

Patents and Free Speech

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There is an enormous literature on the intersection between the First Amendment and various IP regimes such as copyright and trademark. This literature typically omits patent law from the argument, reflecting an implicit assumption that patent protection poses no threat to free speech.

This assumption is wrong. As this Article will explain, patents can restrict free speech just as much as copyrights and trademarks. Indeed, patents often pose an even greater threat to speech than do copyrights and trademarks: precisely because people assume that patents pose no threat to speech, patent law has developed none of the doctrinal safeguards for free speech that copyright law and trademark law have incorporated.

This Article makes two contributions. First, it makes the point that patents are not exceptional and raise the same free speech issues as the rest of IP law. Second, it proposes some doctrinal limits on patent protection to mitigate the speech-restrictive effects of patent law.

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INTRODUCTION

Imagine you are running for office. Like every other candidate today, you set up a campaign website. On that website is a large button: “Donate!”¹ A supporter clicks the button and donates \$100, which is deposited by a payment processor into your campaign account. What just occurred is, under modern First Amendment law, a paradigmatic act of protected political speech.² It is also unlawful patent infringement.³

1. See, e.g., DONALD J. TRUMP, <http://www.donaldjtrump.com/> [<https://perma.cc/N8EG-Y93H>] (last visited July 22, 2018) (displaying a “Contribute” button on the top right of the main page).

2. See *McConnell v. FEC*, 540 U.S. 93, 136–37 (2003) (holding that political contributions are protected expression); *Buckley v. Valeo*, 424 U.S. 1, 19 (1976) (per curiam) (same).

3. See U.S. Patent No. 8,050,987 (filed Jul. 9, 2008). For additional patents of a similar nature, see, for example, U.S. Patent No. 7,996,262 (filed Jul. 18, 2008) (donating frequent flier miles to political campaigns), and U.S. Patent No. 7,870,067 (filed Mar. 5, 2008) (donation system for charitable and political causes).

In contrast to the enormous literature arguing that copyright and trademark law violate the right to free speech,⁴ the analogous relationship between patent law and free speech has received virtually no academic or judicial attention.⁵ Indeed, the academic authors who examine the relationship between intellectual property rights and free speech protection often take pains to specifically exclude patent law from their argument.⁶

The main reason for this scholarly and judicial exclusion of patent law from free speech discussions seems to be a stereotype that patents cover only tangible widgets and physical processes.⁷ The apparent thinking is that, because tangible widgets and physical processes are not “speech,” patent law cannot raise free

4. See, e.g., C. Edwin Baker, *First Amendment Limits on Copyright*, 55 VAND. L. REV. 891 (2002); Yochai Benkler, *Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain*, 74 N.Y.U. L. REV. 354 (1999); Michael D. Birnhack, *Copyright Law and Free Speech After Eldred v. Ashcroft*, 76 S. CALIF. L. REV. 1275 (2003); Erwin Chemerinsky, *Balancing Copyright Protections and Freedom of Speech: Why the Copyright Extension Act Is Unconstitutional*, 36 LOY. L.A. L. REV. 83 (2002); Robert C. Denicola, *Copyright and Free Speech: Constitutional Limitations on the Protection of Expression*, 67 CALIF. L. REV. 283 (1979); Alan E. Garfield, *The First Amendment as a Check on Copyright Rights*, 23 HASTINGS COMM. & ENT. L.J. 587 (2001); Paul Goldstein, *Copyright and the First Amendment*, 70 COLUM. L. REV. 983 (1970); Robert N. Kravitz, *Trademarks, Speech, and the Gay Olympics Case*, 69 B.U. L. REV. 131 (1989); Lawrence Lessig, *Copyright's First Amendment*, 48 UCLA L. REV. 1057 (2001); Neil Weinstock Netanel, *Locating Copyright Within the First Amendment Skein*, 54 STAN. L. REV. 1 (2001); Melville B. Nimmer, *Does Copyright Abridge the First Amendment Guarantees of Free Speech and Press?*, 17 UCLA L. REV. 1180 (1970); L. Ray Patterson, *Free Speech, Copyright, and Fair Use*, 40 VAND. L. REV. 1 (1987); Lisa P. Ramsey, *Increasing First Amendment Scrutiny of Trademark Law*, 61 SMU L. REV. 381 (2008); Jed Rubinfeld, *The Freedom of Imagination: Copyright's Constitutionality*, 112 YALE L.J. 1 (2002); Eugene Volokh & Brett McDonnell, *Freedom of Speech and Independent Judgment Review in Copyright Cases*, 107 YALE L.J. 2431 (1998); Eugene Volokh, *Freedom of Speech and Intellectual Property: Some Thoughts After Eldred*, 44 LIQUORMART, and Bartnicki, 40 HOUS. L. REV. 697 (2003); Alfred C. Yen, *A First Amendment Perspective on the Ideal/Expression Dichotomy and Copyright in a Work's "Total Concept and Feel,"* 38 EMORY L.J. 393 (1989). The case law has also considered the question extensively. See Golan v. Holder, 565 U.S. 302, 327–30 (2012); Eldred v. Ashcroft, 537 U.S. 186, 219–22 (2003).

5. Judge Mayer's concurring opinion in *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1322 (Fed. Cir. 2016) (Mayer, J., concurring), represents the only significant judicial treatment of the topic. And even this opinion does not delve into the proper balance between patent protection and free speech interests, arguing instead that patent law can and should dodge its free speech problem by abolishing software patents. *Id.* at 1325 (“Most of the First Amendment concerns associated with patent protection could be avoided if this court were willing to acknowledge that *Alice* sounded the death knell for software patents.”). As this Article will explain, patent law's free speech problem extends beyond software patents and cannot be avoided so easily.

6. See, e.g., Mark Bartholomew & John Tehranian, *An Intersystemic View of Intellectual Property and Free Speech*, 81 GEO. WASH. L. REV. 1, 3 n.3 (2013) (“Patent law does not routinely confront expressive interests in the same way that copyright, trademark, and the right of publicity all do, and, hence, this Article does not address it separately.”); Mark A. Lemley & Eugene Volokh, *Freedom of Speech and Injunctions in Intellectual Property Cases*, 48 DUKE L.J. 147, 234 (1998) (arguing that “making, using, or selling machines, products, or processes . . . aren't activities that involve speech”).

7. See *supra* note 6; Maureen A. O'Rourke, *Toward a Doctrine of Fair Use in Patent Law*, 100 COLUM. L. REV. 1177, 1198 (2000) (“[P]atented inventions are simply not imbued with the same First Amendment interests that copyrighted material tends to be”); see also Alexander M. Pechette, Comment, *Do Patents Abridge the First Amendment Guarantee of Free Speech?*, FED. CIR. B.J. (forthcoming) (manuscript at 8), <https://ssrn.com/abstract=3129413> [<https://perma.cc/63WX-NL6L>] (arguing that a patent on a telephone would not implicate First Amendment interests because liability arises from “the physical act of picking up the phone and dialing a number”).

speech issues.⁸ This stereotype is so powerful that even the rare dissenters end up reinforcing the stereotype at a more general level.⁹ For example, in an article titled *Patenting Speech*, Dan Burk has argued that software patents could pose First Amendment concerns,¹⁰ but Burk did not mention the possibility of free speech concerns with any other type of patent.¹¹ Similarly, in 2013, the American Civil Liberties Union (ACLU) argued before the Supreme Court that patents on human genes violate the First Amendment,¹² but it took pains in the same brief to emphasize that its argument had no relevance to other areas of patent law: the ACLU argued that genes encode information in a way that fundamentally differs from the “typical invention, such as a carburetor.”¹³ Thus, even *proponents* of the view that patents can raise free speech concerns confine their argument to isolated cases, and they implicitly or explicitly reinforce the stereotype that, in general,

8. See *supra* note 6. As I explain later, this conclusion would not follow even if the stereotype were true. See *infra* notes 73–77 and accompanying text.

9. One issue in the intersection between patent law and free speech that has been discussed is the constitutionality of the inducement provision of the patent statute, 35 U.S.C. § 271(b) (2012), which proscribes actively inducing someone to commit patent infringement. See Lemley & Volokh, *supra* note 6, at 234–35 (arguing that it is unconstitutional to prohibit “tell[ing] someone how to practice an invention”); cf. Christopher Robertson & Victor Laurion, *Tip of the Iceberg II: How the Intended-Uses Principle Produces Medical Knowledge and Protects Liberty*, 11 N.Y.U. J. L. & LIBERTY 770, 792 (2017) (noting that no court has found the inducement provision to violate the First Amendment). The argument that the inducement provision violates the First Amendment is very different from my argument in this Article. My argument is that the behavior covered by a patent is often protected speech under the First Amendment. In contrast, the argument that the inducement provision is unconstitutional because incitement of illegal behavior is generally protected under the First Amendment, see *Brandenburg v. Ohio*, 395 U.S. 444 (1969) (per curiam), takes as an implicit premise that that the underlying behavior being incited is properly proscribed, and raises no First Amendment issues—the First Amendment concern is only with proscribing *incitement*. In this manner, the prior literature implicitly adopts and reinforces an assumption that patents do not themselves cover speech, whereas I challenge that assumption.

10. Dan L. Burk, *Patenting Speech*, 79 TEX. L. REV. 99, 102 (2000); see also Brief of the ACLU as Amicus Curiae in Support of Respondents at 24, *Alice Corp. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014) (No. 13-298) (“First Amendment concerns thus militate against allowing patent protection for abstract ideas—such as the escrow process— simply because they are implemented through software.”); Lemley & Volokh, *supra* note 6, at 236 (noting computer software patents as possibly raising First Amendment issues).

11. After this Article was initially written and posted to SSRN, Burk posted a new, forthcoming article expanding his argument to other types of patents. That article has since been published. Dan L. Burk, *Patents and the First Amendment*, 96 WASH. U. L. REV. 197 (2018). Our two articles were independently developed but end up making overlapping arguments, though with some differences. One difference is that Burk’s new article focuses on describing the conflict between patent law and First Amendment doctrine and has little focus on solutions, concluding merely that “though many patents may survive First Amendment analysis, many will not.” *Id.* at 197.

12. Brief for Petitioners at 56–57, *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576 (2013) (No. 12-398).

13. *Id.* at 56; see also Krysta Kauble, Comment, *Patenting Everything Under the Sun: Invoking the First Amendment to Limit the Use of Gene Patents*, 58 UCLA L. REV. 1123, 1155 (2011) (arguing gene patents raise First Amendment issues but asserting that “as patents have traditionally been used, they have posed no problems to First Amendment rights”); cf. Brief Amicus Curiae of AARP in Support of Petitioner at 11 n.7, *Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc.*, 548 U.S. 124 (2006) (No. 04-607) (mentioning First Amendment objections to diagnostic testing patent in a single sentence in a footnote).

patents cover only tangible widgets or physical processes and raise no free speech concerns.¹⁴

This stereotype is wrong. As this Article will explain, patents that restrict speech are not exceptional—they are routine. Numerous patents cover methods of advertising, of communication, or of sending or receiving information over the Internet;¹⁵ these patents restrict “speech” in exactly the same way as copyright law does. One does not need a novel and convoluted theory of the First Amendment to make the case that patents routinely violate it,¹⁶ and the problem is not limited to some narrow class of exceptional patents such as those covering software or genes. Under a plain, natural, and ordinary understanding of “freedom of speech,” patents routinely abridge this freedom. The goal of this Article is to begin a long-overdue conversation about this overlooked problem.

The Article proceeds in four Parts. Part I begins by providing some background to patents and patent procedure. The key point is that, like any other type of law (such as a statute or regulation), patents are government-issued legal directives that govern the behavior of citizens. Because patents are no different from any other type of government-made “law,” they should be subject to First Amendment scrutiny like any other type of law.

Part II advances the argument that patents can—and frequently do—violate First Amendment free speech principles. I begin by providing examples of the easiest case for finding a free speech violation under conventional First Amendment doctrine, namely patents that restrict speech according to content.¹⁷ As a matter of well-established doctrinal principle, content restrictions are subject to strict scrutiny, which the patents at issue cannot survive. I then move on to the more difficult situation of patents that are facially neutral as to content, but that indirectly restrict speech by restricting the means of communication. Such patents pose a threat to free speech principles because they permit discriminatory enforcement; but they also present a more difficult case under existing First Amendment case law because such patents do not facially regulate the content of speech, and any discriminatory enforcement that occurs is undertaken by private actors. As I will explain, this type of “time, place, and manner” restriction receives laxer scrutiny under standard First Amendment doctrine than outright content restrictions, but there are still *some* limits, to which patent law today does not pay heed. The sum is that, in both the easy and hard cases, patent law fails to

14. Cf. John R. Thomas, *Liberty and Property in the Patent Law*, 39 Hous. L. Rev. 569, 606 (2002) (expressing concern about the impact of patent protection on civil liberties but concluding that “[t]he best reading of the case law remains that . . . application of the . . . Patent Act does not ordinarily entail any constitutional analysis at all”).

15. See, e.g., U.S. Patent No. 7,680,796 (filed Sept. 3, 2003) (method of serving internet advertising based on geolocation information in the ad).

16. Cf. DAVID L. LANGE & H. JEFFERSON POWELL, NO LAW: INTELLECTUAL PROPERTY IN THE IMAGE OF AN ABSOLUTE FIRST AMENDMENT 308–09 (2009) (arguing that patents on designs, business methods, and genetic improvements may be problematic under an “absolute” theory of the First Amendment).

17. See, e.g., U.S. Patent No. 8,357,489 (filed Nov. 13, 2009) (patent on communicating liver cancer test results); U.S. Patent No. 6,311,211 (filed Jan. 14, 1999) (patent on electronic advocacy messages).

adhere to the standard free speech principles that are applied to other types of government-proclaimed laws. Patent law today operates as a giant, *de facto* exception to the First Amendment—one that the literature has not noticed or explained.

In Part III, I consider some potential defenses of this “patent exception” to the First Amendment. The strongest defense, to my mind, is that patents are private property rights, and the private enforcement of property rights has not usually been considered a First Amendment violation even when it results in the collateral suppression of constitutionally protected speech.¹⁸ As I will explain, this “private property” theory cannot save patent law,¹⁹ because the speech-suppressive effect of patents is not properly attributable to private choices in enforcement but instead arises from the government action of issuing the patent. Part III also argues that patent law’s contribution to technological progress and its ability to promote an increased level of aggregate speech in society—by incentivizing the creation of new means of communication such as telephones, televisions, and the Internet—cannot justify speech restrictions, insofar as this type of “restrict some speech to promote more speech by others” argument has been rejected elsewhere in First Amendment jurisprudence.²⁰

Part IV considers some possible solutions to allow patent law to better accommodate free speech concerns and make it more consistent with First Amendment principles. In the end, my primary proposals are the creation of a fair-use defense and a more robust application of the misuse defense. Although a more obvious and straightforward solution to patent law’s current disregard for freedom of speech is to apply First Amendment standards of review directly to individual patents in the same manner as other government-made laws, such an attempt to import First Amendment scrutiny into patent law has the problem of overinclusiveness in that conventional First Amendment scrutiny will result in the outright invalidation of many patents when less drastic remedies would suffice. Accordingly, I argue that patent law should develop internal doctrines that provide the less drastic remedies, specifically a fair-use doctrine to curb patentee power over speech and a misuse doctrine to prevent discriminatory enforcement, reserving direct First Amendment scrutiny only for the easy cases of facial content restrictions.

