro-choice sentiment is closely aligned with the platform of the Democratic party, this expression does not fall within the DCHRA’s protection because it is an expression of opinion and Lahren is not claiming to be a member of the Democratic party.

By sheer happenstance, a member of the Texas House of Representative proposed a bill similar to the DCHRA just two weeks before Lahren appeared on *The View*. Representative James White introduced Texas House Bill 2787 on March 3, 2017 because he perceptively recognized the need for protection of private employee political speech.¹¹² The bill, which proposed to amend section 21.051 of

¹⁰⁷ D.C. CODE ANN. § 2-1402.11 (West 2013).

¹⁰⁸ *Id.* at § 2-1401.02(25).

¹⁰⁹ *Blodgett v. Univ. Club*, 930 A.2d 210, 221-22 (D.C. 2007).

¹¹⁰ *Id.*

¹¹¹ *McCaskill v. Gallaudet Univ.*, 36 F. Supp. 3d 145, 152-53 (D.D.C. 2014).

¹¹² H.R. 2787, 85th Leg. (Tex. 2017).

the Texas Labor Code to include “political beliefs” as a protected class from employment discrimination, provided that:

An employer commits an unlawful employment practice if because of race, color, disability, religion, sex, national origin, age, or political beliefs the employer: (1) fails or refuses to hire an individual, discharges an individual, or discriminates in any other manner against an individual in connection with compensation or the terms, conditions, or privileges of employment; or (2) limits, segregates, or classifies an employee or applicant for employment in a manner that would deprive or tend to deprive an individual for any employment opportunity or adversely affect in any other manner the status of an employee.¹¹³

The bill limits the definition of “political beliefs” to the political expressions of an individual made “outside the workplace and outside the course and scope of the individual’s employment.”¹¹⁴

White conceived of this bill after several employers expressed to him that they felt public pressure to fire employees based on those employees’ political views.¹¹⁵ White recognized the importance of protecting and celebrating the marketplace of ideas and explained his intent for the bill: “We need to get back into a situation where we conduct civil discourse with the person we disagree with instead of these flashpoints of protests against the employer and every other organization the person you disagree with belongs to.”¹¹⁶ The legislative goal was to protect private employees’ ability to express their political beliefs outside of work, including the ability to attend protests and post their thoughts on social media without fear of losing their job.¹¹⁷ Despite White’s efforts, however, these off-site political activities remain unprotected in Texas because the bill died in committee after its public hearing on May 1, 2017.¹¹⁸

While Texas House Bill 2787’s proposal for the inclusion of “political beliefs” as a protected class is nearly indistinguishable from D.C.’s “political affiliation” protected class, White hoped for the application and interpretation of the Texas Bill

¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ Brandi Smith, *New Bill Preventing Firing Employees for Political Expression*, KHOU (Mar. 6, 2017), www.khou.com/article/news/local/texas/new-bill-preventing-firing-employees-for-political-expression/285-419922545.

¹¹⁶ *Id.*

¹¹⁷ *Id.*

¹¹⁸ Tex. H.R. 2787.

to be more inclusive. Had White's proposed bill been enacted into law when Lahren's dispute arose, she could have tested that by filing a claim against TheBlaze for discrimination based on her political beliefs. Interestingly, White explicitly expressed his intention for the proposed bill to protect on-air professionals by allowing individuals in the news media industry to post their political opinions on social media and attend protests without fear of losing their jobs.¹¹⁹ White argued that because the public would know that the media outlet cannot fire the employee because their speech is protected by law, the pressure on TV and radio stations to fire individuals for their off-site political expressions would be lessened.¹²⁰

While the spirit of Texas House Bill 2787 clearly intended to cover Lahren's speech on *The View*—an opinion she never expressed on *Tomi*, on TheBlaze's other media outlets, or within TheBlaze's business premises—whether her expression fell within the scope of her employment is a viable question. Even if Texas House Bill 2787 had been enacted prior to Lahren filing suit, the success of her claim would have turned on a question of fact—whether her appearance on *The View* fell within the scope of her employment.

3. *Protections for Political Speech*

Lahren sued Beck and TheBlaze for wrongful termination without cause and in breach of the employment contract.¹²¹ She could not have sued for speech infringement because the state of Texas has no statutory or constitutional protection for speech by private employees beyond voting interference.¹²² Like most states, the Texas Constitution contains a free speech clause. Article I, section 8 of the Texas Constitution provides that “[e]very person shall be at liberty to speak, write or publish his opinions on any subject, being responsible for the abuse of that privilege; and no law shall ever be passed curtailing the liberty of speech or of the press.”¹²³ Although the Texas Constitution provides its citizens with this right to speak, write, or publicize opinions on any subject, including those relating to politics and issues of public concern, it does not extend protection for abridgement of this right by private individuals or corporations.¹²⁴ However, while Texas' and most states' free

¹¹⁹ Smith, *supra* note 115.

¹²⁰ *Id.*

¹²¹ Complaint, *supra* note 29, at 3.

¹²² See *supra* Section II.C.1.

¹²³ TEX. CONST. art. I, § 8.

¹²⁴ Republican Party v. Dietz, 940 S.W.2d 86, 89 (Tex. 1997); Furman v. Compucom Sys., No. 3:03-CV-1433-L, 2004 U.S. Dist. LEXIS 14331, *27-28 (N.D. Tex. July 23, 2004).

speech clauses are inapplicable to private parties,¹²⁵ Connecticut is unique insofar as it enacted a free speech statute which attempts to extend First Amendment protection beyond government action.¹²⁶

i. Connecticut's Free Speech Statute

Connecticut's employee speech protection law—section 31-51q of the Connecticut Code—is recognized as “the most sweeping recognition to date of ‘First Amendment’ values in the private sector workplace.”¹²⁷ It provides the most favorable statutory protection for private employee political speech. Section 31-51q bars employers from disciplining or discharging employees “on account of the exercise by such employee of rights guaranteed by the first amendment to the United States Constitution . . . provided such activity does not substantially or materially interfere with the employee's bona fide job performance or the working relationship between the employee and the employer.”¹²⁸

What if Lahren had worked in Connecticut instead of Texas? Lahren would have been able to raise a claim of free speech infringement in Connecticut, but, as explained below, whether her claim would have succeeded is indeterminable. The uncertainty of whether Lahren would have had a successful claim for speech infringement under section 31-51q—the most favorable protection for private employee speech—demonstrates the faults of the Connecticut law's application to on-air professionals, such as Lahren, in the entertainment industry and by extension to private employees of all sectors in the age of social media.

The spirit of Connecticut's free speech statute is to protect public and private employee speech at the same level of the First Amendment, thereby allowing private employees to express thoughts and opinions relating to public concern to the same extent as public employees and citizens in public forums.¹²⁹ Despite the legislative

¹²⁵ David C. Yamada, *Voices from the Cubicle: Protecting and Encouraging Private Employee Speech in the Post-Industrial Workplaces*, 19 BERKELEY J. EMP. & LAB. L. 1, 34 (1998) (“The foregoing analysis strongly suggests that state constitutions have little viability as sources of speech protections for private employees.”).

¹²⁶ David C. Yamata, *Dignity, “Rankism,” and Hierarchy in the Workplace: Creating a “Dignitarian” Agenda for American Employment Law*, 28 BERKELEY J. EMP. & LAB. L. 305, 319 (2007) (reviewing ROBERT W. FULLER, *ALL RISE: SOMEBODIES, NOBODIES, AND THE POLITICS OF DIGNITY* (2006)).

¹²⁷ Joseph R. Grodin, *Constitutional Values in the Private Sector Workplace*, 13 INDUS. REL. L.J. 1 (1991).

¹²⁸ CONN. GEN. STAT. § 31-51q (2019).

¹²⁹ Kevin Draper, *Connecticut Law May Shield Anchor from Discipline*, N.Y. TIMES, Sept. 16, 2017, at D1.

intent and promising language of this statute, the actual protection provided to employees since the statute's enactment in the 1980s has been circumscribed by judicial interpretation and the qualifying language embedded in the statute.¹³⁰

Courts have interpreted Connecticut's statute as an extension of the rights available to public-sector workers to employees in the private sector.¹³¹ While the equalization of free speech rights afforded to public and private employees is an improvement because public-sector workers receive *some* protection under the First Amendment, the extent and boundaries of First Amendment protection in public-sector workforce is far from simple. Since public-sector employees maintain First Amendment protection only for expressions relating to matters of public concern, the Connecticut law's protection for employees against adverse employment action only extends to expressions on matters of public concern.¹³²

ii. Narrow Judicial Interpretation of Connecticut's Free Speech Statute

In the landmark case *Pickering v. Board of Education*, the United States Supreme Court held that public employees maintain First Amendment rights in the employment context when speaking on matters of "legitimate public concern" because "free and open debate is vital to informed decision-making by the electorate."¹³³ The Court reasoned that because the relationship between the government and its citizens in the employment context is distinctive from its relationship with citizens in general, the government can regulate speech of public employees in a way that it could not in general because of legitimate interests as an employer.¹³⁴ This regulatory power, however, is not unlimited.¹³⁵ Justice Thurgood Marshall provided a balancing test to curtail the government's ability to regulate speech relating to public concern and allow public employees to speak on these matters without fear of retaliatory actions or dismissal.¹³⁶ Under this test, courts balance the interests of the public employee, "as a citizen, in commenting upon matters of public concern and the interest of the State, as an employer, in promoting the efficiency of the public services it performs through its employees."¹³⁷

¹³⁰ CONN. GEN. STAT. § 31-51q.

¹³¹ *Schumann v. Dianon Sys., Inc.*, 43 A.3d 111, 120-21 (Conn. 2012).

¹³² Marisa Anne Pagnattaro, *What Do You Do When You Are Not at Work?: Limiting the Use of Off-Duty Conduct as the Basis for Adverse Employment Decisions*, 6 U. PA. J. LAB. & EMP. L. 625, 670 (2004).

¹³³ *Pickering v. Bd. of Educ.*, 391 U.S. 563, 571 (1968).

¹³⁴ *Id.*

¹³⁵ *Id.* at 570.

¹³⁶ *Id.* at 568.

¹³⁷ *Id.* at 568, 572.