18. *See, e.g.,* *Lloyd Corp. v. Tanner*, 407 U.S. 551, 570 (1972) (private shopping mall could prohibit distribution of handbills protesting Vietnam War).

19. I have explained elsewhere that this property theory largely saves copyright law from unconstitutionality. Tun-Jen Chiang, *Rehabilitating the Property Theory of Copyright’s First Amendment Exemption*, 89 NOTRE DAME L. REV. 521 (2013).

20. *Cf. Buckley v. Valeo*, 424 U.S. 1, 48–49 (1976) (“[T]he concept that government may restrict the speech of some elements of our society in order to enhance the relative voice of others is wholly foreign to the First Amendment . . .”).

I. BACKGROUND ON PATENT LAW AND PROCEDURE

A. THE PATENT DOCUMENT AND ITS LEGAL EFFECT

A U.S. patent is a complex document, but two parts are usually considered the most important. The first is a written description of the invention, commonly known as the “specification.”²¹ In the specification, the patent provides a description of what the invention is, how it works, and (if the invention is a tangible object) how to make it.²² The “invention” at issue can come from a wide range of technological fields and take a variety of forms—from tangible widgets such as light bulbs to intangible processes such as diagnostic testing procedures. The basic conditions for a patentable invention are that it falls within one of the statutory classes of patent eligibility (processes, machines, manufactured articles, or compositions of matter);²³ that it be new,²⁴ useful,²⁵ and non-obvious;²⁶ and that it be adequately disclosed in the specification.²⁷

The second—and, for purposes of this Article, more relevant—part of the patent document is the so-called “claim.”²⁸ A claim is a single sentence, typically appearing at the end of the patent document, that defines the patentee’s legal rights.²⁹ A patent can have more than one claim, each of which has independent legal effect; each claim operates as a separate legal prohibition on using what is claimed.³⁰ Although the specification provides a *technical* description of the invention and how it works, the claim provides a *legal* delineation of the patentee’s right to exclude, and correspondingly what the public is prohibited from making, using, and doing.³¹ Because the claim is a delineation of legal rights and not a technical description, it is typically more precise and much shorter than the specification. For example, although the Wright brothers’ specification described an airplane in intricate detail (spanning many pages), their claim to the airplane read:

In a flying machine, the combination, with an aeroplane, and means for simultaneously moving the lateral portions thereof into different angular relations to the normal plane of the body of the aeroplane and to each other, so as to present to the atmosphere different angles of incidence, of a vertical rudder, and means whereby said rudder is caused to present to the wind that side thereof

21. 35 U.S.C. § 112(a) (2012).

22. *Id.*

23. 35 U.S.C. § 101 (2012).

24. *Id.* § 102.

25. *See* *Brenner v. Manson*, 383 U.S. 519, 528–29 (1966).

26. 35 U.S.C. § 103 (2012).

27. *Id.* §§ 112(a), 282(b)(3)(A).

28. *Id.* § 112(b).

29. *See* *Universal Oil Prods. Co. v. Globe Oil & Ref. Co.*, 322 U.S. 471, 484 (1944) (“The claim is the measure of the grant.”).

30. *See* § 112(b) (requiring “one or more” claims).

31. *See* *SRI Int’l v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1121 n.14 (Fed. Cir. 1985) (“Specifications teach. Claims claim.”).

nearest the side of the aeroplane having the smaller angle of incidence and offering the least resistance to the atmosphere, substantially as described.³²

In simplified terms, this claim covered any airplane that combined (a) adjustable wings, (b) a rudder, and (c) some mechanism for adjusting the rudder in tandem with the wings.

The legal effect of the patent is to prohibit anyone in the United States from using what is delineated by the claim.³³ When the claim covers something like an airplane, no obvious free speech issues arise. The point of this example is to illustrate the principle that patents serve as generally applicable *prohibitions* on citizen behavior in the same manner as other laws such as statutes and regulations.³⁴ A patent that contains a claim on an airplane has the legal effect of forbidding anyone from flying an airplane without prior approval from the patent owner, in much the same manner as if a statute or FAA regulation banned people from flying an airplane without approval.³⁵

From this premise that claims effectively function as generally applicable prohibitions on citizen behavior, it follows that claims covering acts of communication or speech can likewise *legally prohibit* acts of communication or speech. Consider U.S. Patent No. 8,357,489, which describes a method of testing for liver cancer. Claim 9 of this patent states:

A method comprising:

1. receiving a sample;
2. evaluating said sample according to the method of one of claim 1 or 2 to produce an indication of hepatocellular carcinoma (HCC) of a subject; and
3. communicating said results.³⁶

Under 35 U.S.C. § 271, a doctor who runs a test for liver cancer and tells the patient about the results commits patent infringement, whereas a doctor who runs the test but does not tell the patient about the results does not so infringe. The legal effect of this claim is to bar the doctor from communicating with the patient unless the doctor receives prior approval from the patent owner.

32. U.S. Patent No. 821,393 col. 6 ll. 62–74 (filed Mar. 23, 1903).

33. 35 U.S.C. § 271(a) (2012) (defining patent infringement as making, using, selling, offering, or importing a patented invention).

34. See Mark D. Janis & Timothy R. Holbrook, *Patent Law's Audience*, 97 MINN. L. REV. 72, 90 (2012) (“Patents operate in a manner that might be likened to statutes: all members of the public are subject to the exclusive rights of patents, regardless of whether they are actually aware of a given patent.”).

35. Of course, the nature of patents as private property means that the “approval” comes from a private party rather than a government body. This does not undermine my point, which is that the antecedent legal prohibition is in the nature of a generally-applicable legal directive akin to a statute or regulation. As section III.A will explain, the private property nature of a patent does not save it from First Amendment problems.

36. U.S. Patent No. 8,357,489 col. 30 ll. 4–9 (filed Nov. 13, 2009).

To be clear, the '489 patent does not prohibit the act of speaking in itself; a doctor must *also* perform the test to infringe the patent. But a law that is violated only by a combination of action and speech is still a law that regulates speech. For example, a statute that requires operators of pregnancy-related clinics to provide information on abortion covers a combination of action (operating the clinic) and speech (providing information on abortion).³⁷ But because the content of speech is a but-for cause of liability, the statute is considered a speech regulation.³⁸ That one could avoid violating the statute by not performing the action (by not operating a pregnancy-related clinic) does not take the statute outside the purview of the First Amendment. By the same logic, that one could avoid infringing the '489 patent by not performing the test does not negate its speech-restrictive character, because the communication of test results is a but-for cause of liability.

B. THE PROCEDURE FOR ISSUING PATENTS

Patents are issued by the U.S. Patent and Trademark Office (PTO) after a process known as “examination.”³⁹ The process begins when an individual files an application containing a proposed specification and claims.⁴⁰ The PTO then scrutinizes each claim to determine whether it meets the statutory requirements of patentability—that is, whether the invention delineated by the claim is novel, non-obvious, and useful, and whether the invention being claimed matches what is disclosed in the specification.⁴¹ If the PTO finds that all the claims are allowable under these statutory requirements, then it issues the patent;⁴² if the PTO finds any single claim to be objectionable, it rejects the application.⁴³

If the PTO rejects an application, the patent applicant is permitted to amend or eliminate the claims that the PTO rejects and then resubmit the application for approval.⁴⁴ This process often repeats itself for several rounds, until all the claims have been sufficiently amended to satisfy the PTO. A patent is issued only after the PTO has individually approved each and every claim appearing therein.

Two points are worth noting about this procedure. The first is that none of the statutory requirements pertain to free speech or other constitutional concerns. PTO examination is focused primarily on an invention’s scientific and technological merits, asking whether an invention is novel and non-obvious to a person in the relevant scientific field; whether the invention is useful and operative from a technical perspective; and whether the disclosure adequately teaches how to

37. See *Nat’l Inst. of Family & Life Advocates v. Becerra*, 138 S. Ct. 2361 (2018) (striking down California statute requiring pregnancy-related clinics to provide information about publicly funded contraception and abortion services).

38. *Id.* at 2371 (“The licensed notice is a content-based regulation of speech.”).

39. 35 U.S.C. § 131 (2012).

40. 37 C.F.R. § 1.51(b)(1) (2017).

41. *Id.* § 1.104(a)(1).

42. 35 U.S.C. § 131 (2012).

43. *Id.* § 132(a) (“Whenever, on examination, any claim for a patent is rejected, or any objection or requirement made, the Director shall notify the applicant . . .”).

44. *Id.* (“[I]f after receiving such notice, the applicant persists in his claim for a patent, with or without amendment, the application shall be reexamined.”).

make and use the invention as a technical matter. The PTO does not ask whether the patent will unduly restrict free speech or undermine other liberty interests. In other words, PTO examination—and patent law as a whole—focuses primarily on the narrow question of whether a claimed invention constitutes a technological advance; it does not consider other social goals aside from technological advancement such as promoting free speech or liberal democratic values.

The second point is that, although a patent application is initially a private document created by a private patent applicant, it gains legal force only through individualized government endorsement.⁴⁵ A patent has no legal effect unless and until it is individually approved and issued by the PTO.⁴⁶ In this respect patents are similar to statutes and regulations (which are also individually approved and issued by a government body), but different from most types of private property rights, where a legal right comes into force automatically under some broadly applicable system, without individualized government involvement. For example, a farmer who grows an apple gains property rights over the apple automatically—there is no need to file a specific claim with the government or receive approval for the right to be valid.⁴⁷ Similarly, an author receives a copyright over a book automatically by writing it⁴⁸—there is no need to register with the Copyright Office for the copyright to be valid.⁴⁹ In contrast, an inventor has no patent rights unless and until the PTO approves the patent.⁵⁰ As section III.A will explain, this difference in the extent to which state action is involved makes patent law different from other types of private property regimes when it comes to First Amendment implications.

II. THE CONFLICT BETWEEN PATENT LAW AND FREE SPEECH

This Part makes the case that patents can—and frequently do—restrict speech and violate First Amendment principles. In section II.A, I begin with what I consider the “easy” case by providing examples of patents that restrict speech based on content. Under conventional First Amendment doctrine, content-based restrictions are considered direct restrictions on speech and receive the strictest scrutiny—scrutiny that would certainly result in invalidation if applied to the patent context. In

45. That patents are issued by the government does not immunize them from First Amendment problems under the “government speech” doctrine. *Cf.* *Walker v. Tex. Div., Sons of Confederate Veterans, Inc.*, 135 S. Ct. 2239 (2015) (holding that specialty license plates issued pursuant to statutory authority convey government speech). The patent *document* may contain government speech, but the substantive legal effect of a patent claim—prohibiting use of an invention—is not government speech, just as congressional laws are not government speech immune to First Amendment scrutiny.

46. 35 U.S.C. § 154(a)(2) (2012) (stating the patent grant “shall be for a term beginning on the date on which the patent issues”).

47. *See Pierson v. Post*, 3 Cai. 175 (N.Y. Sup. Ct. 1805) (holding that a hunter gains property rights over wild fox by capture).

48. 17 U.S.C. § 102(a) (2012) (“Copyright protection subsists, in accordance with this title, in original works of authorship fixed in any tangible medium of expression . . .”).

49. *Id.* § 408(a) (“[R]egistration is not a condition of copyright protection.”).

50. *See Marsh v. Nichols, Shepard & Co.*, 128 U.S. 605, 612 (1888) (“Until the patent is issued, there is no property right in it . . .”).

section II.B, I extend the analysis to what I consider the “harder” cases, namely, patents that are facially neutral as to content but which indirectly restrict speech by restricting the manner, means, or mediums of communication. I argue in this section that conventional First Amendment doctrine imposes limits on such indirect speech restrictions, and existing patent law fails to respect these limits.

A preface about methodology is, perhaps, in order: My argument in this Part is doctrinal. That is, my argument is that patent law conflicts with the First Amendment under existing free speech doctrine; I am not making a first-principles theoretical argument about whether patent law is constitutional under the “best” interpretation of the First Amendment. The reason I take this approach is because there is no agreement about how the First Amendment should be interpreted as a theoretical matter, or what the best first-principles interpretation of the First Amendment *is*.⁵¹ For example, living constitutionalists disagree strongly with originalists on the general question of how to interpret constitutional provisions like the First Amendment; and even within a particular methodological approach—such as among self-described originalists—there is no agreement on what the correct interpretation of the First Amendment actually is.⁵² To circumvent these never-ending theoretical debates about interpretative methodology, I eschew a first-principles theoretical argument and base my analysis on existing doctrine. That my argument relies on existing doctrine and advances no new theory of First Amendment law may strike some readers as simplistic or uncreative, but the simplicity is a feature, not a bug.⁵³

A. THE EASY CASE: PATENTS THAT DIRECTLY RESTRICT CONTENT

Consider U.S. Patent No. 6,311,211, entitled “Method and Apparatus for Delivering Electronic Advocacy Messages.” Claim 1 of this patent reads:

A method of operating an advocacy network, comprising the steps of accessing a user database, the user database comprising information about users and information identifying a representative associated with each user; automatically selecting a user based on information in the user database; and sending an advocacy message to the selected user through a first communication network.⁵⁴

What this claim means is that if the Sierra Club compiles a database of supporters with their e-mail and home addresses, and then sends a group e-mail to

51. See generally FREDERICK SCHAUER, *FREE SPEECH: A PHILOSOPHICAL ENQUIRY* (1982) (discussing five possible theories for free speech protection); Lawrence Byard Solum, *Freedom of Communicative Action: A Theory of the First Amendment Freedom of Speech*, 83 NW. U. L. REV. 54, 68–85 (1989) (discussing possible theories for free speech protection).

52. Compare, e.g., Eugene Volokh, *Symbolic Expression and the Original Meaning of the First Amendment*, 97 GEO. L.J. 1057 (2009) (arguing the First Amendment covers symbolic expression), with, e.g., ROBERT H. BORK, *SLOUCHING TOWARDS GOMORRAH: MODERN LIBERALISM AND AMERICAN DECLINE* 100 (1996) (arguing the First Amendment is limited to verbal speech).

53. I do make arguments that are new to patent law and advocate for doctrinal changes there. See *infra* Part IV.

54. U.S. Patent No. 6,311,211 col. 23 l. 61–col. 24 l. 2 (filed Jan. 14, 1999).

supporters who live in the Georgia 6th Congressional District urging them to vote against the Republican candidate, then the Sierra Club commits patent infringement. Of course, virtually every political advocacy group on every side of every political issue sends this type of targeted advocacy e-mail routinely.⁵⁵ Such advocacy e-mails are core political speech that the First Amendment is meant to protect.⁵⁶ A statute or regulation that prohibited groups from sending advocacy e-mails would be a blatant First Amendment violation.

More specifically, standard First Amendment doctrine would classify a statute or regulation that prohibited sending advocacy messages to supporters as a content-based regulation of speech.⁵⁷ The law is “content-based” because it prohibits only *advocacy* messages: if the Sierra Club sent an e-mail to the same supporters with the time and location of the next local hiking trip, it would not qualify as an “advocacy” message and thus would not violate the law.⁵⁸ And content-based laws are subject to strict scrutiny under the First Amendment, meaning that they are invalid unless the law is narrowly tailored to meet a compelling government interest.⁵⁹ It is clear that claim 1 of the ’211 patent could not survive strict scrutiny if such scrutiny were to be applied:⁶⁰ although the broad promotion of technological progress throughout society might arguably qualify as a compelling government interest, the ’211 patent promotes technological progress only in a narrow sense—it at most promotes research into new ways of operating advocacy networks, which is not nearly as compelling as the social interest in broadly promoting new technology.⁶¹ Even if the ’211 patent is deemed to serve the purpose of promoting society-wide technological progress, it is not narrowly tailored

55. That such advocacy e-mails are routine today might make the invention seem obvious and therefore non-patentable under 35 U.S.C. § 103. But, for every invention, there was some early point in time during which the invention was not obvious. My point is that patent law has no objection in principle to speech-restrictive patents provided they are filed early enough. The ’211 patent claims priority to April 19, 1996, a time when the internet was still in its infancy. See Farhad Manjoo, *Jurassic Web*, SLATE (Feb. 24, 2009, 5:33 PM), http://www.slate.com/articles/technology/technology/2009/02/jurassic_web.html [<https://perma.cc/95MX-88L9>] (“In 1996, just 20 million American adults had access to the Internet, about as many as subscribe to satellite radio today. . . . Americans with Internet access spent fewer than 30 minutes a month surfing the Web.”).

56. See *Citizens United v. FEC*, 558 U.S. 310, 318–19, 365 (2010) (invalidating ban on corporations using general treasury funds to “expressly advocat[e] for the election or defeat of a candidate” because “the Government may not suppress political speech on the basis of the speaker’s corporate identity”).

57. See *Police Dep’t of Chi. v. Mosley*, 408 U.S. 92, 95 (1972).

58. See *id.* at 95–97 (finding a ban on labor picketing to be content-based because the “operative distinction is the message on a picket sign”).

59. *Carey v. Brown*, 447 U.S. 455, 461–62 (1980).

60. See Gerald Gunther, *The Supreme Court, 1971 Term—Foreword: In Search of Evolving Doctrine on a Changing Court: A Model for a Newer Equal Protection*, 86 HARV. L. REV. 1, 8 (1972) (describing strict scrutiny as “‘strict’ in theory and fatal in fact”); cf. Adam Winkler, *Fatal in Theory and Strict in Fact: An Empirical Analysis of Strict Scrutiny in the Federal Courts*, 59 VAND. L. REV. 793, 844 (2006) (arguing that strict scrutiny is generally less fatal than Gunther suggests, but also finding that “strict scrutiny is actually most fatal in the area of free speech”).

61. See *Republican Party of Minn. v. White*, 416 F.3d 738, 749 (8th Cir. 2005) (“Precisely what constitutes a ‘compelling interest’ is not easily defined. Attempts at definition generally use alternative, equally superlative language: ‘interest[] of the highest order,’ ‘overriding state interest,’ ‘unusually important interest.’”).

to meet this goal, since a content-neutral patent on the same network technology—not specific to advocacy messages—would provide substantially similar incentives for innovation;⁶² and, in any event, the government has myriad other ways besides patents to promote innovation.⁶³

The '211 patent is not an isolated example. Another example of a patent that restricts core political speech based on content is U.S. Patent No. 8,442,424, entitled “Interactive Live Political Events.” Claim 1 of this patent reads:

A method for participation as an online audience member in an online interactive political, social policy, social activism and/or issue event, comprising:

receiving at least one stream of a live online event from an event origination center;

displaying at least one stream of the live online event to the online audience member;

generating an online feedback message, upon receiving input from the online audience member; and

transmitting the online feedback message and geographical data of the online audience member from an interactive client of the online audience member, directed live to at least one of: candidates, speakers, other online audience members, other clients, producers, an event production center, the event origination center(s), and/or a network operations center of the live event.⁶⁴

In simplified terms, this claim is infringed if someone watches a live political event (for example, a town hall presidential debate) on the Internet and sends a live message (for example, sending a question to the candidates) with a geographic identifier (for example, stating the questioner is from Cleveland, Ohio). The '424 patent is speech restrictive because it bars participation in live political events. It is content-specific because it bars participation only in “political, social

62. Embedded in this argument is the point that analysis under strict scrutiny is zoomed in on the particular law being scrutinized. For example, a limitation on independent expenditures is part of a broader system of campaign finance regulation, and the broad system of campaign finance regulation might well serve the compelling interest in preventing corruption. *See Buckley v. Valeo*, 424 U.S. 1, 26–27 (1976) (upholding contribution limits on this rationale). But unless the independent expenditure limit *itself* is narrowly tailored to promote the compelling interest, it is invalid. *See id.* at 46–48 (striking down independent expenditure limits because independent expenditures have “substantially diminished potential for abuse” and thus are not narrowly tailored to serve the interest in preventing corruption). By the same logic, the patent system as a whole may serve the compelling interest in promoting technological progress; but the question is whether the '211 patent itself is narrowly tailored to this purpose, and the answer is “no.”

63. *See* Daniel J. Hemel & Lisa Larrimore Ouellette, *Beyond the Patents–Prizes Debate*, 92 TEX. L. REV. 303 (2013) (describing alternatives including government prizes, grants, and tax credits); *cf.* *Burwell v. Hobby Lobby Stores, Inc.*, 134 S. Ct. 2751, 2781 (2014) (suggesting that a mandate for employers to cover contraception is not the least restrictive means of providing contraception because the government could assume the cost); *Riley v. Nat’l Fed’n of the Blind*, 487 U.S. 781, 800 (1988) (finding a requirement that solicitors of charitable contributions disclose the amount actually given to charity not narrowly tailored because the government could publish the information itself).

64. U.S. Patent No. 8,442,424 col. 27 ll. 12–27 (filed Sept. 28, 2009).

policy, social activism, and/or issue” events, and not in other types of live online events such as business meetings over Skype. As with the ’211 patent, if the same type of restriction were enacted in any other type of law such as a statute or agency regulation, it would be considered an open-and-shut First Amendment violation.⁶⁵ The only reason these patents survive is because, as Jed Rubenfeld has put it colorfully in the copyright context, patent law today operates “[as] a kind of giant First Amendment duty-free zone.”⁶⁶

Moving beyond cases of patents that restrict political speech—which lies at the center of First Amendment protection and thus generates the easiest of easy cases⁶⁷—another example of a patent that restricts speech according to content is the ’489 patent previously mentioned in section I.A.⁶⁸ The ’489 patent bars doctors from disclosing test results for liver cancer to a patient, which is a content-specific restriction (the doctor is allowed to say anything to a patient *except* disclose the results of a liver cancer test). As with the ’211 and ’424 patents, standard First Amendment doctrine would subject the ’489 patent to strict scrutiny. There is no plausible argument that the ’489 patent would survive such scrutiny if it were applied, given that the government’s interest in promoting research and development into new liver cancer tests (even assuming this is considered a “compelling” interest) could be accomplished in myriad ways without the restriction on speech.⁶⁹

Another example in the same vein, this time in the context of financial advice, is U.S. Patent No. 7,991,675, entitled “Method and System for Financial Advising,” which creates liability for patent infringement in cases where an individual gives certain types of investment advice.⁷⁰ Although financial advice receives less protection under the First Amendment than political speech—for example, the Supreme Court has upheld requirements of professional licensing and regulation for providing investment advice⁷¹—it is nonetheless difficult to imagine a general prohibition on such advice surviving scrutiny under traditional First Amendment standards of review.⁷²

Thus far, I have focused on process patents, because the intangible nature of process inventions makes it most easy to imagine how they would restrict speech. This is a corollary of the false-but-intuitive assumption that patents pertain only

65. See, e.g., *Consol. Edison Co. of N.Y. v. Pub. Serv. Comm’n*, 447 U.S. 530, 544 (1980) (holding as unconstitutional the prohibition on discussing matters of public policy in electric bill inserts).

66. Rubenfeld, *supra* note 4, at 3.

67. See *Gentile v. State Bar of Nev.*, 501 U.S. 1030, 1034 (1991) (“There is no question that speech critical of the exercise of the State’s power lies at the very center of the First Amendment.”).

68. U.S. Patent No. 8,357,489 (filed Nov. 13, 2009); see *supra* note 36 and accompanying text.

69. See *supra* notes 62–63 and accompanying text.

70. U.S. Patent No. 7,991,675 (filed Apr. 30, 2010).

71. See, e.g., *Lowe v. SEC*, 472 U.S. 181, 189 (1985) (“[P]etitioners acknowledge that person-to-person communication in a commercial setting may be subjected to regulation that would be impermissible in a public forum . . .”).

72. See *Ohralik v. Ohio State Bar Ass’n*, 436 U.S. 447, 454, 459 (1978) (holding that speech by licensed attorneys is “entitled to some constitutional protection,” though it is also “subject to regulation in furtherance of important state interests”).

to tangible widgets and that tangible widgets cannot cause free speech issues. But even in the realm of tangible widgets, it is in fact possible for a patent to raise free speech concerns. For example, consider U.S. Patent No. 4,004,547, entitled “Christian Door Knocker,” which covers a door knocker shaped as a cross.⁷³ A door knocker is, of course, a tangible object. But the ’547 patent does not cover all door knockers, only cross-shaped door knockers. The specification of the patent explains that the shape is specifically chosen to communicate “the message that the family of this home is a Christian family.”⁷⁴ Needless to say, an ordinary statute prohibiting the use of cross-shaped door knockers because the knockers communicate a Christian message would violate both the free speech and free exercise clauses of the First Amendment.⁷⁵ A similar example from actual litigation is *In re Dembiczak*,⁷⁶ which concerned a patent application for a bag in the shape of a pumpkin head designed to celebrate Halloween. No one in that litigation thought it worth it to mention the First Amendment issues even though the claim was clearly directed toward an expressive message.

A few points are worth taking away from these examples. First and most importantly, patents can and do restrict speech according to content, and the PTO has no limitations on this practice. Second, free speech issues can arise in multiple areas of technology and can take multiple forms; they are not limited to narrow areas such as software or DNA, nor is the problem unique to process patents (though it does occur most regularly with such patents). Third, the tension between patent protection and free speech principles is not strictly a new issue. Although the intersection between patent protection and free speech has likely become more salient due to the rise of the Internet and the corresponding advent of Internet-related patents, content-based restrictions can occur even with the most old-fashioned type of invention such as a mechanical door knocker.

Concededly, the few examples I have provided here are hardly proof of a pervasive problem, and these exemplar patents are not likely to have caused much actual suppression of speech in the real world.⁷⁷ No one is likely to have refrained from sending advocacy e-mails, abstained from participating in live online political events, or stopped using cross-shaped door knockers because those activities constitute patent infringement.⁷⁸ I am not claiming that content-restrictive patents are in fact causing widespread suppression of speech today; indeed, the actual

73. U.S. Patent No. 4,004,547 col. 2 ll. 45–62 (filed May 9, 1975).

74. *Id.* at col. 1 ll. 10–15.

75. *See Church of the Lukumi Babalu Aye, Inc. v. City of Hialeah*, 508 U.S. 520 (1993) (holding ordinance prohibiting ritual animal sacrifice violates Free Exercise clause); *Fowler v. Rhode Island*, 345 U.S. 67 (1953) (holding ordinance prohibiting persons from addressing religious meetings in public parks invalid under First Amendment).

76. 175 F.3d 994, 996 (Fed. Cir. 1999).

77. *But see* Andrew F. Knight, *A Patently Novel Plot: Fiction, Information, and Patents in the 21st Century*, 47 *IDEA* 203, 226–27 (2006) (arguing that “the Patent Office regularly issues, and private entities regularly enforce, patents that inherently restrict speech” (emphasis omitted)).

78. *See* Mark A. Lemley, *The Surprising Resilience of the Patent System*, 95 *TEX. L. REV.* 1, 40 (2016) (“[T]he merits don’t matter (or at least don’t matter much) to the underlying dynamics of the patent system.”).

effect of content-restrictive patents on real world speech is likely to be small, for two reasons. First, as I will elaborate in section II.B, facially content-restrictive patents are likely to be uncommon in practice, because patentees ordinarily have incentives to draft their claims more broadly. Second, even patents that are facially content-restrictive are likely to be ignored by potential infringers, because the vast majority of all patents are routinely ignored.⁷⁹ It is precisely because patent law currently causes little actual suppression of speech as a real-world matter that no one seems to have noticed the problem of its *capacity* to do so.

Although patents are not presently being widely used as a device of speech suppression, the only reason this is so seems to be that no one has come up with the idea to use patents in this way yet.⁸⁰ Relying on a perpetual lack of ingenuity and imagination among patentees and their lawyers to sustain this status quo would be deeply unwise. If and when some clever Democratic (or Republican) politician or aide comes up with the idea of purchasing the '211 patent and monopolizing the ability to send advocacy e-mails to voters in swing districts, there is little in the way of current law to stop this strategy.

To be sure, the clever patentee would be required to overcome existing requirements of patentability such as novelty and non-obviousness; and one could plausibly argue that many of the patents I describe in this section are in fact invalid as obvious.⁸¹ But the point of my examples is that the existing limitations on patentability are not designed to protect free speech; to the extent they serve that function, it is only incidentally and by accident. A patent that is filed early enough will always pass the novelty and non-obviousness requirements, whereas the First Amendment has no principle that a speech-restrictive law is permissible as long as it was enacted early enough.⁸² In other words, the point for now is that existing patent law conflicts *in principle* with the First Amendment. The frequency of actual real-world manifestations of this conflict is secondary to this point of principle.

In a similar vein, it is no response to my argument that, were a case to actually arise, courts would likely invent new limits on patent rights to protect the freedom of speech. It is true that courts would likely invent new doctrinal solutions were the problem to become manifest, and it may well be that anticipation of such judicial creativity is the reason why the problem has not become manifest.⁸³ But the

79. See Mark A. Lemley, *Ignoring Patents*, 2008 MICH. ST. L. REV. 19, 21–22 (“[C]ompanies in component industries simply ignore patents. Virtually everyone does it. They do it at all stages of endeavor.”).

80. For the closest anyone has come to suggesting this tactic, by proposing the use of intellectual property to skirt First Amendment limits on direct restrictions of expressive content, see Christopher A. Cotropia & James Gibson, *The Upside of Intellectual Property's Downside*, 57 UCLA L. REV. 921, 977–78 (2010).