Though this holding serves as an important protection for public employee speech, Marshall's opinion left important questions unanswered: what constitutes speech on public concern? What standards should judges apply in balancing an employee's right to expression and the State's interest as an employer in promoting efficiency of public services? In Marshall's analysis, he considered factors such as maintaining discipline in the workplace, ensuring harmony among coworkers, and preserving close working relationships.¹³⁸ However, he did not provide clear standards for balancing the diverging interests between public employee and employer.¹³⁹

In *Connick v. Myers*, about two decades after *Pickering*, the United States Supreme Court recognized that speech concerning public affairs is the "essence of self-government" and established the standard to determine whether speech is a matter of public concern.¹⁴⁰ The court instructed for review of the "content form, and context [of the speech], as revealed by the whole record."¹⁴¹ As part of their analysis, courts consider whether an employee is making a statement as a "concerned citizen or as an employee set on airing a personal grievance"¹⁴² because when expression is not "relating to any matter of political, social, or other concern to the community, government officials should enjoy wide latitude in managing their offices, without intrusive oversight by the judiciary in the name of the First Amendment."¹⁴³

While Lahren's speech likely qualifies for protection under section 31-51q of the Connecticut Code, the precise boundaries delineating whether employee speech relates to public concern, thereby falling within the ambit of section 31-51q, remains ambiguous and subject to judicial discretion after *Connick*. Estlund fears that this minimally defined standard gives the judiciary too much discretion and creates a "judicially approved catalogue of legitimate subjects of public discussion."¹⁴⁴ Moreover, since Connecticut courts have shown great deference to employer interests in applying the balancing test, even if speech is related to public concern, the interest in free speech is not valued enough in relation to the employer's interest

¹³⁸ *Id.* at 578.

¹³⁹ *Id.*

¹⁴⁰ *Connick v. Myers*, 461 U.S. 138, 145 (1983).

¹⁴¹ *Id.* at 147-48.

¹⁴² *Daley v. Aetna Life & Cas. Co.*, 734 A.2d 112, 113 (Conn. 1999).

¹⁴³ *Connick*, 461 U.S. at 146.

¹⁴⁴ Cynthia Estlund, *Speech on Matters of Public Concern: The Perils of an Emerging First Amendment Category*, 59 GEO. WASH. L. REV. 1, 3 (1990).

such that the speech is unprotected.¹⁴⁵ The shortcoming is exacerbated by other constraints on the protection afforded to an employee's free speech in Connecticut.

iii. Additional Limitations of Connecticut's Free Speech Statute

In addition to the narrow interpretation of the statute, another significant issue with section 31-51q of the Connecticut Code is the requirement that the employee's expression does not "substantially or materially interfere with the employee's bona fide job performance or the working relationship between the employee and the employer."¹⁴⁶ This caveat limits the safeguard for employee speech by carving out a robust argument for employers to defend retaliations or terminations based on an employee's political speech. Further, in order to sustain an action under section 31-51q, employees bear the additional burden to affirmatively plead and prove a lack of interference with job performance and working relationship.¹⁴⁷ These substantive and procedural limitations established by the statute and common law greatly reduce the likelihood of an employee raising an action under section 31-51q, let alone succeeding.

Notwithstanding these hurdles, had Lahren filed suit under section 31-51q in Connecticut, she would have had a strong argument that her comments opposing government intervention in a woman's right to choose to have (or not to have) an abortion were a matter of public concern. Her speech was not made within the workplace or on property owned by TheBlaze. Her speech was arguably made within her capacity as a private citizen.

However, her claim would have been far from bulletproof. She would have had to prove that her speech, though clearly on a public issue, did not substantially interfere with her performance or her working relationship with TheBlaze. Since attracting and maintaining viewers and sponsors is a central feature of her job performance, the scathing public backlash on social media by her viewers presents convincing evidence that her comments alienated viewers and thus interfered with her performance within the terms of her employment contract.

¹⁴⁵ BARRY, *supra* note 86, at 119.

¹⁴⁶ CONN. GEN. STAT. § 31-51q (2019).

¹⁴⁷ King v. Connection, Inc., No. CV106015682S, 2011 Conn. Super. LEXIS 1629, at *11 (Super. Ct. 2011).

III CONSEQUENCES AND PROPOSED SOLUTIONS

A. *CHILLING EFFECT OF INADEQUATE PROTECTION FOR PRIVATE EMPLOYEE POLITICAL SPEECH IN THE ENTERTAINMENT INDUSTRY*

Section 31-51q of the Connecticut Code provides more protection than any other state statute for private employee speech relating to public concern,¹⁴⁸ and yet it is more likely than not that Lahren's speech would not have been protected by this law because of the disparaging public reaction to her political opinion and the subsequent effect that the response had on her job performance. The preference for employer interests over employee interest in expressing thoughts relating to public concern (as well as the general public's interest in public discourse) is apparent both in the language of the statute and the judicial history of balancing these interests.

While the general lack of federal and state constitutional and statutory protection for political speech in American employment law is problematic for all private employees, these limitations are particularly burdensome for on-air employees in the entertainment industry because of the unique nature of their profession.

Employment in the entertainment industry is distinct because of the imprecise boundaries of the physical workplace, the celebrity status of the employees, and the business model's dependence on viewership and sponsorship. While a TV station's offices, sets, and on-location shoots are clearly part of the physical workplace, was Lahren considered "at the workplace" when she appeared on *The View*, an off-site interview with another network? Was she being interviewed as an employee of TheBlaze or as a private citizen? This raises the more important question: is it ever possible for an on-air entertainer, such as Lahren, to be interviewed or quoted solely in their capacity as a private citizen?

The advances in communication technology and the rising prominence of social media in contemporary society blur the line between private-citizen conduct and employee conduct. This blurring introduces employment issues, unprecedented in both substance and volume, that have disproportionately affected employees in the entertainment industry. Social media platforms such as Twitter, Facebook, and Instagram have become central arenas for discourse on public life and politics.¹⁴⁹ Many professionals in the entertainment industry are national and/or local celebrities

¹⁴⁸ See *supra* Section II.C.3.i.

¹⁴⁹ See, e.g., Donald J. Trump (@realDonaldTrump), TWITTER (Apr. 2, 2019, 7:41 AM), <https://twitter.com/realDonaldTrump/status/1113089157683953665>.

with extensive followings on social media, ranging from thousands to millions of individual followers.¹⁵⁰ The combination of direct access to a large audience and the immediacy of expression supported by these platforms enables individuals in the entertainment industry to almost instantaneously share their political views with others by writing, sharing, and liking posts. As demonstrated by Schilling, Griffin, Hill, and Lahren, entertainment industry employees who post political speech on their social media platforms are at risk of employer retaliation.

Further, in the twenty-first century, a corporation's brand image is considered of utmost importance and employees are expected to represent the brand at all times.¹⁵¹ Employers in the entertainment industry have exploited the rise of social media as a marketing platform by creating accounts for specific talent to increase viewer engagement.¹⁵² Actors, commentators, TV hosts and the like are encouraged, if not required, to maintain a social media presence to directly promote programming and indirectly promote themselves and increase their celebrity status.¹⁵³ While entertainers can engage millions of people to effectuate the objectives of employers on these social media platforms, does that mean that these accounts must be used to the benefit of the employer?

The combination of the celebrity status of these individuals and technological advances in communication has resulted in an increasing ability to share opinions and views in a public forum, as well as an expectation of the public that these individuals will do so. On-air professionals are considered to always be representing their employer,¹⁵⁴ whether it be their network, show, team, or league. And while it is reasonable to expect these individuals to forgo their ability to say or do anything while on the job, it seems plainly excessive for employers to be able to demand their

¹⁵⁰ As of April 3, 2019, Tomi Lahren had over 1.3 million Twitter followers. Tomi Lahren (@TomiLahren), TWITTER (Apr. 3, 2019), https://twitter.com/TomiLahren?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor. As of April 3, 2019, Kathy Griffin had over 2.1 million Twitter followers. Kathy Griffin (@kathygriffin), TWITTER (Apr. 3, 2019), https://twitter.com/kathygriffin?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor.

¹⁵¹ Marilyn Nagel, *How Are Your Employees Affecting Your Brand?*, HUFFINGTON POST (Sept. 23, 2013), https://www.huffingtonpost.com/marilyn-nagel/employee-engagement_b_3956204.html?guccounter=1.

¹⁵² Jeff Beer, *Inside the Secretly Effective—and Underrated—Way Netflix Keeps Its Shows and Movies at the Forefront of Pop Culture*, FAST COMPANY (Feb. 28, 2019), <https://www.fastcompany.com/90309308/by-any-memes-necessary-inside-netflixs-winning-social-media-strategy>.

¹⁵³ See, e.g., Alissa Schulman, *Studios Are Now Looking for Actors Who Are Insta-Famous*, N.Y. POST (May 27, 2018), <https://nypost.com/2018/05/27/studios-are-now-looking-for-actors-who-are-insta-famous/>.

¹⁵⁴ See *supra* text accompanying notes 8–24.

employees contract away their right to ever participate in public discourse (while with the employer) because they decided to pursue a career in the limelight.

On-air personalities, hired for their expertise or influence, are contracted as hosts and commentators to discuss controversial current events and issues and expected to provide a unique viewpoint or spin to attract and entertain viewers. Networks encourage thought-provoking commentary and debate by news anchors, TV show hosts, and sportscasters, such as Tomi Lahren and Jemele Hill, to stimulate discussion, increase viewership and cultivate audience engagement. These occupational expectations place talent in a precarious position: employees are expected to express interesting opinions on current events and controversial topics to increase viewership, while also not being so controversial as to alienate viewers. With diverse audiences and an increasingly polarized political climate, these entertainers are constantly walking a fine line and are at risk of unemployment for either being too boring or too provocative.

The lack of speech protection for entertainers has far-reaching effects beyond the risk of adverse employment action. For example, the American public is dependent on the media, whether it be television or social media, to receive their news and develop their thoughts and opinions on issues of public importance and government. If the information and opinions presented to the public is censored by the media outlets, the employers will have a disproportionate control over political discourse and consequently electoral activity. Thus, the retaliatory consequences for political speech that goes against the employer's preferences or approval creates a disturbing chilling effect, harming the individuals whose speech is suppressed, the general public, and the proper functioning of American democracy.

While the need for statutory protection for private employees in the entertainment industry is most salient, this additional protection is increasingly important for private employees across industries because of the rise of social media. Although the average Joe with a few hundred followers receives less daily attention than a celebrity with millions of followers, any public tweet, Instagram post, or Facebook post could go viral and gain national attention, thereby placing the average American employee at risk of unemployment for sharing an opinion on public life. The severe chilling effect produced by the failures of the First Amendment to protect private employee speech and the general lack of federal or state protection illustrates the need for a reformulation of statutory protection of political expression in the private sector.

B. PROPOSALS

1. Contractual Solutions

i. Negotiate for Protections in the Employment Contract

As a consequence of the insufficient protection available in the American legal system, on-air employees in the entertainment industry, especially those who are hired to address controversial issues, need additional speech protections. The most immediate and effective solution available to these at-risk on-air professionals is contractual. Individuals like Lahren should negotiate with employers for contractual protections against termination and retaliation for expressions of political affiliations or beliefs. The more specific these individuals can be for the kinds of expressions they want to be protected from, the better. Of course, the ability to contract for adequate speech protections is limited by both an individual's foresight when they begin employment and the bargaining power they have when they first sign a contract.

ii. Collective Bargaining for Enhanced Speech Protections

The entertainment industry happens to be one of the few industries still dominated by unions.¹⁵⁵ In addition to negotiating on an individual level, unions such as SAG-AFRA, NFLPA, MLBPA, and NHLPA can and should bargain for greater protection for employee speech relating to politics and public concern expressed on social media and outside of the workplace. Collective bargaining for enhanced speech protections is an ideal solution because of the significant negotiating power these unions, especially in comparison to less famous and established individuals in the industry. This solution would provide protection for union members who lack the foresight or the bargaining power to negotiate for these more favorable employment terms.