81. Though the argument is hardly ironclad. See, e.g., *In re Dembiczak*, 175 F.3d 994, 1001 (Fed. Cir. 1999) (finding a patent on trash bags in the shape of a pumpkin head to be non-obvious).

82. See *infra* notes 202–07 and accompanying text.

83. See generally George L. Priest & Benjamin Klein, *The Selection of Disputes for Litigation*, 13 J. LEGAL STUD. 1 (1984) (arguing that people select disputes for litigation based on expected outcomes).

expectation that judges will invent new doctrine to solve a problem hardly negates the existence of the problem or the need to consider it. The failure of courts and commentators to consider patent law's free speech problem means that nobody has given much thought to what doctrinal solutions should be invented if and when the need arises.

Moreover, it is not true that patents have *never* been used as tools of significant speech suppression in the real world. They in fact have: the Motion Picture Patents Company historically used its ownership of essential patents on film technology to block the production and exhibition of movies it deemed immoral⁸⁴—essentially a private ban on pornography that, if carried out by a government body, would flatly violate *Miller v. California*.⁸⁵ This private censorship regime persisted until the company was shut down for violating antitrust laws in 1915.⁸⁶

B. THE HARDER CASE: PATENTS THAT REGULATE THE MEANS OF SPEECH

Although cases where patents facially restrict speech according to content constitute the clearest examples of how patent law conflicts with the First Amendment, they are not, in practical terms, the most concerning, because most patentees have little incentive to formally limit their exclusionary rights ahead of time to specific viewpoints and types of content. As a general matter, limiting a claim to specific viewpoints or types of content is not the type of technological difference that adds significantly to its novelty, utility, or non-obviousness,⁸⁷ and an applicant who limits his or her claim to specific viewpoints or types of content therefore sacrifices breadth of coverage without offsetting benefit. An inventor who develops a new and non-obvious method for, say, sending targeted group e-mails should rationally seek to obtain a patent covering *all* uses of the method, not just uses involving political advocacy.⁸⁸ Even if the inventor were only interested in using the method for sending political advocacy e-mails, there is little reason not to first obtain the broad claim and then *enforce* the patent more narrowly. Because patentees have intrinsic economic incentives to claim broadly, patent claims that are facially specific to particular types of content or viewpoints

84. See TIM WU, *THE MASTER SWITCH: THE RISE AND FALL OF INFORMATION EMPIRES* 70 (Vintage Books 2011) (2010) (“The Trust simply did not allow films it deemed inappropriate to be made or exhibited.”).

85. 413 U.S. 15, 18–19 n.2, 26–27 (1973) (finding non-obscene pornographic material constituted protected expression under the First Amendment).

86. See *United States v. Motion Picture Patents Co.*, 225 F. 800, 811 (E.D. Pa. 1915).

87. See Kevin Emerson Collins, *Patent Law's Authorship Screen*, 84 U. CHI. L. REV. 1603, 1608 (2017) (arguing that patent law has an implicit requirement that “a good must ‘do’ something” to be protected); see also, e.g., *Bilski v. Kappos*, 561 U.S. 593, 612 (2010) (“[L]imiting an abstract idea to one field of use . . . did not make the concept patentable.”); *AstraZeneca LP v. Apotex, Inc.*, 633 F.3d 1042, 1065 (Fed. Cir. 2010) (holding that the addition of a label required by the Food and Drug Administration to a preexisting drug was entitled to no patentable weight).

88. See Dan L. Burk & Mark A. Lemley, *Fence Posts or Sign Posts? Rethinking Patent Claim Construction*, 157 U. PA. L. REV. 1743, 1768 (2009) (noting that patentees draft claims “as broadly as possible, to encompass as much technological space as possible”).

are likely to be rare.⁸⁹ In this sense, although the common belief that patents cannot cover intangible speech is unquestionably false, it has a grain of truth in that *smart* patent applicants will not seek content- and viewpoint-specific claims in most circumstances.⁹⁰

This grain of truth does not mean that patent law's ability to threaten to free speech is practically insignificant. It is true that the threat from content- and viewpoint-specific patents is limited. The larger threat instead comes from patents that are facially content- and viewpoint-neutral but cover the tools, mediums, or methods of speech (which I will broadly call the "means" of speech), such as patents on loudspeakers,⁹¹ radios,⁹² or Morse Code.⁹³

Consider, for example, Alexander Graham Bell's patent on the telephone. Claim 5 covered "[t]he method of, and apparatus for, transmitting vocal or other sounds telegraphically, as herein described, by causing electrical undulations, similar in form to the vibrations of the air accompanying the said vocal or other sound, substantially as set forth."⁹⁴

As interpreted by the Supreme Court, this claim covered essentially every analog telephone.⁹⁵ Faced with an argument that the patent should not be interpreted to cover articulated speech, the Supreme Court responded:

Articulate speech necessarily implies a sound produced by the human voice, and, as the patent on its face is for the art of changing the intensity of a continuous current of electricity by the undulations of the air caused by sonorous vibrations, and speech can only be communicated by such vibrations, the transmission of speech in this way must be included in the art.⁹⁶

89. Though not nonexistent for two reasons. First, some applicants will make mistakes. Second, and more importantly, although patent law typically does not give weight to informational content in determining novelty, it sometimes does. *See* Collins, *supra* note 87, at 1651 (noting that the authorship screen is "permissive for mixed-use innovation").

90. At least, they will leave the content- or viewpoint-specific limitation to a dependent claim, with the paradoxical result that a narrower dependent claim is invalid while a broader independent claim is valid. Although such a result is contrary to standard patent law principles—see *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1576 n.36 (Fed. Cir. 1987) which explained that a finding that a broader claim is valid implies a finding that a narrower claim is also valid—it is entirely consistent with ordinary First Amendment principles. In First Amendment law, unlike patent law, it is well recognized that a narrower prohibition might be constitutionally invalid even when a broader prohibition is valid. *See, e.g.*, *R.A.V. v. City of St. Paul*, 505 U.S. 377, 391 (1992) (invalidating a prohibition on racially offensive fighting words, even though a broader prohibition on all fighting words would be permitted).

91. *See, e.g.*, U.S. Patent No. 1,448,279 (filed Apr. 28, 1920).

92. *See, e.g.*, U.S. Patent No. 586,193 (filed Dec. 7, 1896).

93. *See, e.g.*, U.S. Patent No. RE 117 (granted June 13, 1848).

94. U.S. Patent No. 174,465 (filed Feb. 14, 1876).

95. *The Telephone Cases*, 126 U.S. 1, 533–34 (1888) ("What Bell claims is the art of creating changes of intensity in a continuous current of electricity, exactly corresponding to the changes of density in the air caused by the vibrations which accompany vocal or other sounds, and of using that electrical condition thus created for sending and receiving articulate speech telegraphically.")

96. *Id.* at 532.

The Court then left no doubt that it understood the practical import of its decision:

It may be that electricity cannot be used at all for the transmission of speech except in the way Bell has discovered, and that therefore, practically, his patent gives him its exclusive use for that purpose It will, if true, show more clearly the great importance of his discovery, but it will not invalidate his patent.⁹⁷

A patent on a means of speech like the telephone is threatening precisely because it does not contradict but instead conforms to traditional stereotypes about what patents should look like and what they should cover. On its face, Bell's patent is about a tangible widget (a telephone system) and a physical process (causing undulations in electrical current). Its effect on speech is indirect. And this indirectness means that free speech issues were obscured. No one saw any First Amendment implications in the case.

This treatment of Bell's patent is by no means unique. Patents on means of speech are routinely granted and have a long pedigree. Other famous historical patents on means of speech include Morse's patent on the telegraph⁹⁸ and Edison's patent on the phonograph.⁹⁹ Moving to the modern day, an entire class in the PTO patent classification system—Class 455—pertains to telecommunications technology.¹⁰⁰ Beyond this class are tens of thousands more Internet- and computer-related patents that are also directed at means for communication and speech. For example, the patent referred to in the Introduction to this Article that covers the donation of money over the Internet falls outside of Class 455.¹⁰¹ The point is that, unlike the situation with content- or viewpoint-specific patents—which are unorthodox, uncommon, and of limited practical significance—patents on the means of speech are orthodox, common, and enormously significant.

Patents on the means of speech raise two concerns. First, a patent that broadly covers an important means of speech—even if content- and viewpoint-neutral in phrasing and application—may stifle too much expression where alternative means for communication are inconvenient.¹⁰² For example, the Supreme Court has held that laws banning residential yard signs are unconstitutional because

97. *Id.* at 535.

98. U.S. Patent No. RE 117 (granted June 13, 1848).

99. U.S. Patent No. 200,521 (filed Dec. 24, 1877).

100. U.S. PATENT & TRADEMARK OFFICE, CLASSIFICATION DEFINITIONS: CLASS 455, TELECOMMUNICATIONS 1 (2011), <https://www.uspto.gov/web/patents/classification/uspc455/defs455.pdf>.

101. *See* U.S. Patent No. 8,050,987 (filed Jul. 9, 2008).

102. *See* *City of Ladue v. Gilleo*, 512 U.S. 43, 55 (1994) (holding that laws banning “an entire medium” of speech threaten First Amendment protections “by eliminating a common means of speaking”); *Metromedia, Inc. v. City of San Diego*, 453 U.S. 490, 526 (1981) (Brennan, J., concurring) (plurality opinion) (arguing for heightened scrutiny when a law amounts to “a total ban of a medium of communication”); *see also* Geoffrey R. Stone, *Content-Neutral Restrictions*, 54 U. CHI. L. REV. 46, 57 (1987) (“[B]y limiting the availability of particular means of communication, content-neutral restrictions can significantly impair the ability of individuals to communicate . . .”).

such signs are “an unusually cheap and convenient form of communication” which, if suppressed, would leave “persons of modest means or limited mobility” with no practical alternative.¹⁰³ The Court has also opined that a total ban on loudspeakers would likely be unconstitutional for similar reasons.¹⁰⁴ It has invalidated a tax specifically directed at ink used for newspapers as violating freedom of the press, even if a broader tax that still covered ink would be valid.¹⁰⁵ A patent on yard signs¹⁰⁶ or loudspeakers¹⁰⁷ is effectively the same as a statutory ban and has the same problem.¹⁰⁸ A patent on newspaper ink would impose a financial burden in essentially the same manner as a use tax.¹⁰⁹

Second, patents that are facially content-neutral but which cover a means for speech raise the concern that the patent may be *enforced* in a discriminatory manner to suppress disfavored viewpoints or content. For example, a patent on televisions¹¹⁰ or radios¹¹¹ would seem to cover run-of-the-mill widget technology, and do not at first glance seem to raise free speech concerns. But imagine if the owner of such a patent were a partisan activist who decided to enforce the patent only against Democrats (or only against Republicans). This would provide one side of the political marketplace with a significant advantage. Less hypothetically, as discussed previously, the Motion Picture Patents Company historically did use its ownership of essential patents on film technology to block the production and exhibition of disfavored movies.¹¹²

These two policy concerns¹¹³—which I will respectively call the “overbroad suppression” concern and the “discriminatory enforcement” concern—underlie First Amendment jurisprudence with respect to so-called “time, place, or

103. *City of Ladue*, 512 U.S. at 57.

104. *See Kovacs v. Cooper*, 336 U.S. 77, 81–82 (1949) (“Absolute prohibition within municipal limits of all sound amplification, even though reasonably regulated in place, time and volume, is undesirable and probably unconstitutional as an unreasonable interference with normal activities.”).

105. *Minneapolis Star & Tribune Co. v. Minn. Comm’r of Revenue*, 460 U.S. 575, 586–90 (1983).

106. *E.g.*, U.S. Patent No. 6,170,183 (filed Jan. 27, 1999).

107. *E.g.*, U.S. Patent No. 1,448,279 (filed Apr. 28, 1920).

108. In a forthcoming article, Alex Pechette argues that a patent on a means of speech such as a telephone does not implicate free speech concerns because “an unauthorized user of a telephone can remain silent” and thereby violate the patent without speaking. Pechette, *supra* note 7 (manuscript at 9). This argument contradicts Supreme Court precedent because, by the same logic, Congress would be free to ban yard signs because the signs could be blank and thereby violate the statute without speaking. *Contra City of Ladue*, 512 U.S. at 54–59.

109. *See Hemel & Ouellette, supra* note 63, at 312 (“Patents are, in substance, a sales tax combined with a prize . . .”).

110. *E.g.*, U.S. Patent No. 1,773,980 (filed Jan. 7, 1927).

111. *E.g.*, U.S. Patent No. 586,193 (filed Dec. 7, 1896).

112. *See supra* notes 84–86 and accompanying text.

113. As a pure policy matter, similar concerns have been voiced about the ability of owners of various communication platforms—such as Facebook or Google—to control speech. *See, e.g.*, JONATHAN TAPLIN, *MOVE FAST AND BREAK THINGS: HOW FACEBOOK, GOOGLE, AND AMAZON CORNERED CULTURE AND UNDERMINED DEMOCRACY* (2017). But patent law more clearly implicates the First Amendment because a patentee’s control over speech comes from a government-issued legal prohibition. *See supra* Section I.A. Google and Facebook do not enjoy the same level of legal protection and thus do not raise the same level of constitutional concern.

manner” (TPM) regulations.¹¹⁴ A TPM regulation is a facially content-neutral law that nonetheless indirectly restricts speech by regulating the time, place, or manner by which it can occur.¹¹⁵ Examples include laws forbidding residential yard signs¹¹⁶ and laws giving licensing officials “unduly broad discretion” in granting or denying a performer’s permit to hold events in public parks.¹¹⁷

Although TPM regulations are by definition not targeted at specific content or viewpoints, the Supreme Court has nevertheless recognized that such laws implicate the First Amendment because of the potential for overbroad suppression and discriminatory enforcement. As the Court has explained, a TPM regulation is problematic if it is so broad that it “foreclose[s] an entire medium of expression” and “suppress[es] too much speech.”¹¹⁸ Moreover, “[a] government regulation that allows arbitrary application is ‘inherently inconsistent with a valid time, place, and manner regulation because such discretion has the potential for becoming a means of suppressing a particular point of view.’”¹¹⁹ For these reasons, First Amendment doctrine requires TPM regulations to (1) be narrowly tailored to serve a substantial government interest,¹²⁰ (2) leave open ample alternative means for expression,¹²¹ and (3) provide “narrowly drawn, reasonable and definite standards” for enforcement.¹²² The first two requirements seek to prevent TPM regulations from becoming overbroad and unduly suppressing speech,¹²³ and the third is designed to prevent discriminatory enforcement.¹²⁴ As examples of how these limits work in practice, the Supreme Court has struck down bans on the distribution of leaflets as being insufficiently tailored to the government interest in preventing litter;¹²⁵ bans on residential yard signs because there were inadequate alternative means for expression;¹²⁶ and laws forbidding parades without a prior license as lacking sufficiently objective criteria for the grant of such licenses.¹²⁷

114. See generally *Ward v. Rock Against Racism*, 491 U.S. 781 (1989) (discussing the Supreme Court’s First Amendment precedent on TPM regulations).

115. *Id.* at 791.

116. *City of Ladue v. Gilleo*, 512 U.S. 43, 54–59 (1994).

117. *Thomas v. Chi. Park Dist.*, 534 U.S. 316, 323–25 (2002).

118. *City of Ladue*, 512 U.S. at 55; see also Martin H. Redish, *The Content Distinction in First Amendment Analysis*, 34 STAN L. REV. 113, 128 (1981) (“That governmental regulation impedes all forms of speech, rather than only selected viewpoints or subjects, does not alter the fact that the regulation impairs the free flow of expression.”).

119. *Forsyth Cty. v. Nationalist Movement*, 505 U.S. 123, 130–31 (1992) (quoting *Heffron v. Int’l Soc’y for Krishna Consciousness, Inc.*, 452 U.S. 640, 649 (1981)).

120. *Clark v. Cmty. for Creative Non-Violence*, 468 U.S. 288, 293 (1984).

121. *Va. State Bd. of Pharmacy v. Va. Citizens Consumer Council, Inc.*, 425 U.S. 748, 771 (1976).

122. *Niemotko v. Maryland*, 340 U.S. 268, 271 (1951).

123. See *Ward v. Rock Against Racism*, 491 U.S. 781, 799–800 & n.7 (1989) (describing the “essence of narrow tailoring” as asking whether the regulation is “substantially broader than necessary to achieve the interests justifying it”).

124. *Cox v. Louisiana*, 379 U.S. 536, 557 (1965) (“This Court has recognized that the lodging of such broad discretion in a public official allows him to determine which expressions of view will be permitted and which will not.”).

125. *Schneider v. State*, 308 U.S. 147, 162 (1939).

126. *City of Ladue v. Gilleo*, 512 U.S. 43, 54–59 (1994).

127. *Shuttlesworth v. City of Birmingham*, 394 U.S. 147, 150–51 (1969).

The test for valid TPM regulations is much less demanding than the strict scrutiny applied to content-based regulations, but it is still a meaningful check.¹²⁸

In comparison, patent law is much more permissive in its treatment of analogous restrictions on the means of speech. Although patent law does, at a theoretical level, ask whether the grant of a patent is necessary to achieve the government's legitimate interest in incentivizing inventions that otherwise would not be created or disclosed,¹²⁹ it does not ask the question in the same rigorous and individualized manner as First Amendment law. The requirements of patentability seek to ensure that, on average, the patent system creates more social benefit than social costs; they are not administered to ensure that every individual patent does so.¹³⁰ First Amendment law, in contrast, *does* seek this kind of fine-grained individualization.¹³¹ More to the point, patent law simply does not ask whether a patent on a means for speech will leave open ample alternative means for expression, nor does it require enforcement or licensing to be conducted according to neutral or definite standards. If a politician of one party—for example, Democratic presidential candidate Howard Dean—is the first person to invent the idea of raising money over the Internet,¹³² patent law is perfectly happy to give him a twenty-year monopoly over the idea, no matter how important Internet fundraising has subsequently become to political campaigns¹³³ or how great the ability to discriminatorily enforce the patent. In such a scenario,

128. See KATHLEEN M. SULLIVAN & GERALD GUNTHER, *FIRST AMENDMENT LAW* 199–201 (1999) (“The interest need not be compelling, and the means/ends fit need not be perfect; the state is not obliged to exhaust less restrictive alternatives before it may enact or enforce a content-neutral law.”).

129. See *Graham v. John Deere Co.*, 383 U.S. 1, 11 (1966) (“The inherent problem was to develop some means of weeding out those inventions which would not be disclosed or devised but for the inducement of a patent.”); Michael Abramowicz & John F. Duffy, *The Inducement Standard of Patentability*, 120 *YALE L.J.* 1590, 1596 (2011) (arguing for using this “inducement standard as the touchstone for understanding and refining the obviousness doctrine”); Tun-Jen Chiang, *A Cost-Benefit Approach to Patent Obviousness*, 82 *ST. JOHN’S L. REV.* 39, 67 (2008) (arguing that, if the same invention would not be independently developed during the patent term, “the patent should always be granted”).

130. See John M. Golden, *Patentable Subject Matter and Institutional Choice*, 89 *TEX. L. REV.* 1041, 1055 (2011) (“[P]atent law features a series of requirements for patentability that . . . are meant to ensure that the average benefits from disclosure and innovative effort stimulated by patents are greater than the average social costs—including administrative costs—that patents generate.”).

131. For example, in *Schneider v. State*, the Court held that an ordinance forbidding handbills could not be justified on an anti-littering rationale because government could punish the litterer who throws the handbill away instead of punishing the speaker who distributes the handbill. 308 U.S. 147, 162 (1939). It did not say that the ordinance was justified as part of a larger system that, overall, served the government interest in preventing littering, which would be the analogue to the argument that individual patents are justified because they are part of a larger patent system that, overall, serves the government interest in promoting innovation. See *id.*; see also *Bartnicki v. Vopper*, 532 U.S. 514, 523 & n.19 (2001) (holding unconstitutional a ban on disclosure of illegally intercepted communications, even though it complemented a constitutionally permissible ban on wiretapping).

132. See JEFF BLODGETT & BILL LOFY, *WINNING YOUR ELECTION THE WELLSTONE WAY: A COMPREHENSIVE GUIDE FOR CANDIDATES AND CAMPAIGN WORKERS* 196 (2008) (“Ever since Howard Dean’s presidential campaign shocked political observers by raising millions of dollars in online contributions, Internet fundraising has grown in importance.”).

133. See *id.* (“Take a look at the Web site of any major political campaign, and one of the first things you will notice is a contribution field . . .”).

Democrats could raise money over the Internet whereas Republicans could not, distorting the balance of our political system.¹³⁴ Indeed, that Internet fundraising has subsequently become central to modern political campaigns would be taken by patent law to demonstrate the non-obviousness of the idea and make the patentee's rights *stronger*.¹³⁵

III. POTENTIAL DEFENSES OF PATENT LAW'S FIRST AMENDMENT EXEMPTION

If the affirmative case that patent law conflicts with First Amendment principles seems straightforward, what are the potential counterarguments? By and large, courts and commentators have simply *assumed* that patent law poses no First Amendment issues; they have not articulated a detailed theory as to why.¹³⁶ To the extent the literature even addresses this issue, the most common defense is an offhand assertion that patents pertain only to tangible widgets or physical processes and thus do not implicate speech or expression. As has already been discussed, this “tangible widget” theory is defective for at least two reasons. First, it is not true as a factual matter—patents can in fact cover intangible inventions and can be directed to pure speech content.¹³⁷ Second, even granting that the tangible widget theory has a shadow of truth insofar as patents directed to pure speech are likely to be rare in practice, patents can also indirectly suppress speech by covering the means of speech, and patents on the means of speech are *not* rare.¹³⁸ Patent law would still implicate free speech concerns *even if* patents were limited to tangible widgets as the stereotype assumes.

The remainder of this Part will consider some potential defenses of the status quo that I consider to be more plausible than the tangible widget theory. These arguments have not been articulated in the patent law context—because nobody has provided any detailed defense of patent law's constitutionality—but many of them have been articulated in the context of other IP rights, especially copyright law. As I will explain, although these defenses are significantly more plausible than the tangible widgets theory, they ultimately do not justify the current exemption of patent law from First Amendment scrutiny.

A. PRIVATE ENFORCEMENT OF PROPERTY RIGHTS

To my mind, the best defense of patent law's exemption from First Amendment scrutiny is that patents are property rights, and the private enforcement of property rights is not typically subject to First Amendment

134. See Stone, *supra* note 102, at 55 (arguing that a law that “mutilates ‘the thinking process of the community’” is “incompatible with the central precepts of the first amendment” (quoting ALEXANDER MEIKLEJOHN, *POLITICAL FREEDOM* 27 (1st ed. 1960))).

135. See *Apple Inc. v. ITC*, 725 F.3d 1356, 1365–66 (Fed. Cir. 2013) (reversing obviousness finding because fact finder failed to give weight to the subsequent adoption of the invention by others, industry praise, and commercial success).

136. See Burk, *supra* note 11, at 200 (describing “attitudes ranging from skeptical to incredulous that patent law could have any serious association with expressive rights or the First Amendment”).

137. See *supra* notes 73–77 and accompanying text.

138. See *supra* notes 87–112 and accompanying text.

scrutiny.¹³⁹ I have previously argued that this theory largely justifies copyright law's exemption from the First Amendment.¹⁴⁰ However, it cannot do the same for patent law for two reasons, as I will explain below.

1. Patents Are Issued by the PTO

The property theory has its doctrinal basis in the state action requirement of the First Amendment: the First Amendment applies only to *government* acts and not to the acts of private individuals.¹⁴¹ This theory has a deeper normative intuition insofar as most people consider it a good thing that their property is not used to convey messages with which they disagree—it is one thing for a neighbor to put an obnoxious sign on their front lawn; it is quite another for them to put the sign on *your* front lawn.¹⁴² Because the First Amendment does not entail a right to trespass on others' private property,¹⁴³ it follows that private property owners may generally enforce their property rights—including IP rights¹⁴⁴—without regard to First Amendment limits.¹⁴⁵

It is important, however, to clarify the contours of the property theory. In any property regime, there is potential state action at three levels. First, there is always state action in the creation of the overall property system. For example, the patent system is created by the congressionally enacted Patent Act, whereas the real property system is created by a mixture of common law rules and statutory enactments. Second, there is sometimes state action in the creation of individual property rights within the property system, such as the issuance of an individual patent by the PTO. Third, on occasion, the state acts to enforce an individual property right, such as with a criminal trespass prosecution. Saying that the private enforcement of property rights is normally exempt from First Amendment limits—because such enforcement is not a matter of state

139. See Knight, *supra* note 77, at 222–25 (arguing that patents on speech are not subject to First Amendment concerns because patentees are not state actors); Thomas, *supra* note 14, at 606 (arguing that application of the Patent Act “does not ordinarily entail any constitutional analysis” because patentees are not state actors).

140. Chiang, *supra* note 19.

141. See *Pub. Utils. Comm'n v. Pollak*, 343 U.S. 451, 461 (1952) (noting that the First and Fifth Amendments “apply to and restrict only the Federal Government and not private persons”).

142. See Rubinfeld, *supra* note 4, at 27–28; see also *Miami Herald Publ'g Co. v. Tornillo*, 418 U.S. 241, 256 (1974) (striking down statute compelling newspapers to give reply space).

143. See *Hudgens v. NLRB*, 424 U.S. 507, 520–21 (1976) (holding that there is no First Amendment right to enter shopping center for picketing purposes).

144. Whether patents ought to be considered property is a longstanding jurisprudential debate that is well beyond the scope of this Article. Compare, e.g., Frank H. Easterbrook, *Intellectual Property Is Still Property*, 13 HARV. J.L. & PUB. POL'Y 108, 109 (1990) (“Patents give a right to exclude, just as the law of trespass does with real property.”), with, e.g., Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1032 (2005) (“[T]reating intellectual property as ‘just like’ real property is a mistake.”). For purposes of this Article, I will assume that patents are property. See *Consol. Fruit-Jar Co. v. Wright*, 94 U.S. 92, 96 (1876) (“A patent for an invention is as much property as a patent for land.”). If patents are not property, then the property theory would not apply, making my argument even easier.

145. See *Lloyd Corp. v. Tanner*, 407 U.S. 551, 568 (1972).

action¹⁴⁶—does not imply that *everything* relating to the property right is thereby exempt from the First Amendment. A central tenet of the property theory is that First Amendment analysis should be directed toward the analytical level(s) at which state action occurs.¹⁴⁷

Once the property theory is understood in this manner, it follows that copyright law is largely exempt from First Amendment scrutiny because the only level at which state action occurs is at the level of the creation of the overall copyright system. There is no state action in the creation of individual copyrights because individual copyrights are automatically effective upon the creation of a work,¹⁴⁸ without the need for registration or government approval;¹⁴⁹ there is also no state action in the private enforcement of individual copyrights.¹⁵⁰ Because the only state action occurs at the level of the overall copyright system, the proper First Amendment question is whether the copyright system *as a whole* contravenes First Amendment principles. The answer to this question—posed at this level of abstraction—is “mostly no.” With a few minor exceptions,¹⁵¹ the copyright system as a whole is content- and viewpoint-neutral in granting protection to *all* original works fixed in any tangible medium for an equal period of time,¹⁵² and copyright as a whole is designed to promote speech rather than to suppress

146. A case to the contrary is *Shelley v. Kraemer*, which held private suits to enforce racially restrictive covenants constitute state action, because courts are part of the government. 334 U.S. 1, 14 (1948). If *Shelley's* logic were applied broadly, then all private enforcement of property rights ultimately require judicial enforcement, and the property theory would be a nullity. For this reason, *Shelley* is generally considered to be limited to its own specific facts and has not been applied elsewhere. See Erwin Chemerinsky, *Rethinking State Action*, 80 NW. U. L. REV. 503, 526 (1985) (“The Supreme Court . . . largely has refused to apply *Shelley*.”).

147. See Nicholas Quinn Rosenkranz, *The Subjects of the Constitution*, 62 STAN. L. REV. 1209, 1212–13 (2010) (“The Constitution prohibits certain actions. . . . Judicial review is the constitutional review of such actions.”); see also *Cohen v. Cowles Media Co.*, 501 U.S. 663, 668–70 (1991) (finding state action in state recognition of promissory estoppel doctrine, but also holding that promissory estoppel is a content-neutral generally applicable law and not invalid even when applied to a newspaper).

148. 17 U.S.C. § 302(a) (2012) (“Copyright in a work . . . subsists from its creation . . .”).

149. See § 408 (“[R]egistration is not a condition of copyright protection.”). Students of copyright law may object that registration is required to enforce a copyright, but this is not quite accurate. All that is required is for the owner to *apply* for registration; denial of the application by the Copyright Office still entitles the owner to file suit. *Id.* § 411 (“In any case, however, where the deposit, application, and fee required for registration have been delivered to the Copyright Office in proper form and registration has been refused, the applicant is entitled to institute a civil action for infringement . . .”). As the Supreme Court held in *American Manufacturers Mutual Insurance Co. v. Sullivan*, simply filing a form with a government agency is not state action, so no state action occurs in filing an application for copyright registration. 526 U.S. 40, 41 (1999).

150. That notwithstanding, state action does occur with criminal enforcement. 17 U.S.C. § 506 (2012) (outlining criminal enforcement of copyright infringement). The property theory accordingly does not shield criminal copyright enforcement from First Amendment scrutiny. Chiang, *supra* note 19, at 570.

151. An example of where the copyright statute itself draws content distinctions in providing protection would be the special protection for works of visual art against modifications that injure the author’s reputation. 17 U.S.C. § 106A(a)(3) (2012); cf. *N.Y. Times Co. v. Sullivan*, 376 U.S. 254 (1964) (holding defamation laws are subject to First Amendment scrutiny).