2. Statutory Solutions

Although legislative action is not an immediate or politically viable solution (at least based on Representative White's inability to pass Texas House Bill 2787), a statutory protection for private employee speech relating to politics and public concern would be a more effective and far-reaching solution than private contracting. Although these issues are heightened within the context of employment for on-air personalities in the entertainment industry, employees across industries

¹⁵⁵ David Ng, *Hollywood Guilds Flex Their Muscle as Union Influence Declines Nationwide*, L.A. TIMES (May 9, 2017), <https://www.latimes.com/business/hollywood/la-fi-ct-hollywood-unions-20170509-story.html>.

are at risk of termination or employer retaliation due to political speech expressed outside of the workplace. While contractual solutions are sufficient to protect those with the knowledge, access, and bargaining power, a statute would extend this protection to those who lack such knowledge, access, and bargaining power.

i. Amend Title VII to Include “Political Beliefs” as a Protected Class

The most effective (and legislatively efficient) solution to protect private employee political speech would be to adopt Representative White’s proposed solution on a national level by amending Title VII of the Civil Rights Act of 1964¹⁵⁶ to include “political beliefs” as a protected class. In effect, this amendment would prevent an employer from discriminating against an employee for expression of political beliefs. Title VII is sufficiently broad to forbid discrimination in any aspect of employment including hiring, firing, compensation, assignment, conditions, and privileges of employment. It is important that the amendment includes a broad definition of “political beliefs” to include any expression made in relation to matters of public concern.

ii. Federal Statute Protecting Employee Speech Relating to Public Concern

Another possible legislative solution would be to draft and enact a new federal statute, modeled after Connecticut’s free speech statute, that explicitly protects employee speech relating to public concern from any adverse employment action. However, this solution would be subject to the same limitations facing the Connecticut statute.

iii. State Statutory Solution

In the event that it is not possible for Congress to pass a federal statute or until a federal statute is passed, the next best option would be for state legislatures to either include “political beliefs” as a protected class in their state anti-discrimination law or pass statutes modeled after Connecticut’s free speech statute.

CONCLUSION

Employer silencing of employee speech relating to politics and matters public concern is particularly unsettling because speech relating to public concern is recognized as “some of the most highly protected forms of speech.”¹⁵⁷ American citizens watch reporters, pundits, and personalities on television, listen to them on podcasts and radio, and follow them on social media to learn about current events

¹⁵⁶ 42 U.S.C. §§ 2000e to 2000e-17 (2012).

¹⁵⁷ Draper, *supra* note 129.

and develop their own thoughts and opinions. Allowing employers to limit these influential individuals' ability to contribute to public discourse is a violation of core American values and stunts the democratic system of government. Though at times frustrating and contentious, political speech is a profoundly valuable form of expression in American society because it allows for a strong and functioning democracy. The recent suggestions by the Trump administration that certain on-air employees should be terminated for expressing their opinions about public life¹⁵⁸ sheds light on the overall lack of protection that these private employees enjoy both within and outside of the workplace.

Tomi Lahren learned from experience the limits of the prized American saying, "I can say what I want—it's a free country." She did say what she wanted. And she lost her job for it. Though there are valid and strong reasons for limitations of employee speech in specific situations and circumstances, private employers should not have such strong control over their employees' expressions outside of the context of work, especially over expressions relating to public life. Perhaps American jurisprudence should better reflect the American aspiration for free speech.

¹⁵⁸ See Draper, *supra* note 7.

NEW YORK UNIVERSITY
JOURNAL OF INTELLECTUAL PROPERTY AND
ENTERTAINMENT LAW

VOLUME 8

SPRING 2019

NUMBER 2

TRADEMARK LAW IN THE VIRTUAL REALISM
LANDSCAPE

JAMES YANG*

The recent rise of virtual reality, augmented reality, and other related technologies has created vast amounts of virtual space. Within this space, novel forms of trademark infringement and expressive use may arise. This note categorizes the above-mentioned technologies under the umbrella term of “virtual realism” and examines trademark infringement in relation to such virtual realism technologies. In particular, the usage of physical-goods marks in virtual realism platforms is examined in relation to the usage of such marks in more traditional virtual platforms. This note argues that virtual realism platforms are less defendant-friendly in the trademark context than are traditional virtual platforms.

* J.D. Candidate, New York University School of Law, 2019; B.A., Philosophy, magna cum laude, New York University, 2019. The author would like to thank the 2018-19 Editorial Board of the Journal of Intellectual Property & Entertainment Law for their help on this note.

INTRODUCTION.....	410
A. <i>Trademark Law and Market Change</i>	410
B. <i>Overview of Note Structure</i>	412
I. DEFINING VIRTUAL REALISM	413
A. <i>Realism and Abstraction</i>	413
B. <i>What is Virtual Realism?</i>	414
II. VIRTUAL REALISM TECHNOLOGIES	415
A. <i>Virtual Reality</i>	416
B. <i>Augmented Reality</i>	417
C. <i>Location-Based Services</i>	419
III. VIRTUAL REALISM AND LIKELIHOOD OF CONFUSION	410
A. <i>Infringement and Likelihood of Confusion Generally</i>	420
B. <i>Proximity/Similarity of Goods Factor</i>	421
C. <i>Similarity of Marks Factor</i>	426
D. <i>Channels of Trade/Marketing Factor</i>	427
IV. VIRTUAL REALISM AND EXPRESSIVE USE.....	429
A. <i>Rogers v. Grimaldi Test</i>	429
B. <i>Virtual Realism and the Role of Microtransactions</i>	431
CONCLUSION	433

INTRODUCTION

A. Trademark Law and Market Change

Throughout its history, United States trademark law has often had to adapt to and accommodate for unforeseen innovations and evolutions in the American market. The Trademark Act of 1905¹ was, in many ways, unable to account for the “realities of twentieth century commerce.”² From an inability to register services marks, to being silent on renewal and abandonment, the 1905 Act was blind to the changes in commerce that would take place in the decades following its adoption.³ The inadequacies of the 1905 Act were ultimately addressed by the Trademark Act

¹ Trademark Act of 1905, Pub. L. No. 58-84, 33 Stat. 724 (repealed 1946).

² 1 J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 5:3 (5th ed. 2017).

³ *Id.*

of 1946, more commonly known as the Lanham Act.⁴ However, the Lanham Act too has had to rapidly adapt in order to address unique changes in commerce.⁵

In particular, the end of the twentieth century introduced significant changes to the market when commerce began shifting towards digital technology and internet services.⁶ Faced with novel issues arising from internet platforms, trademark law adapted to unforeseen characteristics of the internet age through measures such as the Anticybersquatting Consumer Protection Act (ACPA) of 1999.⁷

Trademark law, however, must still adapt further to current market changes. Despite past amendments and adaptations, trademark law's basic focus remains the prevention of public confusion arising from the usage of marks in relation to goods and services.⁸ Thus, evolutions in the market of goods and services will inevitably command a need for adaptation within trademark law. Novel goods and services may force novel legal interpretations to adequately achieve trademark law's basic focus.

Of particular relevance to the modern market is the evolving role of information technology,⁹ the importance of which is apparent from the proliferation of internet platforms, smartphone platforms, and digital services.¹⁰ New forms of information technology continue to enter the market.

In recent years, a particular class of new information technology has crept into the market. This class of technology concerns virtual experiences, providing a novel change in user experience in relation to virtual platforms. Such technologies include,

⁴ Lanham Act, ch. 540, 60 Stat. 427 (1946) (codified as amended in scattered sections of 15 U.S.C. (2012)); *see also* 1 McCarthy, *supra* note 2 § 5:4.

⁵ *See* Deborah F. Buckman, Annotation, *Lanham Act Trademark Infringement Actions in Internet and Website Context*, 197 A.L.R. Fed. 17 (2004).

⁶ *Id.*

⁷ 1 MCCARTHY, *supra* note 2, § 5:10.

⁸ Buckman, *supra* note 5 (“The basic focus of trademark protection has not changed: preventing the use of identical or similar marks in a way which confuses the public about the source of goods and services.”).

⁹ *See generally* 1-3 MANUEL CASTELLS, *THE INFORMATION AGE: ECONOMY, SOCIETY AND CULTURE* (1996).

¹⁰ MCKINSEY & COMPANY, *GLOBAL MEDIA REPORT 5* (2016) (“Digital media are the driving forces behind industry expansion today, both in consumer spending and, to an even greater extent, in advertising spend.”).

amongst others, virtual reality, augmented reality,¹¹ and location-based services.¹² While virtual-experience technologies differ in the ways that they add realism, they share a common effect in that they bring virtual user experiences closer to actual physical or real-world experiences. As these technologies grow in influence, the landscape of virtual interactions will significantly shift away from abstraction and towards what I call “virtual realism.”¹³ However, the evolution into virtual realism will not be without consequence. Virtual realism platforms will inevitably raise novel trademark disputes and, as a result, new questions of trademark law.¹⁴

In this note, I have two objectives. First, I identify and outline virtual realism as a phenomenon. Second, I seek to offer a preliminary discussion of how trademark law should be applied and adapted to the context of virtual realism. My discussion focuses on situations in which mark owners find their mark used without their permission within a virtual realism platform.

B. Overview of Note Structure

I proceed in four Parts. In Part I, I introduce and clarify the concept of virtual realism. In Part II, I provide three relevant examples of technologies which push towards virtual realism. The next two parts turn to a legal discussion of such technologies’ effect on trademark law. In Part III, I discuss the effect of virtual realism technologies on trademark infringement, particularly with respect to likelihood of confusion analyses. And in Part IV I discuss infringement defenses, particularly with respect to the expressive use defense. Ultimately, I argue that trademark owners should receive greater protection with respect to virtual realism platforms than they have traditionally received in the past in other virtual platforms.

¹¹ See generally *Demystifying the Virtual Reality Landscape*, INTEL, <https://www.intel.com/content/www/us/en/tech-tips-and-tricks/virtual-reality-vs-augmented-reality.html> (last visited May 19, 2019).

¹² See generally Ryan Goodwich, *Location-Based Services: Definition & Examples*, BUS. NEWS DAILY (Oct. 30, 2013), <https://www.businessnewsdaily.com/5386-location-based-services.html>.