152. 17 U.S.C. § 102(a) (2012).

it.¹⁵³ That owners routinely *enforce* their individual copyrights in a content- and viewpoint-discriminatory manner—such as Jackson Browne suing John McCain for using his copyrighted music because Browne is a lifelong Democrat¹⁵⁴—is irrelevant under the property theory. Again, the proper analysis is to consider the copyright system in its totality.

The same analysis applies to patents, with one crucial difference. Like copyright, the patent system involves state action at the level of the creation of the property system, but it easily survives First Amendment scrutiny at that level because the patent statute as a whole is content-neutral and is directed to purposes other than the regulation of speech.¹⁵⁵ Also like copyright, the enforcement of individual patents involves no state action¹⁵⁶ and therefore is not subject to First Amendment limits. The crucial difference is that, unlike with copyright, the creation of an individual patent is always a matter of state action,¹⁵⁷ because every patent must be individually examined and issued by the PTO.¹⁵⁸ Because every patent is a product of individual state action, it is proper to conduct a First Amendment analysis at the level of the issuance of the individual patent. And when individual patents are analyzed under standard First Amendment principles, many run into trouble, as explained in Part II.¹⁵⁹

Turning the entire applicability of the First Amendment on whether an IP right is formally issued by a government agency (patent) or automatically created under a statute (copyright) may seem like seizing on a technicality.¹⁶⁰ It is not. As

153. See *Eldred v. Ashcroft*, 537 U.S. 186, 219 (2003) (noting copyright's purpose to promote creation and publication).

154. *Browne v. McCain*, 611 F. Supp. 2d 1062, 1065 (C.D. Cal. 2009).

155. See *United States v. O'Brien*, 391 U.S. 367, 376–77 (1968) (holding a law prohibiting the destruction of draft cards valid under First Amendment because the law serves the valid administrative purpose of raising armies and any restrictive effect on expression is incidental).

156. That state universities routinely enforce their patents represents one exception. See Peter Lee, *Patents and the University*, 63 DUKE L.J. 1, 42–43 (2013) (“[C]ontemporary universities have become active participants in litigation.”).

157. See *Lugar v. Edmondson Oil Co., Inc.*, 457 U.S. 922, 937 (1982) (finding a state action “when the claim of a constitutional deprivation is directed against a party whose official character is such as to lend the weight of the State to his decisions”).

158. 35 U.S.C. §§ 131, 153 (2012) (“Patents shall be issued in the name of the United States of America, under the seal of the Patent and Trademark Office.”).

159. An astute reader might note an apparent contradiction between my argument that private enforcement is not a proper subject of First Amendment analysis under the property theory (because of a lack of state action), and my argument in this Article, see *infra* Section III.A.2, that the lack of safeguards against discriminatory enforcement imperils the validity of the patent. If actual discriminatory enforcement is not a problem, then why is a lack of safeguards against such discriminatory enforcement a problem? There is no contradiction. That the property theory immunizes discriminatory private enforcement from First Amendment scrutiny does not imply that discriminatory enforcement is a good thing. Rather, this immunity conveys that private action is something the First Amendment does not reach, and that there are some problems for which the law provides no direct solution. In the context of analyzing the PTO's issuance of a patent with no safeguards against discriminatory enforcement, there is a potential remedy.

160. *Cf. Am. Mfrs. Mut. Ins. Co. v. Sullivan*, 526 U.S. 40, 54–55 (1999) (holding that a requirement that an agency process a form filed by insurers before they may withhold payment does not establish state action).

Nicholas Rosenkranz has argued, identifying the constitutional actor who causes a particular violation is important for accountability.¹⁶¹ When the PTO issues a speech-suppressing patent under the provisions of the congressionally enacted Patent Act, which is silent in regards to the relationship between patents and speech, it is the *PTO* that should bear responsibility for the speech-suppressing effects of the patent, not Congress.

This attribution of responsibility matters for institutional design. A finding of a constitutional violation implies a contrary course of conduct that would be constitutionally compliant.¹⁶² A conscientious PTO examiner tasked with detecting free speech violations—not currently part of the PTO examiner’s job, but this can be changed—could, in theory, figure out that a patent on donating money over the Internet, on political advocacy over e-mail, or on cross-shaped door knockers, might implicate free speech issues, and respond accordingly.¹⁶³ Saying that the PTO violated the First Amendment by issuing a speech-suppressing patent logically suggests an *ex ante* constitutional course of action that should have been taken—the PTO should not have issued the patent and should work in the future to prevent such violations. A remedy for the violation exists and can in theory be implemented. In contrast, saying that Congress violated the First Amendment by enacting a Copyright Act (or Patent Act) that permits some speech-suppressive copyrights (or patents) presents no plausible *ex ante* constitutional course of action for Congress to take, short of not enacting the statute at all. No member of Congress drafting a copyright or patent statute, no matter how conscientious, could reasonably be expected to foresee all the specific free speech issues that might arise with particular copyrights or patents and then include legislative provisions dealing with them.¹⁶⁴ Attributing responsibility to Congress thus makes the First Amendment a right without a remedy.¹⁶⁵

Pointing to PTO issuance as making a constitutional difference is therefore about more than a technical distinction in state action doctrine. It reflects important underlying substantive differences in institutional role and responsibility.

161. Rosenkranz, *supra* note 147, at 1220–24 (“[T]he first step in any act of judicial review must be to figure out the *subject* of the constitutional claim.”).

162. *See* *Wine Ry. Appliance Co. v. Enter. Ry. Equip. Co.*, 297 U.S. 387, 395 (1936) (“Penalty for failure implies opportunity to perform.”).

163. This is not to say that placing the onus on the PTO is the best solution to patent law’s free speech problem. As I will argue in Part IV, it is not. PTO examiners are institutionally ill-suited to dealing with First Amendment analysis except in the easiest and most clear-cut cases; thus, my proposed solutions are mostly designed to be implemented by courts at the point of litigation rather than by the PTO at the point of examination. The point, however, is that there *is* a potential First Amendment remedy if the PTO is deemed responsible for the violation (even if the remedy has undesirable side effects). In contrast, there is no plausible First Amendment remedy if responsibility lies only with Congress.

164. *See, e.g.*, Rosenkranz, *supra* note 147, at 1266–67 (arguing that a generally applicable law against peyote would not violate the Free Exercise clause even if peyote happens to be used in rituals by some religions).

165. *Cf. Marbury v. Madison*, 5 U.S. (1 Cranch) 137, 163 (1803) (“The government of the United States has been emphatically termed a government of laws, and not of men. It will certainly cease to deserve this high appellation, if the laws furnish no remedy for the violation of a vested legal right.”).

Constitutional rights imply correlative duties on constitutional actors,¹⁶⁶ and in patent law there is a constitutional actor who can violate a constitutional duty (the PTO issuing a speech-suppressive patent) that has no analog in copyright law.

2. Patent Law Has Inadequate Safeguards Against Private Ownership Power

A second reason why the property theory cannot save patent law is that the property theory stands for the proposition that private enforcement of property rights is *generally* not subject to First Amendment limits. This is the general rule, but it is not an absolute one, and it is subject to an exception: when a single owner owns so much property as to foreclose all reasonable alternative avenues for expression, courts will subject the owner's private enforcement actions to First Amendment scrutiny.

Marsh v. Alabama establishes this principle and illustrates its underlying rationale.¹⁶⁷ There, a private company owned all the land in an entire town and ran all the operations of the town.¹⁶⁸ The company then forbade Jehovah's Witnesses from distributing religious literature on its property.¹⁶⁹ Ordinarily, the company's actions would be quite lawful—a private property owner is typically entitled to prohibit the advocacy of disfavored views on its property. But, following this logic to its endpoint leaves a troubling practical consequence: because the company owned the entire town, its residents would effectively have no free speech rights. As the Supreme Court framed the issue, the question was: "Can those people who live in or come to Chickasaw be denied freedom of press and religion simply because a single company has legal title to all the town?"¹⁷⁰ To this the Court answered "no," and held that the company/landowner's ownership rights were subject to First Amendment limitations.¹⁷¹

The *Marsh* exception is not only grounded in Supreme Court precedent, but also has a sound underlying policy rationale. Most of the time, allowing private owners broad discretion to enforce their property rights, even in viewpoint-discriminatory ways, poses little threat to robust debate and a vibrant marketplace of ideas, because evicted speakers can find reasonable alternative forums.¹⁷² If Goldman Sachs evicts Occupy Wall Street protesters from its headquarters, those protesters can protest on the street. For this reason, the private enforcement of property rights is ordinarily not subject to First Amendment limits. But when the underlying premise is not true—when a private owner does possess so much ownership power so as to be able to foreclose all reasonable alternatives—then the

166. See Wesley Newcomb Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 YALE L.J. 16, 30–32 (1913) ("‘Duty’ and ‘right’ are correlative terms. When a right is invaded, a duty is violated." (quoting *Lake Shore & M.S. Ry. Co. v. Kurtz*, 37 N.E. 303, 304 (Ind. App. 1894))).

167. 326 U.S. 501 (1946).

168. *Id.* at 502–03.

169. *Id.* at 502–04.

170. *Id.* at 505.

171. *Id.* at 506.

172. See Rubinfeld, *supra* note 4, at 28 ("[N]o owner, under ordinary property law, has a general power simply to block the public at large from engaging in expression . . .").

general rule becomes subject to the *Marsh* exception, and the private enforcement of property rights is no longer exempt from First Amendment scrutiny.¹⁷³

In the tangible property context, it is inherently difficult for anyone to amass enough tangible property to foreclose all reasonable alternatives, and therefore *Marsh* is a rarely applied doctrine in that context. But intellectual property rights—especially patent rights—are different. IP rights are not intrinsically limited in their reach in the way that tangible property rights are. For a tangible property owner to shut down disfavored views on television, they would need to buy up every existing and subsequently created television station, which is practically impossible. In contrast, a single patent on televisions accomplishes the task with elegant simplicity.¹⁷⁴ The inherent limitations on ownership power that apply to tangible property do not apply to intellectual property.¹⁷⁵ Intellectual property therefore needs other—legally created—limitations on ownership power to avoid running afoul of free speech principles.¹⁷⁶ Merely saying that patents are private property is not enough, because the private enforcement of property rights is not *absolutely* shielded from First Amendment scrutiny.

In the copyright context, I have argued that copyright law’s internal doctrinal limits serve to constrain ownership power, and copyright accordingly avoids triggering the *Marsh* exception.¹⁷⁷ That is, copyright has a variety of doctrinal limits, including the idea–expression dichotomy,¹⁷⁸ the fair use defense,¹⁷⁹ and the requirement that infringers must copy the author’s work and not independently recreate it,¹⁸⁰ that ensure that a copyright owner cannot broadly shut down all reasonable means for communicating a particular idea or viewpoint. Because copyright law has internal legal limits on ownership power, First Amendment law does not need to impose additional constraints.¹⁸¹

Patents are different from both tangible property and copyrights. Patents are different from tangible property because patents are not subject to inherent

173. *See id.* at 28 n.106.

174. Of course, in real life, there is hardly ever just “one” patent on a class of product. More frequently, there are multiple overlapping patents on a commercial product such as a television, each covering a narrow slice of the technology. *See generally* Mark A. Lemley, *The Myth of the Sole Inventor*, 110 MICH. L. REV. 709, 710 (2012) (“The canonical story of the lone genius inventor is largely a myth. Edison didn’t invent the lightbulb; he found a bamboo fiber that worked better as a filament in the lightbulb developed by Sawyer and Man, who in turn built on lighting work done by others.”); Adam Mossoff, *The Rise and Fall of the First American Patent Thicket: The Sewing Machine War of the 1850s*, 53 ARIZ. L. REV. 165, 171–82 (2011) (describing the multiple patents leading up to the sewing machine).

175. Rubinfeld, *supra* note 4, at 29 (“A copyright owner’s power over speech applies to the public at large, anywhere and everywhere.”).

176. *See* Jessica Litman, *Reforming Information Law in Copyright’s Image*, 22 U. DAYTON L. REV. 587, 614 (1997) (“[C]opyright law’s harmony with freedom of speech law owes more to the limits on copyright owners’ control . . . than to any inherent congruence between the two bodies of law.”).

177. *See* Chiang, *supra* note 19, at 548–51.

178. 17 U.S.C. § 102 (2012).

179. *Id.* § 107.

180. *Arnstein v. Porter*, 154 F.2d 464, 468 (2d Cir. 1946) (requiring actual copying for infringement).

181. *See Eldred v. Ashcroft*, 537 U.S. 186, 219–21 (2003) (explaining that “copyright’s built-in free speech safeguards” adequately address First Amendment concerns).

economic limits on ownership power. Patents are different from copyrights because patent law has none of the internal legal limits on ownership power that copyright law has.¹⁸² Unlike copyrights, patents can cover ideas—at least, they can cover ideas to a much greater extent than copyright law permits.¹⁸³ In contrast to copyright, patent law has no fair use defense.¹⁸⁴ And, again unlike copyright, patent law has no requirement of copying for infringement liability.¹⁸⁵ The sum is that a patent can broadly foreclose all practical avenues of communicating an idea or message in a way that a copyright cannot. The ownership power conferred by a patent is much greater, and more threatening to free speech principles, than the ownership power conferred by a copyright. Without the same internal limits on private ownership power as copyright law, patent law cannot claim the same exemption from First Amendment scrutiny as copyright law.

I do not mean to overstate the scope of the *Marsh* exception or its importance to my overall argument. The *Marsh* exception is narrow, and the Supreme Court has never found any other tangible property owner to possess sufficient ownership power to fall within it. Even in the context of intellectual property—which does not have the same inherent limits on ownership power as tangible property—it is only in rare cases that a patent will confer so much power that there are *no* reasonable alternative avenues of expression. My point is not that patents routinely fall within the *Marsh* exception or that state action is unnecessary. I discuss the *Marsh* doctrine because it establishes the proposition that private enforcement of property rights is not an absolute shield from First Amendment scrutiny. Understanding the rationale of *Marsh* helps explain why copyright law has internal limits against excessive ownership power and why those limits are relevant to First Amendment analysis. This understanding lays the foundation for my later argument that patent law should mimic copyright's approach to solving its First Amendment problem.¹⁸⁶ For now, even if one puts aside *Marsh* entirely and regards it as an overruled case, my central argument that patents can and regularly do violate the First Amendment would still hold because the PTO issues patents that are products of state action. Nothing in that part of my argument necessarily hinges on the *Marsh* exception to state action doctrine.

182. See Thomas, *supra* note 14, at 589 (“The case can readily be made that patent law allows private actors to impose more significant restraints on speech than has ever been possible through copyright.”).

183. WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 296 (2003) (“Another reason patent protection tends to confer greater value . . . is that . . . patents protect ideas . . .”).

184. See O'Rourke, *supra* note 7, at 1193 (“[W]hile some of patent's scope-limiting devices bear a surface resemblance to copyright fair use, none, alone or in combination with others, functions as its equivalent.”).