¹³ Barry Werbin, *Trademarks in Virtual Worlds*, INT’L TRADEMARK ASS’N (Dec. 1 2009), <https://www.inta.org/INTABulletin/Pages/TrademarksinVirtualWorlds.aspx> (“Realism and social interaction in computer gaming have been greatly enhanced in recent years by advances in software technology, computer hardware and bandwidth . . .”).

¹⁴ *Id.* (“High levels of realism in games often require game designers to replicate material objects with which we interact in the real world, including branded products and services From a commercial perspective, 3D virtual worlds in particular present the opportunity for real-life companies to promote their own brands in a rich interactive environment to millions of potential viewers worldwide.”).

I DEFINING VIRTUAL REALISM

A. Realism and Abstraction

In order to define “virtual realism,” it is necessary to first introduce the concepts of “realism” and “abstraction.” As used in this note, “realism” and “abstraction” are contrasting characteristics with respect to virtual platforms. Realism denotes the qualities of an experience in the physical (or “real”) world, whereas abstraction denotes qualities that deviate from the physical (or “real”) world. For example, we might view limitations in graphical depiction as an abstraction from the sharp detail of the physical world.¹⁵ The pixels that make up the spaceship in *Space Invaders*, for instance, make the spaceship abstract in its two-dimensional simplicity and lack of any complex visual detail.¹⁶ Limitations on interaction may constitute another form of abstraction. In *Space Invaders*, the spaceship is restricted to two-dimensional movement, which is an abstraction from the range of interactions possible in an actual spaceship.

Abstraction might take many other forms. Virtual “money” in a video game, which is relatively worthless in the real world, could be seen as an abstraction of real money. A virtual “shopping cart” on a webpage, which does not move on wheels or hold tangible objects, is an abstraction of a physical-world shopping cart.¹⁷ The “front page” of a news website is an abstraction of a physical newspaper’s front page. A “like” on a social media post is similarly an abstraction of an in-person social interaction where one expresses appreciation for another’s statement.¹⁸

We might then see online markets such as Amazon or eBay as abstractions of physical-world marketplace.¹⁹ News websites such as nytimes.com can be seen as

¹⁵ Richard Cobbett, *The Evolution of Gaming Graphics*, TECHRADAR (June 17, 2009) <https://www.techradar.com/uk/news/gaming/the-evolution-of-gaming-graphics-609050> (“It can be tough to remember, but over the last 30 years, we’ve moved from simple shapes floating around black screens pretending to be spaceships... Part of the problem with these games is that they set out to simulate reality, albeit in a stylised way.”).

¹⁶ Simon Parkin, *The Space Invader*, NEW YORKER (Oct. 17, 2013) <https://www.newyorker.com/tech/annals-of-technology/the-space-invader>.

¹⁷ See generally *What is a Shopping Cart?*, BIG COMMERCE, <https://www.bigcommerce.com/ecommerce-answers/whats-shopping-cart/> (last visited Apr. 9, 2019).

¹⁸ See generally Kari Paul, *Does the ‘Like’ Mean Anything Anymore?*, INTELLIGENCER (May 5, 2016), <http://nymag.com/intelligencer/2016/05/does-the-like-mean-anything-anymore.html>.

¹⁹ See generally *How Are eBay and Amazon Different?*, INVESTOPEDIA, <https://www.investopedia.com/articles/investing/061215/how-are-ebay-and-amazon-different.asp> (last visited June 12, 2015).

abstractions of their physical newspaper counterparts.²⁰ Social media sites such as Facebook can be seen as abstractions of in-person social interactions.²¹ While these virtual platforms all achieve enough realism to invite user participation in some aspects, they are inevitably abstract and fail to achieve complete realism in other aspects due to technological limitations.

Recent technological advances, however, have allowed virtual interactions to shed some of their past limitations and abstractions. In particular, several well-known, new technologies allow for unprecedented forms of realism in the virtual world. This note categorizes such technologies as virtual realism technologies.

B. What is Virtual Realism?

This note defines “virtual realism” as the lack of abstraction and achievement of realism within a virtual platform. Even this definition, however, is not without ambiguities. Thus, it is important to clarify the concept virtual realism as follows.

First, this note construes virtual realism by reference to the user experience. A hyper-realistic virtual racing simulation, for instance, achieves virtual realism through a user’s experience playing it, not through a coder’s experience reading and writing the underlying software code. It is the consumer’s interaction with a virtual platform that is the focus here.

Second, this note does not attempt to draw a bright line separating platforms that achieve virtual realism from those that do not. Rather, the focus here is to examine a class of virtual platforms which provide a significant increase in the realism of the user experiences. In other words, the term virtual realism is not meant to allow for a clear categorization of every individual platform. Rather, it describes certain technologies that significantly shift platforms away from abstraction and towards higher levels of realism.

This limitation in scope is practical, as many older virtual platforms had some realistic features, and even the most modern platforms still retain some level of abstraction. For instance, early racing games were pixelated works, played in front

²⁰ See generally Jack Shafer, *Print vs. Online*, SLATE (Aug. 19, 2011, 5:47 PM), <https://slate.com/news-and-politics/2011/08/print-vs-online-how-the-print-edition-of-the-new-york-times-trumps-the-online-version.html>.

²¹ See generally Anna Akbari, *Identity in the Age of Social Media*, PSYCHOLOGY TODAY (Sept. 10, 2018), <https://www.psychologytoday.com/us/blog/startup-your-life/201809/identity-in-the-age-social-media>.

of a screen with a controller.²² Still, even early racing games had some elements of realism insofar as basic movement mechanics, sounds, and even spirit.²³ And while hyper-realistic on the whole, even modern racing simulations still retain elements of abstraction in that they cannot simulate, for instance, the danger of a life-ending crash or the feeling of wind tunneling through an open window.

Accordingly, as relevant to this note, virtual realism is used to describe goods and services that exhibit novel forms of realism *relative* to past goods and services. The group of technologies central to this note are not common in their ability to pass some objective bar for realism, but rather in their ability to significantly shift older technologies towards a higher level of realism.

Finally, virtual realism is used to describe a wide variety of technologies across a range industries; it is not limited to any single industry category. As discussed in this note, “virtual reality” and “augmented reality” are intended as illustrative examples of virtual realism, not as concepts synonymous or coterminous with virtual realism.

To summarize, virtual realism denotes a specific outcome of technological change. Where technologies provide for virtual realism, they significantly alter user experiences away from abstraction and toward the realism of physical-world experiences.

II

VIRTUAL REALISM TECHNOLOGIES

While there are many technologies that provide for virtual realism, this note examines three specific technologies which have recently gained popularity—virtual reality (“VR”), augmented reality (“AR”), and location-based services (“LBS”). All three stand out in that they provide a significant shift in user experience towards virtual realism. In many respects, this significant shift is more than a shift in degree. Rather, this shift is a fundamental change in the type of user experience—that is, a change in kind.

²² Darren Orf, *Racing Games: A Brief Visual History*, POPULAR MECHANICS (Nov. 25, 2013), <https://www.popularmechanics.com/culture/gaming/g1350/racing-games-a-brief-visual-history/?slide=1>.

²³ *Id.*

A. Virtual Reality

VR is a technology that has recently achieved popularity for its ability to completely immerse users inside a virtual world.²⁴ A VR headset replaces users' visual connection to their physical environment with a virtual environment.²⁵ Sensors in the headset make it such that one's physical head movements are replicated in the virtual world they see.²⁶ When they turn left, they see to their left in the VR world. When they turn right, they see to their right in the VR world. Some systems even track footsteps and controller movements so that a physical step forward or a hand gesture will trigger a parallel movement in the virtual world.²⁷

VR's growth and potential are vast, as VR and AR combined are expected to grow into a \$95 billion market by 2025.²⁸ Though VR's current demand comes primarily from the entertainment industry, its application has the potential to spread to "industries as diverse as healthcare, education, the military and real estate over time."²⁹

VR's rise to prominence represents a significant shift away from the traditional flat-screen medium (i.e., TVs, computer monitors, movie theater projections, etc.) towards an entirely different way of experiencing virtual content.³⁰

²⁴ *Demystifying the Virtual Reality Landscape*, *supra* note 11 ("VR is the most widely known of these technologies. It is fully immersive, which tricks your senses into thinking you're in a different environment or world apart from the real world.").

²⁵ *Id.* ("Using a head-mounted display (HMD) or headset, you'll experience a computer-generated world of imagery and sounds . . .").

²⁶ Tom Goodwin, *The 6 Dimensions of Virtual Reality*, FORBES (Apr. 20, 2016, 6:23 PM), <https://www.forbes.com/sites/tomgoodwin/2016/04/20/the-6-dimensions-of-virtual-reality/#7d5edbb618be> ("A leap beyond 360 videos are VR headsets like Oculus Rift and HTC Vive and AR headsets like the Microsoft Hololens that allow your head position to be tracked within a specified area.").

²⁷ Dan Stapleton, *HTC Vive Review*, IGN (Apr. 6, 2016, 9:57 PM), <http://www.ign.com/articles/2016/04/07/htc-vive-review> ("Thanks to sensors that track your position as you physically move around a room and allow you to use your hands to interact with the imaginary as though it were real, the Vive is vastly more effective at making me feel present within a game or other virtual environment than anything else I've experienced.").

²⁸ Stefan Hall & Ryo Takahashi, *Augmented and Virtual Reality: The Promise and Peril of Immersive Technologies*, MCKINSEY & CO. (Oct. 2017), <https://www.mckinsey.com/industries/media-and-entertainment/our-insights/augmented-and-virtual-reality-the-promise-and-peril-of-immersive-technologies>.

²⁹ *Id.*

³⁰ *Id.* ("[VR] promises the replacement of rectilinear devices with technologies that depict worlds in ever-expanding concentric circles, providing a level of immersion and experience that has never been seen before.").

Whereas flat-screen televisions are only *part* of a user's environment (i.e., an aspect that they observed), VR *replaces* users' physical environment entirely, fully immersing them in a virtual world.³¹ VR platforms achieve realism not only through the complete replacement of a users' physical surroundings with a virtual world but also through the depth, dimension, and interactivity that is achievable in such virtual world. Whereas a flat screen is abstract in two-dimensional display, VR can accurately create a realistic three-dimensional world.³²

B. Augmented Reality

AR, like VR, finds much of its current application in the entertainment industry through mobile applications and video games.³³ However, AR probably has a larger range of potential applications.³⁴ Unlike VR, AR does not seek to completely replace one's physical environment with a virtual world. Instead, AR mixes the virtual world with the physical world, using various methods to overlay virtual images and video onto one's real-world surroundings.³⁵

An even more interactive version of AR is "mixed reality," which not only overlays virtual images but also allows for an interaction between the virtual and the physical, thus "anchoring" virtual objects into the physical.³⁶ For the purposes of this note, AR is an umbrella term which also encompasses mixed reality.