185. See *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, 191 F.2d 99, 103 (2d Cir. 1951) (“[I]ndependent reproduction of a copyrighted work is not infringement, whereas it is *vis a vis* a patent.” (internal quotation marks and footnote omitted)).

186. See *infra* Section IV.B.

B. CONSTITUTIONAL TEXT AND FRAMER INTENT

A frequent argument in favor of copyright's compatibility with the First Amendment is what I have termed the "Framer intent theory." That is, as the Supreme Court put the argument in *Eldred v. Ashcroft*, "[t]he Copyright Clause and First Amendment were adopted close in time. This proximity indicates that, in the Framers' view, copyright's limited monopolies are compatible with free speech principles."¹⁸⁷ This logic easily carries over to patents since the authority to grant patents arises from the same clause in the Constitution as that of copyrights,¹⁸⁸ and the same Congress that drafted the First Amendment also enacted both the first Copyright Act and the first Patent Act.¹⁸⁹ If we assume that the Framers did not wish to enact unconstitutional laws, then it is likely that they did not regard copyright and patent protection as unconstitutional. And if one takes the view that the expectations of the Framers govern constitutional interpretation—a view that is, of course, highly contested¹⁹⁰—it would then follow that copyright and patent protection are not unconstitutional under the First Amendment.¹⁹¹

The debate over whether original intent governs constitutional interpretation is beyond the scope of this Article. Nevertheless, my argument works even if one does accept the premise, underlying *Eldred*, that the Framers of the First Amendment did not regard patent and copyright protection as unconstitutional.¹⁹² This is because my argument is not that *all* patent protection is unconstitutional under the First Amendment; my argument is only that *some* individual patents are unconstitutional. That the Framers of the First Amendment also enacted a Patent Act at most tells us that those Framers did not regard patent protection as categorically incompatible with the First Amendment; it does not support the much grander assertion that they believed all patents to be categorically constitutional.¹⁹³ There is no contradiction between the acknowledgement of a general

187. 537 U.S. 186, 219 (2003).

188. U.S. CONST. art. I, § 8, cl. 8 ("To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.").

189. See Resolution of the Senate and the House to Submit Amendments to the Constitution, 1 Stat. 97 (1789); Copyright Act of 1790, ch. 15, 1 Stat. 124; Patent Act of 1790, ch. 8, 1 Stat. 109.

190. Compare, e.g., RAOUL BERGER, GOVERNMENT BY JUDICIARY: THE TRANSFORMATION OF THE FOURTEENTH AMENDMENT 363–66 (1977) (arguing for original intent as the lodestar of constitutional interpretation), with, e.g., JACK M. BALKIN, LIVING ORIGINALISM 6–12 (2011) (arguing for "original meaning" as contrasted with "original expected application"), and Paul Brest, *The Misconceived Quest for the Original Understanding*, 60 B.U. L. REV. 204 (1980) (arguing against originalism in all its forms).

191. See Rebecca L. Brown, *Tradition and Insight*, 103 YALE L.J. 177, 183–85 (1993) ("The Supreme Court has interpreted evidence that the first Congress either took, approved, or acquiesced in some action as a virtually irrefutable indication of the constitutional validity of that action.").

192. If one does not accept these premises, of course, then *Eldred* has no bite and poses no obstacle to my argument.

193. There is another way to reconcile patent and copyright with the First Amendment, which is that the Framers understood freedom of speech and press to be natural rights that were subject to reasonable restraints to promote the public good, including patent and copyright restraints. See Jud Campbell,

power to grant patents and an argument that specific patents violate the First Amendment, just as there is no contradiction between acknowledging Congress's general power to pass legislation and arguing specific statutes violate the First Amendment.

C. PRACTICE AND TRADITION

Putting aside what the Framers intended, another argument in favor of maintaining the status quo is that it reflects long-settled practices and understandings. That is, everyone has always understood patents to be exempt from the First Amendment, and the accepted practice of the PTO and courts is to give patents no First Amendment scrutiny. Accepting my argument would necessarily overturn this understanding and practice, and would amount to a change in settled law,¹⁹⁴ even if my argument does not technically contradict any case law precedent because no court has ever expressly addressed the issue.¹⁹⁵ Those who believe that “[l]ong settled and established practice is a consideration of great weight in a proper interpretation of constitutional provisions”¹⁹⁶ accordingly might be disturbed by my argument.¹⁹⁷

There is a vibrant literature on the relevance of executive and legislative branch practice to constitutional interpretation,¹⁹⁸ and I do not aim to take a

Natural Rights and the First Amendment, 127 YALE L.J. 246, 276 (2017) (“Speaking, writing, and publishing were thus ordinarily subject to restrictions under laws that promoted the public good.”). But it is unlikely that the Court in *Eldred* was endorsing this natural rights understanding of the First Amendment, since it would portend a radical reworking of virtually all of modern First Amendment law. *Id.* at 263–64 (“If an originalist wanted First Amendment doctrine to track Founding Era judicial reasoning, the Supreme Court’s decisions in *Texas v. Johnson*, *Boy Scouts of America v. Dale*, *Citizens United v. FEC*, and *Snyder v. Phelps*, among many, many others, would likely have to go.” (internal citations omitted)).

194. See 1 BRUCE ACKERMAN, *WE THE PEOPLE: FOUNDATIONS* 17–18 (1991) (describing the “Burkean sensibilities” that are “pronounced amongst practicing lawyers and judges”).

195. Besides Judge Mayer’s concurring opinion in *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1322–29 (Fed. Cir. 2016) (Mayer, J., concurring), there are only a few other instances I could find where courts have even remotely considered the issue. See *MySpace, Inc. v. GraphOn Corp.*, 672 F.3d 1250, 1266 n.1 (Fed. Cir. 2012) (Mayer, J., dissenting) (one line footnote in dissent arguing patent raised First Amendment concerns); *In re Prater*, 415 F.2d 1378, 1391 (C.C.P.A. 1968) (Rich, J., dissenting), *aff’d in part and rev’d in part*, 415 F.2d 1393 (C.C.P.A. 1969) (dismissing argument that patent would exclude other’s thoughts as waived); *Eli Lilly & Co. v. Medtronic, Inc.*, 735 F. Supp. 652, 662 (E.D. Pa.), *vacated*, 915 F.2d 670 (Fed. Cir. 1990) (holding that injunction against patent infringement did not violate First Amendment).

196. *NLRB v. Noel Canning*, 134 S. Ct. 2550, 2559 (2014) (alteration in original) (quoting *The Pocket Veto Case*, 279 U.S. 655, 689 (1929)).

197. See Richard H. Fallon, Jr., *Stare Decisis and the Constitution: An Essay on Constitutional Methodology*, 76 N.Y.U. L. REV. 570, 582 (2001) (“[A]rguments that deeply entrenched practices violate the Constitution seldom succeed.”).

198. *Compare, e.g., McCulloch v. Maryland*, 17 U.S. (4 Wheat.) 316, 401 (1819) (“An exposition of the constitution, deliberately established by legislative acts, on the faith of which an immense property has been advanced, ought not to be lightly disregarded.”), and Thomas W. Merrill, *Bork v. Burke*, 19 HARV. J.L. & PUB. POL’Y 509, 512–13 (1996) (arguing that the goal of constitutional interpretation should be to achieve “the least disruption to settled understandings that can be discerned in the surrounding legal landscape”), with, e.g., *Powell v. McCormack*, 395 U.S. 486, 546–47 (1969) (“That an unconstitutional action has been taken before surely does not render that same action any less unconstitutional at a later date.”), and JOHN HART ELY, *WAR AND RESPONSIBILITY: CONSTITUTIONAL*

strong position on that debate in this Article. My limited position here is that, even if one subscribes to the position that practice and tradition should be accorded significant weight in the interpretative calculus, few would contend that *unconsidered* practice and tradition should count.¹⁹⁹ And patent law's de facto exemption from the First Amendment is the epitome of an unconsidered tradition: the main reason that patents have never been subject to First Amendment limitation seems to be that no one has ever thought very hard about the argument.²⁰⁰

The history of the First Amendment's development is that many government practices, once treated as unobjectionable,²⁰¹ have come to be regarded as blatant violations once courts gave them more thought. It was settled practice to uphold seditious libel laws,²⁰² flag desecration laws,²⁰³ mandatory flag salutes,²⁰⁴ strict liability for defamation,²⁰⁵ and state censorship boards,²⁰⁶ until each of those practices was overturned by courts that gave the issue more thought. That the revolution has not yet come to patent law is not a good reason for permanently exempting patent law from it.

LESSONS OF VIETNAM AND ITS AFTERMATH 9–10 (1993) (“[P]ast violations are only that—violations . . .”). See generally Curtis A. Bradley & Trevor W. Morrison, *Historical Gloss and the Separation of Powers*, 126 HARV. L. REV. 411 (2012) (discussing role of past practice in resolving separation of powers disputes); Richard H. Fallon, Jr., *The Many and Varied Roles of History in Constitutional Adjudication*, 90 NOTRE DAME L. REV. 1753, 1773–84 (2015) (discussing varying uses of historical practice in constitutional argument).

199. See *McCulloch*, 17 U.S. at 401 (giving weight to practice that was “*deliberately* established by legislative acts” (emphasis added)); Letter from James Madison to Spencer Roane (May 6, 1821), in 2 THE PAPERS OF JAMES MADISON, RETIREMENT SERIES 317, 320 (J.C.A. Stagg et al. eds., 2013) (legislative precedents are “entitled to little respect” when they were made “without full examination & deliberation”); William Baude, *Constitutional Liquidation*, 71 STAN. L. REV. (forthcoming 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3214035 [<https://perma.cc/S7X8-5GJP>] (arguing that textually indeterminate provisions can be settled by *deliberate* practice); Shalev Roisman, *Constitutional Acquiescence*, 84 GEO. WASH. L. REV. 668, 712–13 (2016) (“[H]istorical precedents that have not been accompanied or preceded by any articulation or deliberation of constitutional authority should not count as evidence of constitutional agreement.”).

200. See *supra* notes 4–13 and accompanying text.

201. See ANTHONY LEWIS, *FREEDOM FOR THE THOUGHT THAT WE HATE: A BIOGRAPHY OF THE FIRST AMENDMENT* 23–39 (2007) (“[T]he first time a Supreme Court opinion ever supported a claim of freedom under the [First] amendment was in 1919—and that was a dissenting opinion. . . . A majority on the Supreme Court began enforcing the constitutional guarantee of freedom of speech in 1931.”); David M. Rabban, *The First Amendment in Its Forgotten Years*, 90 YALE L. J. 514, 523 (1981) (“The overwhelming majority of prewar decisions in all jurisdictions rejected free speech claims, often by ignoring their existence. No court was more unsympathetic to freedom of expression than the Supreme Court . . .”).

202. See Sedition Act, ch. 74, 1 Stat. 596 (1798); see also *Abrams v. United States*, 250 U.S. 616, 623–24 (1919) (upholding convictions for sedition).

203. See *Halter v. Nebraska*, 205 U.S. 34, 45–46 (1907), *overruled by Texas v. Johnson*, 491 U.S. 397 (1989).

204. See *Minersville Sch. Dist. v. Gobitis*, 310 U.S. 586, 599–600 (1940) (upholding mandatory flag salute), *overruled by W. Va. State Bd. of Educ. v. Barnette*, 319 U.S. 624 (1943).

205. See *Brokers' Choice of Am., Inc. v. NBC Universal, Inc.*, 861 F.3d 1081, 1105 (10th Cir. 2017) (“Until the Supreme Court decided *New York Times Co. v. Sullivan*, a common law claim for defamation in most states was a strict liability tort . . .” (citation omitted)).

206. *Mut. Film Corp. v. Indus. Comm'n of Ohio*, 236 U.S. 230, 244–45 (1915) (upholding statute creating board of censors), *overruled by Joseph Burstyn, Inc. v. Wilson*, 343 U.S. 495 (1952).

Again, I am not arguing that traditional practice—even unconsidered practice—necessarily has *no* role to play in constitutional interpretation. My argument is only that unconsidered traditional practice should not be such an overwhelming trump that it dominates all other considerations.²⁰⁷ As Oliver Wendell Holmes put it, “It is revolting to have no better reason for a rule of law than that so it was laid down in the time of Henry IV.”²⁰⁸ That patents have not heretofore been subject to First Amendment limits, by itself, ought not become its own justification.²⁰⁹

D. PATENT RIGHTS PROMOTE SPEECH IN THE AGGREGATE

A central argument in the debate over copyright’s interaction with freedom of speech is that, in the aggregate, copyright does not restrict speech but instead promotes speech, because copyright protection incentivizes more speech than it restricts.²¹⁰ A similar argument can be applied in the patent context: in theory, a patent should only be awarded if the same invention would not otherwise have been made and disclosed without patent incentives.²¹¹ Therefore, to the extent a patent validly covers speech content, that speech content would not have existed in the first place if not for the patent itself.²¹² To make this argument concrete, the ’489 patent on liver cancer tests restricts speech in the sense that it prevents a doctor from disclosing the results of a liver cancer test to a patient. However, if without the ’489 patent and its incentive effect there would be no liver cancer test and no results to communicate, then the grant of the ’489 patent does not reduce the amount of speech in society but instead increases it.

The argument that patent rights are consistent with free speech principles because they incentivize more speech than they restrict has two problems. First, it rests on an idealized view of the patent system that is not necessarily reflected in reality. That is, as a theoretical matter, patents should only be granted if we get more inventions with an *ex ante* promise of a patent than without such a promise—whether the “invention” in question is speech or anything else. It is far from clear, however, whether the patent system in fact promotes more innovation

207. Cf. PHILIP BOBBITT, *CONSTITUTIONAL INTERPRETATION* 12–22 (1991) (describing six “modalities” of constitutional argument, with history being one).

208. Oliver Wendell Holmes, *The Path of the Law*, 10 HARV. L. REV. 457, 469 (1897).

209. See Jonathan Turley, *Constitutional Adverse Possession: Recess Appointments and the Role of Historical Practice in Constitutional Interpretation*, 2013 WIS. L. REV. 965, 1036 (“The result is maddeningly circular with courts refusing to intervene and then claiming the continued exercise of the authority as proof of the accepted meaning of the language.”).

210. See Nimmer, *supra* note 4, at 1192 (“In some degree [copyright] encroaches upon freedom of speech in that it abridges the right to reproduce the ‘expression’ of others, but this is justified by the greater public good in the copyright encouragement of creative works.”).

211. See Abramowicz & Duffy, *supra* note 129, at 1597–98.

212. See *E.I. du Pont de Nemours & Co. v. Berkley & Co.*, 620 F.2d 1247, 1273 n.49 (8th Cir. 1980) (“If the patent be valid, the competition involves a product which by definition did not exist before the inventor contributed it to the marketplace. Enforcement of the patent in that case takes nothing from the public . . .”).

than it hampers.²¹³ Thus, to the extent that patent law's First Amendment exemption is defended on the basis that patents incentivize more speech than they restrict, the underlying factual premise has not been established.