³¹ *Id.* ("This could be game-changing: users will no longer view content but will be placed inside ever-expanding virtual worlds and find themselves at the center, hence the 'immersive' nature of the technology.").

³² Goodwin, *supra* note 26 ("With these devices, you can draw in 3D and walk around your image, you can be transported to the Roman Coliseum and wonder around, and you see depth and parallax movements—you feel transported.").

³³ 3 MARY M. SQUYRES & NANETTE NORTON, TRADEMARK PRACTICE THROUGHOUT THE WORLD § 30:42 (2018) ("Although most uses of AR are confined to mobile applications or video games, the future is limitless. Any glass surface can provide a screen for AR, including eye glasses, a retail store window, or a television screen.").

³⁴ *Id.*

³⁵ *Demystifying the Virtual Reality Landscape*, *supra* note 11 ("AR overlays digital information on real-world elements. Pokémon GO* is among the best-known examples. Augmented reality keeps the real world central but enhances it with other digital details, layering new strata of perception, and supplementing your reality or environment.").

³⁶ Julia Tokareva, *The Difference Between Virtual Reality, Augmented Reality and Mixed Reality*, FORBES (Feb. 2, 2018), <https://www.forbes.com/sites/quora/2018/02/02/the-difference-between-virtual-reality-augmented-reality-and-mixed-reality/#65cd5b072d07> ("Mixed reality that starts with the real world—virtual objects are not just overlaid on the real world but can interact with it. In this case, a user remains in the real-world environment while digital content is added to it;

There are various ways in which AR can be implemented. Perhaps the best known example of AR is the 2016 global-phenomenon *Pokémon Go*.³⁷ *Pokémon Go* is a mobile phone game that utilizes the camera and screen of a smartphone to superimpose virtual characters onto one's surroundings.³⁸ Players move around the real world looking for characters to capture.³⁹ While *Pokémon Go* exemplifies a huge commercial success for AR, its limited entertainment role and confinement to smartphones does not demonstrate AR's full potential.

An example that might represent AR's full potential is imagined through Google's all-purpose AR eyewear: Google Glass.⁴⁰ Google Glass seeks to provide wearable, multifunctional AR that can be utilized in a variety of fields such as medicine, sports, and gaming.⁴¹ Though Google Glass has not been widely adopted,⁴² one can imagine a world in which Google Glass-type AR devices are as ubiquitous as smartphones, where every wearer's perception of the world is virtually augmented.⁴³ In such a world, physical ads on billboards would be rendered obsolete by virtual overlays. In a world with ubiquitous AR, virtual overlays would replace menus, storefronts, and other physical displays.

AR represents a significant shift towards an entirely different way of experiencing virtual content. Its virtual-physical hybrid experience is radically new and, compared to VR, fundamentally more "real" in that AR anchors users' virtual

moreover, a user can interact with virtual objects. This form of mixed reality can be considered an advanced form of AR.”).

³⁷ See Alex Hern, *Pokémon Go Becomes Global Craze as Game Overtakes Twitter for US Users*, GUARDIAN (July 12, 2016, 1:33 PM), <https://www.theguardian.com/technology/2016/jul/12/pokemon-go-becomes-global-phenomenon-as-number-of-us-users-overtakes-twitter>.

³⁸ *Id.*

³⁹ *Id.* (“Pokémon Go is a spin-off of the long-running Pokémon series, in which players capture and battle the titular creatures (short for ‘pocket monsters’) in their quest to become the greatest Pokémon trainer in the world. Unlike in earlier videogames, players move around the real world looking for Pokémon to capture.”).

⁴⁰ Paul Lamkin, *Google Glass Could Make Comeback in AR Revolution*, FORBES (Feb. 26, 2018, 3:45 PM), <https://www.forbes.com/sites/paullamkin/2018/02/26/google-glass-could-make-comeback-in-ar-revolution/#2c10ccb823a6>.

⁴¹ See Chris Smith, *2020 Vision: The Future of Google Glass*, TECHRADAR (Oct. 19, 2013), <http://www.techradar.com/news/world-of-tech/2020-vision-the-future-of-google-glass-1190832>.

⁴² See Siimon Reynolds, *Why Google Glass Failed: A Marketing Lesson*, FORBES (Feb. 5, 2015, 8:44 PM), <https://www.forbes.com/sites/siimonreynolds/2015/02/05/why-google-glass-failed/#4c775e1951b5>.

⁴³ Smith, *supra* note 41 (“[H]ow will Google Glass will look at the end of the decade? Will everyone be wearing one and if they are, what will they be wearing? How powerful can Augmented Reality become? How could it potentially change the way we work, study and consume?”).

experiences in their physical surroundings. Thus, AR significantly shifts the landscape of virtual interactions towards virtual realism.

C. Location-Based Services

While perhaps not as experientially stunning as VR and AR, LBS are already widely used and significantly changing the way that users interact with virtual platforms. Like the changes driven by VR and AR, LBS-driven changes allow for user experiences that are less abstracted than previously possible.

LBS “use real-time geo-data from a mobile device or smartphone to provide information, entertainment or security.”⁴⁴ Essentially, LBS allow virtual platforms to track a person’s physical location, resulting in a variety of new interactions. Though location-based services can be used passively to deliver targeted advertisement or to provide extra security measures, LBS can also be used to provide interactive virtual experiences.⁴⁵

For instance, the popular rating platform Yelp utilizes LBS to create an incentive system which rewards users for virtual “check ins.”⁴⁶ Global media applications, such as Snapchat and Instagram, have introduced location-restricted “geostickers” and “geofilters” which provide specifically-located users with unique images that they can superimpose on their media.⁴⁷ Modern dating applications use LBS to quickly connect users within spatial proximity to each other.⁴⁸ By offering unique virtual interactions to only those within certain geographical boundaries, LBS-enabled platforms not only offer an incentive to travel but also create virtual boundaries, or “geofences,” that have both virtual and physical elements.⁴⁹

It should be noted that AR and location-based services are complementary. For example, *Pokémon Go* uses AR to superimposes virtual characters onto one’s

⁴⁴ Ryan Goodrich, *Location-Based Services: Definition & Examples*, BUS. NEWS DAILY (Oct. 30, 2013, 4:34 PM), <https://www.businessnewsdaily.com/5386-location-based-services.html>.

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ Josh Constine, *Instagram Stories Launches Geostickers as its Snap Attack Continues*, TECHCRUNCH (Mar. 7, 2017), <https://techcrunch.com/2017/03/07/instagram-geostickers/>.

⁴⁸ Chris Weller, *eHarmony is Gearing Up for a Battle to Win Back Millennials from Tinder and Bumble*, BUS. INSIDER (Feb. 18, 2017, 9:41 AM), <http://www.businessinsider.com/eharmony-win-back-millennials-2017-2>.

⁴⁹ Sarah K. White, *What is Geofencing? Putting Location to Work*, CIO (Nov. 1, 2017, 12:43 PM), <https://www.cio.com/article/2383123/mobile/geofencing-explained.html>.

physical environment and uses LBS to limit the discovery of such characters to specific geographic locations.⁵⁰

Whereas AR mixes virtual and physical stimuli, LBS mix the locational boundaries of a virtual platform and its incentive scheme with the physical geography of the real world. LBS, when used actively to incentivize user movement, can break down the barriers traditionally found between virtual experiences and the physical world. Whereas virtual platforms used to be completely disconnected from one's physical surroundings, LBS are now capable of inducing user movement.

The three technologies explained above do not represent an exhaustive list of all current or potential virtual realism technologies. However, for practical purposes, this note's discussion is limited to AR, VR, and LBS.

III

VIRTUAL REALISM AND LIKELIHOOD OF CONFUSION

Trademark law is fundamentally tied to the market, which means that significant shifts in the market with respect to virtual realism will inevitably raise questions of trademark law. The new wave of virtual platforms implementing VR, AR, and LBS are significantly different from their predecessors and may provide totally novel user experiences. Thus, the rest of this note examines virtual realism's implications for trademark law, ultimately arguing that trademark owners should be afforded greater protection in relation to the use of their marks in virtual realism platforms.

My examination of virtual realism and trademark law centers on virtual realism in the context of infringement and is divided into two parts. First, I examine the likelihood of confusion analysis. Second, I examine infringement defenses, focusing on the expressive use defense.

A. Infringement and Likelihood of Confusion Generally

With an influx of platforms utilizing VR, AR, and LBS, one can see the potential usages of trademarks within such platforms. Whether it be the trade dress of a soda bottle in a VR video game or a physical store's trademark superimposed on a building through an AR application, such platforms provide vast virtual spaces in which trademark infringement may be possible. While courts have yet to offer significant discussion with respect to trademark infringement in the context of VR

⁵⁰ Hern, *supra* note 37 (“But the core of the game is the Pokémon themselves, which can appear anywhere, anytime (though often themed around the location, with ghost-type Pokémon appearing in graveyards and water-type creatures near lakes and rivers).”).

and AR platforms, case law concerning trademark infringement in the context of non-VR and non-AR video games offers meaningful guidance.⁵¹

The fundamental test for trademark infringement is likelihood of confusion.⁵² At first glance, virtual realism intuitively denotes a greater likelihood of confusion between virtual and physical marks. For example, a higher level of realism in a virtual platform entails a higher level of realism for any marks used within that platform. Thus, marks used within virtual realism platforms have the potential to be more similar to their physical-world counterparts. Said similarity should, then, increase the likelihood that one might confuse virtual marks in virtual realism platforms with physical marks in the real world. This intuition also applies to the goods such mark is used in relation to, as well as other contextual experiences related to the mark.

The intuition above is also supported by the existing likelihood of confusion doctrine, for which each circuit has formulated similar, though slightly differing, multi-factor tests.⁵³ In particular, three common factors from the likelihood of confusion test are especially relevant for infringement analysis in the context of virtual realism: (1) proximity/similarity of goods; (2) similarity of marks; and (3) channels of trade/marketing. Since each circuit formulates their factors differently, the factors as described here may not explicitly match those used by some circuits. However, in circuits where there is not an explicit congruency in wording, a conceptual link with a factor can often be found.

B. Proximity/Similarity of Goods Factor

In general, the two most determinative factors with respect to likelihood of confusion are (1) proximity/similarity of goods and (2) similarity of marks.⁵⁴ Proximity of goods is especially important here, as it is the factor most affected by

⁵¹ See *Trademark Dispute: Can a Video Game Use Another Company's Trademark?*, DAVID LIZERBRAM & ASSOCIATES (Feb. 24, 2015), <https://lizerbramlaw.com/2015/02/24/trademark-dispute-can-video-game-use-another-companys-trademark/>.

⁵² 4 MCCARTHY, *supra* note 2, § 23:1 (“‘Likelihood of confusion’ is the fundamental test of both state common-law and statutory trademark infringement and federal statutory trade mark infringement.”).

⁵³ *Id.* (“[T]he federal courts have developed a multi-factor test to assist in the difficult determination of whether there is or is not a likelihood (probability) of confusion. The test used is not identical throughout the various federal circuits. Most such tests have about eight factors to consider and the number of factors varies slightly among the 13 federal circuits.”).

⁵⁴ *Id.* § 23:20.50 (“In applying a multi-factor analysis for likelihood of confusion, it will often be the case that the similarity of the marks and the similarity of the goods and services will be the most determinative of the factors.”).

virtual realism technologies. All of the circuits use a proximity of goods factor in one way or another.⁵⁵ This note, however, does not parse the differences between the circuits' differing formulations of the proximity of goods factor; rather, this note uses a broad conception of the factor.

In practice, the proximity factor for likelihood of confusion is often used quite broadly to incorporate elements of similarity, competition, and otherwise relatedness.⁵⁶ For disputes concerning marks normally reserved for physical goods and services, which are then used within a virtual platform, this factor cuts against a finding of likelihood of confusion. Namely, there is a notion that virtual goods/services and physical goods/services are not only different qualitatively but also separate spatially. However, such differences and separation are often a result of the technological limitations (i.e., abstractions) of past virtual platforms.

*E.S.S. Entertainment 2000, Inc. v. Rock Star Videos, Inc.*⁵⁷ is illustrative of how courts have failed to find proximity between virtual marks and their physical counterparts. There, the operators of a Los Angeles strip club named the "Play Pen" sued the creators of the video game series *Grand Theft Auto: San Andreas* ("*San Andreas*") for creating a virtual replica of the strip club named the "Pig Pen."⁵⁸ The game, which has sold millions of copies,⁵⁹ is set in a virtual city named "Los Santos," a fictionalized version of Los Angeles. To create Los Santos, the artists for the game took reference photographs of Los Angeles' businesses and people.⁶⁰ The Play Pen

⁵⁵ See, e.g., *Sorensen v. WD-40 Co.*, 792 F.3d 712, 726 (7th Cir. 2015) (listing "the similarity of the products" as a factor); *George & Co., LLC v. Imagination Entm't Ltd.*, 575 F.3d 383, 393 (4th Cir. 2009) (listing "the similarity of the goods or services that the marks identify" as a factor); *Am. Rice, Inc. v. Producers Rice Mill, Inc.*, 518 F.3d 321, 329 (5th Cir. 2008) (listing "similarity of the products" as a factor); *Frisch's Rest., Inc. v. Shoney's, Inc.*, 759 F.2d 1261, 1264 (6th Cir. 1985) (listing "relatedness of the goods" as a factor); *Pignons S.A. de Mecanique de Precision v. Polaroid Corp.*, 657 F.2d 482, 487 (1st Cir. 1981) (listing "the similarity of the goods" as a factor); *AMF, Inc. v. Sleekcraft Boats*, 599 F.2d 341, 348 (9th Cir. 1979), *abrogated by* *Mattel, Inc. v. Walking Mountain Prods.*, 353 F.3d 792 (9th Cir. 2003) (listing "proximity of the goods" as a factor); *Polaroid Corp. v. Polarad Elecs. Corp.*, 287 F.2d 492, 495 (2d Cir. 1961) (listing "the proximity of the products" as a factor).

⁵⁶ MARK S. LEE, ENTERTAINMENT AND INTELLECTUAL PROPERTY LAW § 2:55 (2018 ed.) ("For trademark purposes, 'proximity' refers to the extent to which goods or services are similar to, compete with, or otherwise 'relate' to each other.").

⁵⁷ 547 F.3d 1095 (9th Cir. 2008).

⁵⁸ *Id.* at 1097.

⁵⁹ *E.S.S. Entm't 2000, Inc. v. Rock Star Videos, Inc.*, 444 F. Supp. 2d 1012, 1017 (C.D. Cal. 2006), *aff'd*, 547 F.3d 1095 (9th Cir. 2008).

⁶⁰ *E.S.S. Entm't*, 547 F.3d at 1097 ("To generate their vision for Los Santos, some of the artists who drew it visited Los Angeles to take reference photographs. The artists took pictures of businesses, streets, and other places in Los Angeles that they thought evoked the San Andreas

was one such business that was modeled. In its examination of the proximity of goods and services, the Ninth Circuit noted that “[t]he Play Pen is a public establishment, where food and refreshments are served and live nude dancers perform. Video games such as *San Andreas* are generally played at home, sitting in front of a screen.”⁶¹ The court pointed to not only the differing features of a physical experience and a virtual experience but also the spatial separation between the two. Given the technological limitations in *San Andreas*, the court’s observation was proper. The virtual strip club in *San Andreas* is both visually and interactively abstracted from a physical strip club. Furthermore, the Pig Pen, which is located within an at-home video game, is spatially distant from the actual Play Pen, located in the physical world. Thus, it is hard to see the two goods/services as proximate in either their qualitative features or their literal geographical location.

In *E.S.S. Entertainment*, the lack of proximity was a crucial obstacle in finding likelihood of confusion.⁶² Moreover, such lack of proximity seems to be a symptom of the underlying virtual platform, rather than the specific video game at hand. However, while *E.S.S. Entertainment* provided a meaningful commentary on the difficulties of establishing likelihood of confusion in the context of traditional virtual platforms that are experienced at home in front of a screen, the opinion did not anticipate the rise of virtual realism technologies.

From the discussion in *E.S.S. Entertainment*, two problems arise concerning trademark infringement in virtual platforms: (1) lack of qualitative similarity between goods/services and (2) lack of spatial proximity between goods/services.

With respect to the qualitative similarity problem, VR, AR, and LBS all minimize the problem by contributing to an enhanced qualitative similarity between the virtual and physical goods/services. In particular, VR and AR allow for a more realistic virtual depiction of objects, surroundings, and interactions than was ever possible before. Using VR or AR, for instance, the Play Pen could be depicted in a hyper-realistic fashion. Virtual realism technologies provide significant improvements in other areas as well. For example, one might consider the extra dimension of realism a roller coaster simulation attains when played on an immersive VR system, rather than a traditional flat screen.⁶³

theme. They then returned home (to Scotland) to draw Los Santos, changing the images from the photographs as necessary to fit into the fictional world of Los Santos and San Andreas.”).

⁶¹ *E.S.S. Entm't*, 444 F. Supp. 2d at 1025.

⁶² *Id.*

⁶³ Dan Griliopoulos, *10 Best VR Rollercoasters for the Vive, Oculus, Cardboard and Gear VR*, TECHRADAR (Apr. 2, 2016), <https://www.techradar.com/news/gaming/10-best-vr-rollercoasters-for-the->

However, a particularly interesting scenario is presented by the recent “multiplayer online experience” known as *VRChat*, which is “a transformative platform like nothing you've ever experienced.”⁶⁴ *VRChat* is essentially a “virtual meeting space that lets people socialize, attend events, take classes, create art, play games, perform for large crowds, and explore virtual environments.”⁶⁵ Using VR, players possess a virtual avatar from an internal point of view and are able to control the speech and movement of their personal avatars.⁶⁶ The avatars in *VRChat* are user-created and span a vast range of possibilities.⁶⁷ A player using *VRChat* can use body-tracking technology to physically control an avatar to such detail that the player’s physical movements map directly onto the avatar’s virtual movements.⁶⁸ The body control is so precise that players can hold VR dancing events or yoga classes.⁶⁹

The realism of avatar control and social interaction on a platform like *VRChat* lends itself to a discussion of the similarity/proximity of virtual goods.⁷⁰ Imagine an avatar in *VRChat* with a virtual replica of a trademarked luxury bag. Not only would VR allow for the bag to be replicated in three-dimensional space with a high level of detail, but the bag would actually be worn on one’s “body” from the player’s perspective. The bag would move in synchrony with the player’s movements in real life. The bag could be interactive, such that it would open and close with the player’s hands in real life. Finally, a virtual bag could serve a purpose similar to that of a physical bag in that the player could choose to wear it as part of their personal image and identity, specifically for an occasion or environment like a virtual nightclub. All of these features draw the virtual bag closer in likeness to a real bag, and such closeness is only realized through the technological capabilities of VR.

vive-oculus-cardboard-and-gear-vr-1318108 (“Rollercoasters have been part of gaming’s heritage since the earliest days But VR’s inherent sense of presence makes the managed terror of roller coasters all the more impressive. It also has the added, uh, ‘bonus’ of sometimes inducing exactly the kind of sickness that you get from a really impressive rollercoaster . . .”).

⁶⁴ Kaylee Fagan, *A Large Number of People Have Come Out Saying VRChat Has Saved Their Lives — Here’s What it’s Like to Experience the Online Meeting Place of the 21st Century*, BUS. INSIDER (Mar. 1, 2018, 5:55 PM), <https://www.businessinsider.com/vrchat-explained-2018-2>.

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ Gabriel Moss, *VRChat’s Full-Body Tracking Attracts Pole Dancers, Breakdancers and More*, VRFITNESSINSIDER (Nov. 30, 2018), <https://www.vrfitnessinsider.com/vrchats-full-body-tracking-pole-dancers/> (“And then there’s HTC’s house brew: the Vive Trackers. VERY accurate, to the point that you can do yoga and stuff.”).

⁶⁹ *Id.*

⁷⁰ *See generally id.* (“Nowadays, it’s no surprise that groups of people are already using full-body tracking in the virtual world to socialize and connect in entirely new and entirely real ways.”).

Whereas virtual bags in previous eras were limited to abstracted, two-dimensional displays on flat screens, VR has brought the potential for realistic, virtual bags to life. While this does not necessarily mean a finding of proximity/similarity of goods, it certainly provides a more convincing argument than was previously possible before.

For AR, much of the same detail and interactivity that is present in VR can be analogously superimposed onto one's environment. But AR may achieve additional qualitative similarities in that AR experiences borrow the "realness" of the physical environment onto which AR is superimposed. One might even say that games like *Pokémon Go* try to blur the line between virtual interactions and physical interactions, causing consumers to treat virtual representations as reality. With respect to *Pokémon Go*, consumers not only congregate outdoors in the thousands to pursue virtual rewards⁷¹ but also exhibit a passion for the game that has led some adults to commit crimes in pursuit of advancing through the game.⁷²

With respect to the spatial proximity problem, the relevant virtual realism technologies are AR and LBS. Using LBS, virtual platforms may be integrated with real-world geographical locations. Users of virtual platforms may be incentivized, or even required, to travel outside to real world locations. With AR, users have the ability to directly interact with their immediate environment, whether it is their living room or the façade of a public establishment. In order to better understand the features of AR and LBS, as well as to contrast them with the abstracted virtual world in *E.S.S. Entertainment*, we return to the global phenomenon of *Pokémon Go*.⁷³

Unlike older games, such as *San Andreas*, users interact with *Pokémon Go* by travelling to a variety of geographically dispersed, internet-connected locations. The technological capabilities of *Pokémon Go* advance beyond simple mobility, as it achieves mobile integration with its physical surroundings, thereby incentivizing player's to explore the real world and travel to specific locations. *Pokémon Go* achieves a virtually-augmented, hyper-real fantasy, in which the line between virtual interactions and physical interactions are blurred.

⁷¹ Julia Wong, *The World's Largest Pokémon Go Gathering Hits the Streets of San Francisco*, GUARDIAN (July 21, 2016, 7:47 AM), <https://www.theguardian.com/technology/2016/jul/21/pokemon-go-gathering-san-francisco>.

⁷² Ben Rappaport & Tim Stelloh, *Arizona Couple Abandons Toddler to Play 'Pokemon Go'*, NBC NEWS (Aug. 1, 2016), <https://www.nbcnews.com/news/us-news/arizona-couple-abandons-toddler-play-pokemon-go-n621006>.

⁷³ Hern, *supra* note 37.

Now, we might further imagine the potential of AR and LBS by considering a hypothetical AR version of *San Andreas* with game design similar to that of *Pokémon Go*. Theoretically, the game could utilize LBS to position a virtual strip club in an abandoned building next to the Play Pen. Furthermore, utilizing AR, the game could map a virtual façade depicting the mark “Pig Pen” onto the building. Perhaps the virtual façade could even mimic the aesthetic details of the Play Pen. Though it may still be considered only a “game,” the technologies that implement it and its ultimate result on user experience are completely different from traditional two-dimensional games—like *Grand Theft Auto: San Andreas*. In a hypothetical case involving trademark infringement within an AR-LBS version of *San Andreas*, establishing similarity/proximity of goods/services, and therefore establishing likelihood of confusion, seems possible, as the goods/services would be spatially adjacent and the virtual game would be qualitatively embodied in a physical building.

It is unclear what other kinds of virtual platforms will utilize AR and LBS and in what way they will implement them. However, it is clear that these technologies will intimately tie virtual goods/services to the physical world. Of course, while such technologies will not necessarily satisfy the proximity factor in every case involving virtual uses of physical marks, they will nevertheless increase the likelihood that virtual platforms may satisfy the proximity factor.

C. Similarity of Marks Factor

The second likelihood of confusion factor of interest is similarity of marks. This factor is also included in one way or another in most circuits.⁷⁴ This note, however, does not parse the differences between the circuits’ varying formulations

⁷⁴ See, e.g., *Sorensen v. WD-40 Co.*, 792 F.3d 712, 726 (7th Cir. 2015) (listing “the similarity between the marks in appearance and suggestion” as a factor); *Am. Rice, Inc. v. Producers Rice Mill, Inc.*, 518 F.3d 321, 329 (5th Cir. 2008) (listing “similarity of design between the marks” as a factor); *Sally Beauty Co., Inc. v. Beautyco, Inc.*, 304 F.3d 964, 972 (10th Cir. 2002) (listing “the degree of similarity between the marks” as a factor); *All. Metals, Inc. v. Hinely Indus., Inc.*, 222 F.3d 895, 907 (11th Cir. 2000) (listing “the similarity between the plaintiff’s mark and the allegedly infringing mark” as a factor); *Frisch’s Rest., Inc. v. Shoney’s, Inc.*, 759 F.2d 1261, 1264 (6th Cir. 1985) (listing “similarity of the marks” as a factor); *Interpace Corp. v. Lapp, Inc.*, 721 F.2d 460, 463 (3d Cir. 1983) (listing “the degree of similarity between the owner’s mark and the alleged infringing mark” as a factor); *Pignons S.A. de Mecanique de Precision v. Polaroid Corp.*, 657 F.2d 482, 487 (1st Cir. 1981) (listing “the similarity of the marks” as a factor); *AMF, Inc. v. Sleekcraft Boats*, 599 F.2d 341, 348–49 (9th Cir. 1979) (listing “similarity of the marks” as a factor); *In re E.I. du Pont de Nemours & Co.*, 476 F.2d 1357, 1361 (C.C.P.A. 1973) (listing “[t]he similarity or dissimilarity of the marks in their entireties as to appearance, sound, connotation and commercial impression” as a factor).

of the similarity of marks factor; rather, this note uses a broad conception of the factor.

The effect of virtual realism on the similarity of marks factor is minor, as even older virtual platforms were capable of replicating marks with a high degree of precision. This is especially true when replicating two-dimensional marks.

Nevertheless, virtual realism technologies have the potential to present uniquely detailed marks more realistically than was previously possible on virtual platforms. For example, VR may allow one to present a three-dimensional mark with more accuracy and precision and may enable a player to walk around and interact with the mark in a virtual three-dimensional space. VR can faithfully represent certain trade dresses that pertain to large spaces and buildings in stature and atmosphere. VR even has the potential to implement scent simulation in the future, thus allowing for the potential replication of scent marks.⁷⁵

Overall, however, virtual realism does not present any groundbreaking issues with respect to analyzing the similarity of marks. Even in older virtual platforms, most virtual marks can pass a similarity of marks analysis.

D. Channels of Trade/Marketing Factor

The third likelihood of confusion factor of interest is channels of trade/marketing. This factor is also included in one way or another in most circuits.⁷⁶ This note, however, does not parse the differences between the circuits' varying formulations of the channels of trade factor; rather, this note uses a broad conception of the factor.

⁷⁵ Andrew Tarantola, *Smellable VR is Coming Whether You Want It or Not*, ENGADGET (Nov. 13, 2017), <https://www.engadget.com/2017/11/13/smellable-vr-is-coming/>.

⁷⁶ See, e.g., *Sorensen*, 792 F.3d at 726 (listing “the area and manner of concurrent use” as a factor); *Am. Rice*, 518 F.3d at 329 (listing “identity of retail outlets and purchasers” as a factor); *Sally Beauty Co.*, 304 F.3d at 972 (listing “similarity of products and manner of marketing” as a factor); *All. Metals*, 222 F.3d at 907 (listing “the similarity of advertising methods” as a factor); *Frisch's Rest.*, 759 F.2d at 1264 (listing parties’ “marketing channels used” as a factor); *Interpace Corp.*, 721 F.2d at 463 (listing “whether the goods, though not competing, are marketed through the same channels of trade and advertised through the same media” as a factor); *Pignons*, 657 F.2d at 487 (listing “the relationship between the parties' channels of trade” as a factor); *AMF*, 599 F.2d at 348 (listing “marketing channels used” as a factor); *In re du Pont*, 476 F.2d at 1361 (listing “[t]he similarity or dissimilarity of established, likely-to-continue trade channels” as a factor).

The channels of trade/marketing factor inquires whether the plaintiff's and defendant's products or services share marketing channels, lines of commerce, etc.⁷⁷ For example, in *Checkpoint Systems, Inc. v. Check Point Software Technologies, Inc.*,⁷⁸ the court found a separation in channels because one party "marketed to physical and retail security specialists" while the other "marketed to computer information specialists."⁷⁹

For trademarks disputes concerning virtual platforms that use marks normally reserved for physical goods and services, this factor would heavily cut against likelihood of confusion. Namely, there is an argument that virtual channels and physical channels are per se separate. Even in *Checkpoint*, where the physical and virtual distinction was only brought up with respect to consumer expertise, there was a sense that the physical-world and virtual-world are separate "realms."⁸⁰

*Sherwood 48 Associates. v. Sony Corp. of America*⁸¹ sheds light on the difficulty of satisfying the channels of trade factor in infringement disputes with respect to virtual mediums.⁸² There, the owners of certain Times Square buildings sued Sony over a virtual depiction of the buildings in the 2002 movie *Spider-Man*.⁸³ In the movie, the buildings at issue are represented in their likeness, but with substitutions to the advertisements actually in place.⁸⁴ The court's likelihood of confusion analysis simply comprised the statement: "As to plaintiffs claim of confusion—as between whom was any purchasing decision affected?"⁸⁵ The separation between a virtual movie and the physical buildings of Times Square allowed for the easy dismissal of the infringement claim, primarily due to the fact that the consumers of each were entirely separated.

In contrast to movies, such as *Spider-Man*, it may be easier for plaintiffs to satisfy the channels of trade factor in relation to infringement cases involving AR

⁷⁷ LEE, *supra* note 56, § 2:57 ("The more similar marketing channels are for a plaintiff's and defendant's products or services that bear allegedly infringing marks, the greater the likelihood of confusion. However, even identical marks may not be confusing if other factors, such as marketing channels, lines of commerce, etc., weigh against confusion.").

⁷⁸ 269 F.3d 270 (3d Cir. 2001).

⁷⁹ *Id.* at 289.

⁸⁰ *Id.* ("Here, there is no evidence that a single security expert has sufficient knowledge in both the physical security and information security realms that he purchases both of these products for his corporation.").

⁸¹ 213 F. Supp. 2d 376 (S.D.N.Y. 2002).

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ *Id.* at 377.

and LBS platforms. With AR and LBS, one could imagine the situation in which the façade of the Times Square buildings is substituted, not in a movie, but rather through AR superimposition on the actual buildings in question. In such cases, the “marks” would directly compete for the same consumers, as they would physically take the same space, and so a court could weigh the channels of trade factor in favor of the mark owner. One could see the same sort of problems applying to the facts of *E.S.S. Entertainment*, where the at-home video game player is physically separated from the actual strip club.⁸⁶ There too, AR and LBS could utilize superimposition on the specific building to, perhaps, cause confusion in a similar channel of trade.

With virtual realism platforms, it is still hard to say whether virtual marks will enter the exact same channels of trade as physical marks. At the very least, however, courts may be more willing to weigh the channels of trade factor in favor of mark owners in relation to trademark disputes which arise in AR and LBS platforms.

IV VIRTUAL REALISM AND EXPRESSIVE USE

In addition to the infringement analysis above, virtual platforms also raise special questions concerning trademark infringement defenses. When it comes these defenses, courts often rule in favor of defendants in cases involving a virtual platform’s usage of physical goods/services. Namely, since many virtual platforms qualify as expressive works,⁸⁷ defendants can conveniently avoid infringement through protections under the First Amendment.⁸⁸

A. Rogers v. Grimaldi Test

In *Rogers v. Grimaldi*,⁸⁹ the Second Circuit set forth a balancing test for First Amendment defenses in the trademark context.⁹⁰ The *Rogers* test requires that courts construe the Lanham Act “to apply to artistic works only where the public interest in avoiding consumer confusion outweighs the public interest in free expression.”⁹¹

⁸⁶ *E.S.S. Entm't 2000, Inc. v. Rock Star Videos, Inc.*, 547 F.3d 1095, 1097 (9th Cir. 2008).

⁸⁷ *See* 6 MCCARTHY, *supra* note 2, § 31:139 (“All types of entertainment media are considered as Constitutional free speech. Thus, enjoying free speech protection are: entertainment motion pictures; comic books; video games; and song titles and lyrics.”).

⁸⁸ *See id.* § 31:144.50 (“When a trademark is used in an expressive work, the *Rogers* test is a balancing of rights between the free speech policy of the First Amendment and the Lanham Act policy of preventing deception and confusion.”).

⁸⁹ 875 F.2d 994 (2d Cir. 1989).

⁹⁰ *See* 6 MCCARTHY, *supra* note 2, § 31:144.50 (“The Second Circuit's *Rogers* balancing test is now widely used by almost all courts.”).

⁹¹ *Rogers*, 875 F.2d at 999.

Thus, the usage of a mark “falls outside the reach of the Lanham Act if it (1) has some artistic relevance and (2) does not explicitly mislead as to the source or content of the work.”⁹² This is a very low standard for a defendant to meet. Accordingly, defendants frequently rely on the *Rogers* standard to defend virtual platforms from infringement claims by physical mark owners.

For example, in *E.S.S. Entertainment*, the court applied the *Rogers* test and ultimately found that the Pig Pen was artistically relevant to Rockstar’s artistic goal of depicting the look and feel of Los Angeles.⁹³ Given that the “Pig Pen” did not explicitly mislead consumers, the court held that the usage of such mark was protected under the First Amendment.⁹⁴ In *Sherwood 48 Assocs.*, the court found first amendment protection in Sony’s depiction of Time Square in the movie *Spider-Man* given the depictions’ “artistic purposes.”⁹⁵ In *Mil-Spec Monkey, Inc. v. Activision Blizzard, Inc.*,⁹⁶ which concerned the virtual depiction of a trademarked military morale patch in a military-based video game, the court applied the *Rogers* test and entered summary judgment for the defendant.⁹⁷ Other courts applying the *Rogers* test to infringement disputes involving virtual platforms have similarly found in favor of defendants.⁹⁸

⁹² *E.S.S. Entm't 2000, Inc. v. Rock Star Videos, Inc.*, 444 F. Supp. 2d 1012, 1037 (C.D. Cal. 2006), *aff'd*, 547 F.3d 1095 (9th Cir. 2008).

⁹³ *E.S.S. Entm't 2000, Inc. v. Rock Star Videos, Inc.*, 547 F.3d 1095, 1100 (9th Cir. 2008) (“Like most urban neighborhoods, its distinctiveness lies in its ‘look and feel,’ not in particular destinations as in a downtown or tourist district. And that neighborhood, with all that characterizes it, *is* relevant to Rockstar's artistic goal, which is to develop a cartoon-style parody of East Los Angeles. Possibly the only way, and certainly a reasonable way, to do that is to recreate a critical mass of the businesses and buildings that constitute it. In this context, we conclude that to include a strip club that is similar in look and feel to the Play Pen does indeed have at least ‘some artistic relevance.’” (citation omitted)).

⁹⁴ *Id.* (“Nothing indicates that the buying public would reasonably have believed that ESS produced the video game or, for that matter, that Rockstar operated a strip club.”).

⁹⁵ *Sherwood 48 Assocs. v. Sony Corp. of Am.*, 213 F. Supp. 2d 376, 377 (S.D.N.Y. 2002) (“[W]hat exists here is for artistic purposes a mixture of a fictionally and actually depicted Times Square, which is central to a major scene in the movie thereby serving the theatrically relevant purpose of orienting the viewer to the location. This has First Amendment protection.” (citations omitted)).

⁹⁶ 74 F. Supp. 3d 1134 (N.D. Cal. 2014).

⁹⁷ *Id.*

⁹⁸ *See, e.g., VIRAG, S.R.L. v. Sony Comput. Entm't Am. LLC*, 699 F. App'x 667, 668 (9th Cir. 2017) (“Applying the *Rogers* test, we conclude that the First Amendment bars VIRAG's Lanham Act claims. Sony's use of the VIRAG trademark furthers its goal of realism, a legitimate artistic goal, and therefore satisfies the requirement that Sony's use of the trademark have ‘above zero’ artistic relevance to the Gran Turismo games. Moreover, Sony's use of the VIRAG trademark

B. Virtual Realism and the Role of Microtransactions

While many older virtual platforms have sought protection under the *Rogers* test, it is uncertain whether *Rogers* will afford same level of protection to virtual realism platforms. For at least two reasons, the *Rogers* test may not protect defendants in trademark disputes involving virtual realism platforms.

The first reason concerns hyper-realism. Virtual realism platforms allow for the replication of marks and corresponding goods at a higher level of realism than was ever before possible. Virtual realism platforms can recreate not only a mark's detailed appearance but also the functionality and interactive experience associated with the mark's corresponding goods. Where a luxury bag once could only be virtually copied as a two-dimensional image, it can now be replicated as a three-dimensional object in virtual reality with fleshed out interactive qualities. One can move their hand in the virtual reality world to grab, open, and close the bag much like in real life. Whereas previous virtual replicas were highly abstract, a VR replica is hyper-realistic.

This hyper-realism may make it more difficult for defendants to seek protection under *Rogers* test in trademark disputes involving virtual realism platforms. Given the hyper-realistic nature of virtual replicas, their existence should not be considered an expressive work. One can imagine a future world in which VR is able to produce a virtual handbag that looks, feels, acts, and even smells exactly like a real one. It is questionable whether such a bag should then be considered an expressive work. The copying of a handbag in VR does not seem to serve expressive or artistic purposes. Rather, such copying would seem more in line with traditional notions of counterfeiting.

Though it has been held that realism can be an expressive goal in virtual platforms, that view should be seen as a result of the technological limitations of the

meets the second requirement of *Rogers*, because VIRAG does not allege any 'explicit indication, overt claim, or explicit misstatement' that would cause consumer confusion." (citations omitted)); *Dillinger, LLC v. Elec. Arts, Inc.*, No. 1:09-CV-1236-JMS-DKL, 2011 WL 2457678, at *6 (S.D. Ind. June 16, 2011) ("It bears repeating that it is not the role of the Court to determine how meaningful the relationship between a trademark and the content of a literary work must be; consistent with *Rogers*, any connection whatsoever is enough for the Court to determine that the mark's use meets 'the appropriately low threshold of minimal artistic relevance.' EA has certainly shown that the 'mental imagery' associated with the Dillinger name has more than zero relevance to the content of the *Godfather* games." (citation omitted)).

past.⁹⁹ Because past virtual platforms were necessarily abstract, realism was not fully attainable and creative solutions were required to attain moderate levels of realism. However, in the virtual realism era, hyper-realistic virtual depictions may not require any creative solutions. The process of replicating a physical mark and/or object into VR or AR may very well be automated,¹⁰⁰ and it is further questionable how creative the motivation to replicate was to begin with. Where the creative process simply involves a desire to virtually counterfeit, it is questionable whether a truly expressive goal exists at all.

The second reason relates to microtransactions—a prominent business strategy associated with virtual platforms and video games.¹⁰¹ A microtransaction with respect to a virtual platform refers to anything you buy in a video game beyond the initial purchase of that game.¹⁰² After downloading a video game, for instance, a player may engage in microtransactions by purchasing virtual objects or experiences for use in that video game. *Fortnite*, which grossed \$3 billion in annual revenue despite being free to download,¹⁰³ is a prime example of a video game whose business model relies on microtransactions. *Fortnite* earns revenue by selling costumes and accessories with which players can equip their avatars in the game.¹⁰⁴ Microtransactions, such as those implemented in *Fortnite*, are expected to grow in ubiquity and may become the dominant business model associated with virtual realism platforms in the future.¹⁰⁵

⁹⁹ See *Brown v. Elec. Arts, Inc.*, 724 F.3d 1235, 1243 (9th Cir. 2013) (finding that “[g]iven the acknowledged centrality of realism to EA’s expressive goal, and the importance of including Brown’s likeness to realistically recreate one of the teams in the game, it is obvious that Brown’s likeness has at least some artistic relevance to EA’s work”).

¹⁰⁰ Sam Cribbie, *How We Turn Physical Products into Realistic 3D Models for AR*, MEDIUM (Dec. 6, 2017), <https://medium.com/shopify-vr/how-we-turn-physical-products-into-realistic-3d-models-for-ar-13f9dc20d964>.

¹⁰¹ Eddie Makuch, *Microtransactions, Explained: Here’s What You Need to Know*, GAMESPOT (Nov. 20, 2018, 8:31 PM), <https://www.gamespot.com/articles/microtransactions-explained-heres-what-you-need-to/1100-6456995/> (“[G]enerally speaking, a microtransaction is anything you pay extra for in a video game outside of the initial purchase.”).

¹⁰² *Id.*

¹⁰³ Paul Tassi, *Why Isn’t ‘Fortnite’ Going Away?*, FORBES (Jan. 4, 2019, 09:00 AM), <https://www.forbes.com/sites/insertcoin/2019/01/04/why-isnt-fortnite-going-away/#5bc8118a4380>.

¹⁰⁴ Connor Sheridan, *Fortnite Battle Royale Does Microtransactions Perfectly . . . With One Big Exception*, GAMESRADAR+ (Mar. 2, 2018), <https://www.gamesradar.com/fortnite-battle-royale-does-microtransactions-perfectly-with-one-big-exception/>.

¹⁰⁵ Makuch, *supra* note 101 (“Every major publisher in video games is already investing in microtransaction systems, and as mentioned, they bring in lots of money and at a high margin. You can therefore expect microtransaction systems to continue to exist and grow in ubiquity.”).

Microtransactions may limit defendants' ability to argue that virtual marks are purely expressive works under *Rogers*. If virtual objects in a platform can be bought and sold pursuant to individual transactions (i.e., microtransactions), then such virtual objects can be considered isolated goods which are separable from the platform as a whole. This isolation removes the need to consider expressive features of the platform as a whole when deciding whether the individual goods/services at hand are expressive. Even if the virtual platform as a whole is an expressive medium, a hyper-realistic virtual replica within that virtual platform might not be an expressive work if it is part of a microtransaction.

Hyper-realism and microtransactions may even play a role together, such as where hyper-realistic virtual objects are bought and sold pursuant to microtransactions. Such cases would be prime candidates for rejecting a *Rogers*-based defense, thereby allowing for a potential finding of infringement.

CONCLUSION

While past virtual platforms have generally resisted trademark infringement with respect to physical-goods marks, new classes of virtual platforms may not be afforded such immunity. With the rise of VR, AR, and other virtual realism platforms, vast amounts of virtual space will be created in which questions of likelihood of confusion and expressive use may no longer lean in favor of defendants. Where software developers may have previously been less averse to using marks for physical-goods within their platform, they may now need to be warier. Where owners of such marks may have previously been skeptical of the prospects of litigation, they may now be more inclined litigate.