Second, and more importantly, First Amendment law is, as a matter of principle, quite unreceptive to the argument that we should permit some restrictions on some speech to promote more speech in the aggregate.²¹⁴ For example, it is entirely plausible that allowing newspapers to publicly disclose rape victims' names (obtained from police reports) would lead to fewer rapes being reported to the police,²¹⁵ and that, if rape victims do not go to the police, newspapers would have no names to disclose in the first place. However, the Supreme Court has repeatedly struck down laws banning disclosure of rape victims' names.²¹⁶ Similarly, although many scholars argue that racist speech silences minorities,²¹⁷ the Supreme Court has still consistently struck down "hate speech" restrictions under the First Amendment.²¹⁸ If the suppress-some-speech-to-promote-more-speech theory does not work for rape victims or against racist speech, it should hardly work for patent owners.

E. PATENTS AS APPENDAGES TO THE PATENT ACT

A key premise of my argument is that each individual patent is regarded as its own "law" and the product of its own individual state action. And, as a matter of the standard state action test articulated by courts, it is quite clear that the PTO's issuance of an individual patent is state action, insofar as a patent claim is "a rule of conduct imposed by the state" and is issued by "a person who may fairly be said to be a state actor."²¹⁹ But as the doctrine is applied in practice, there are many cases where courts do not analyze an individual executive action separately from the higher-level legislative enactment. Rather, the executive action is

213. STAFF OF S. SUBCOMM. ON PATENTS, TRADEMARKS & COPYRIGHTS, 85TH CONG., AN ECONOMIC REVIEW OF THE PATENT SYSTEM 44–45 (Comm. Print 1958) (authored by Fritz Machlup) (stating that debate over the practical influence of the patent system on innovation is "one of the fundamental conflicts in the economics of the patent system"); George L. Priest, *What Economists Can Tell Lawyers About Intellectual Property*, in 8 RESEARCH IN LAW AND ECONOMICS: THE ECONOMICS OF PATENTS AND COPYRIGHTS 19, 21 (John Palmer & Richard O. Zerbe, Jr. eds., 1986) ("[E]conomists know almost nothing about the effect on social welfare of the patent system . . .").

214. See Mary-Rose Papandrea, *Where Intellectual Property and Free Speech Collide*, 50 B.C. L. REV. 1307, 1313 (2009) (stating that the argument is "based on a concept foreign to First Amendment jurisprudence").

215. See Paul Marcus & Tara L. McMahon, *Limiting Disclosure on Rape Victims' Identities*, 64 S. CAL. L. REV. 1019, 1050 (1991) ("One reason frequently mentioned by victims who do not report their rapes to the police is their uncertainty about whether they will be able to maintain their privacy if they do report the rape.").

216. Fla. Star v. B.J.F., 491 U.S. 524, 541 (1989); Cox Broad. Corp. v. Cohn, 420 U.S. 469, 492, 496–97 (1975).

217. See, e.g., Owen M. Fiss, *The Supreme Court and the Problem of Hate Speech*, 24 CAP. U. L. REV. 281, 287–88 (1995); Charles R. Lawrence III, *If He Hollers, Let Him Go: Regulating Racist Speech on Campus*, 1990 DUKE L.J. 431, 452–55.

218. See, e.g., Matal v. Tam, 137 S. Ct. 1744, 1764–65 (2017) (striking down statute forbidding registration of racially disparaging trademarks); R.A.V. v. City of St. Paul, 505 U.S. 377, 391 (1992) (striking down statute banning racially insulting fighting words).

219. Lugar v. Edmondson Oil Co., 457 U.S. 922, 937 (1982) (providing two-part state action test).

treated as an appendage to, or incidental effect of, the legislative enactment, such that only the legislative enactment is subjected to First Amendment analysis.

To take a concrete example, suppose a city has a general ordinance that states that anyone who wishes to hold activities involving more than 100 people in the central public park must apply for a permit, and that the permit must be granted if no prior activities are scheduled at the same time. An anti-abortion group then applies for and receives a permit to hold an anti-abortion rally at a specific time.²²⁰ In such cases, the established practice of the courts is to only conduct a First Amendment analysis of the *ordinance*; courts do not separately analyze the individual issuance of the *permit*. Even if the permit is content- or viewpoint-specific—if it specifically authorizes an anti-abortion rally—it will not be subjected to strict scrutiny because it will not be considered its own individual “law” that requires a separate First Amendment analysis. Rather, the validity of the permit will stand or fall with the ordinance under which it is issued. In the example above, the ordinance will be valid, and therefore so too will be the permit.²²¹

The argument in defense of exempting patents from First Amendment scrutiny, by this logic, is that patents are akin to the permit in the example. Like the permit, a patent is issued under the authority of a higher-level law, namely the Patent Act. Like the permit, a patent can be content specific at the level of the individual instrument. And again like the permit, a patent authorizes the holder to deliver favored speech while excluding others. Accordingly, or so the argument goes, the First Amendment validity of any individual patent should stand or fall with the Patent Act as a whole, and I do not contend that the Patent Act as a whole violates the First Amendment.

Two distinctions can be drawn between a patent and the permit in my example, such that First Amendment scrutiny should be applied to individual patents but not to individual permits. First, a permit is a grant of *permission* to the holder to engage in certain specified speech, but the permit itself does not impose any restrictions on the general public or prohibit members of the public from speaking—the prohibition comes from the higher-level legislative enactment. That is, if a city grants a permit to anti-abortion protesters to hold a rally in the park, the permit itself does not prohibit pro-choice counter-protesters from speaking in the park. Rather, it is the higher-level ordinance prohibiting anyone from holding activities in the park without a permit that prohibits the pro-choice counter-rally; the permit simply carves out an exception to the background restriction but does not impose any restrictions itself. Because it is only the city ordinance that imposes a restriction on speech, it is the ordinance that is subject to First Amendment analysis.²²² In contrast, a patent by its own terms confers upon the patent holder

220. Thanks to Geoffrey Stone for suggesting this example and the overall counterargument.

221. See *Heffron v. Int'l Soc'y for Krishna Consciousness, Inc.*, 452 U.S. 640, 649–50 (1981) (holding that a “first-come, first-served system” of permits is valid because it is narrowly tailored to serve purpose of crowd control and confers no discretion).

222. See *Arcara v. Cloud Books, Inc.*, 478 U.S. 697, 706–07 (1986) (general anti-prostitution law not invalid under First Amendment when applied to bookstore because “we have subjected such restrictions

the right to exclude others from performing activities described by the claims.²²³ A patent imposes a restriction on members of the public whereas a permit does not—in other words, a patent on anti-abortion rallies is a law that *prohibits* speech in a way that a permit allowing anti-abortion rallies is not.

Second, for a permit ordinance to be valid under the standard TPM test, the permit regime must contain “narrowly drawn, reasonable and definite standards for” when permits are to be granted and denied,²²⁴ such that individual permit decisions are simply direct non-discretionary consequences of the ordinance. That is, permit officials are supposed to be ministerial functionaries who simply act according to the dictates of fully specified rules and who are not supposed to exercise individual discretion in making decisions. In comparison, the standards provided by the Patent Act are not fully specified, narrowly drawn, or definite;²²⁵ the PTO in fact has large amounts of discretion to grant or deny patents and to shape the scope of patent claims.²²⁶ The PTO is not fairly characterized as a ministerial functionary and the scope of individual patents cannot fairly be characterized as simply the direct consequences of the rules laid out in the Patent Act with no room for individual judgment. Thus, even assuming purely ministerial executive actions that directly follow from a legislative enactment should be regarded as appendages not subject to separate First Amendment analysis,²²⁷ PTO decisions are not purely ministerial and do not fit this exception.

IV. POSSIBLE SOLUTIONS AND PROPOSALS

This Part will discuss possible solutions to patent law’s free speech problem. In general, the solutions can take one of two possible approaches. The first approach, discussed in section IV.A, is to directly apply conventional First Amendment scrutiny to patents, treating each patent claim as if it were its own statute or regulation, and invalidating those that fail the regular First Amendment doctrinal tests. The second approach, discussed in section IV.B, is to have doctrines within patent law to protect freedom of speech, such that direct First

to scrutiny only where it was conduct with a significant expressive element *that drew the legal remedy in the first place*” (emphasis added)).

223. 35 U.S.C. § 154(a) (2012) (“Every patent shall contain . . . a grant to the patentee, his heirs or assigns, of the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States . . .”).

224. *Niemotko v. Maryland*, 340 U.S. 268, 271 (1951).

225. *See Harries v. Air King Prods. Co.*, 183 F.2d 158, 162 (2d Cir. 1950) (opinion by Hand, C.J.) (describing the obviousness standard as “as fugitive, impalpable, wayward, and vague a phantom as exists in the whole paraphernalia of legal concepts”); Tun-Jen Chiang, *The Levels of Abstraction Problem in Patent Law*, 105 NW. U. L. REV. 1097, 1122–24 (2011) (explaining how the formal rules of patent law leave vast discretion over patent scope).

226. *See, e.g., Michael D. Frakes & Melissa F. Wasserman, Patent Office Cohorts*, 65 DUKE L.J. 1601, 1603–05 (2016) (finding that the identity of the examiner has great influence on the likelihood a patent will be granted).

227. *Cf. Hawkins v. Freeman*, 195 F.3d 732, 741 (4th Cir. 1999) (questioning “the premise that a ministerial executive act cannot ever be the proper target of a substantive due process claim; that such a claim must always be directed at whatever legislation imposed the duty”).

Amendment scrutiny becomes unnecessary because patent protection and free speech principles will no longer collide the way they do today.

As I will explain, conventional First Amendment scrutiny works best in the context of patent claims that facially restrict content, where the analogy between patent claims and statutes is strongest and where invalidating the content-restrictive claim poses few long-term problems. Regular First Amendment scrutiny becomes less workable when applied to patent claims that are facially neutral but that cover the means of speech—in other words, where the underlying problem is the potential for excessive ownership power and discriminatory enforcement—because regular First Amendment doctrine has no method of reducing patentee power or preventing discriminatory enforcement except by invalidating the patent, which is an inflexible remedy prone to overkill. Thus, in the context of facially neutral patents covering the means of speech, developing more flexible and precisely tailored free speech protections within patent law would be the preferable course as a theoretical and policy matter. That said, to the extent that patent law currently does not have much in the way of internal protection for free speech, a faithful application of well-established First Amendment principles leads to the conclusion that many patents today are unconstitutional. Applying direct First Amendment scrutiny to remove those patents—unless and until adequate internal protections for free speech within patent law are enacted—is both the constitutionally proper thing to do and may provide the political impetus for Congress to enact the necessary reforms.

A. DIRECT FIRST AMENDMENT SCRUTINY

The simplest and most conceptually straightforward approach to dealing with patent law's free speech problem is to apply conventional First Amendment scrutiny to patents. How this approach would operate should be easy for the reader to comprehend, because my analysis so far has been implicitly embodying it—the entirety of Part II provides a demonstration of how conventional First Amendment scrutiny applies to various types of patents. Patents that directly regulate speech content on their face—such as the '211 patent on advocacy e-mails—would be subject to strict scrutiny.²²⁸ Patents that are facially content-neutral but regulate the means of speech—such as patents on radio or television—would be subject to TPM scrutiny.²²⁹ Patents that do not implicate speech at all are, of course, not affected.

The benefit of this solution is not only that it is simple to understand, but also that a court can adopt the solution without going beyond the customary limits of the judicial role. That is, the whole thrust of my argument so far has been that a logical application of the Supreme Court's First Amendment precedent leads to the conclusion that patents that regulate speech are unconstitutional, and therefore the “true” state of the law *already is* that such patents are invalid, even if

228. See *supra* Section II.A.

229. See *supra* Section II.B.

nobody previously realized that this was the true state of the law. A court that applies First Amendment scrutiny to patents can therefore reasonably argue that it is simply “following precedent” rather than “making law.”²³⁰ A related benefit to such an approach is that importing First Amendment scrutiny into patent law (rather than creating new speech-protective doctrine within patent law such as a fair use defense) allows a court to avoid the work involved in constructing a new doctrinal edifice from scratch—a court would simply be laying well-established First Amendment doctrinal tests *on top of* the current requirements of patentability; it would not be *altering* the content of patent doctrine or the content of First Amendment doctrine.²³¹ In short, applying First Amendment scrutiny to patents directly is a “shovel-ready” solution that courts can adopt without the need for legislative intervention and without the need for extensive reconceptualization of the preexisting doctrinal fabric. It is the type of “minimalist” solution that courts in our common law legal system tend to favor.²³²

Thus far, I have only outlined the benefits of directly importing First Amendment scrutiny into patent law. And, as applied to patent claims that facially restrict speech according to content, that is all that needs to be said. A patent claim that facially restricts speech according to content is just like any other law that restricts speech according to content. It is wholly unconstitutional according to standard principles. It should be invalidated without ado—invalidation is not an overbroad remedy because there is no circumstance where a facially content-restrictive claim could be constitutionally enforced or applied.²³³ Because direct First Amendment scrutiny gets us to the proper result in a simple and

230. See RICHARD A. POSNER, *HOW JUDGES THINK* 41 (2008) (stating that “the judiciary’s ‘official’ theory . . . hypothesizes that judicial decisions are determined by ‘the law,’ conceived of as a body of preexisting rules found in canonical legal materials”); see also *Confirmation Hearing on the Nomination of John G. Roberts, Jr. to Be Chief Justice of the United States Before the S. Comm. on the Judiciary*, 109th Cong. 55–56 (2005) (statement of John G. Roberts) (“Judges are like umpires. Umpires don’t make the rules, they apply them.”).

231. See BENJAMIN N. CARDOZO, *THE NATURE OF THE JUDICIAL PROCESS* 149 (1921) (“[T]he labor of judges would be increased almost to the breaking point if . . . one could not lay one’s own course of bricks on the secure foundation of the courses laid by others who had gone before him.”); Richard A. Posner, *What Do Judges and Justices Maximize? (The Same Things Everyone Else Does)*, 3 *SUP. CT. ECON. REV.* 1, 22 (1993) (“[I]f judges considered every case afresh they would, if conscientious, have to work much harder in each case . . .”).

232. See Cass R. Sunstein, *Incompletely Theorized Agreements*, 108 *HARV. L. REV.* 1733, 1752 (1995) (“[U]se of large-scale theories by courts is usually problematic and understood as such, within the judiciary . . .”).

233. I am putting aside content restrictions that fall into one of the exceptions to the First Amendment. A patent on a new way to make threats of illegal violence would not violate the First Amendment. See *Virginia v. Black*, 538 U.S. 343, 359–60, 363 (2003) (upholding law banning threats of illegal violence). *But see* *Lowell v. Lewis*, 15 F. Cas. 1018, 1019 (C.C.D. Mass. 1817) (No. 8,568) (holding that illegal inventions are not patentable because they lack utility). My point here is that a facially content-restrictive claim is either *wholly* problematic in all its applications or (vanishingly rarely) *wholly* unproblematic if it falls within a First Amendment exception. This is different from how claims covering the means of speech are only partially problematic in that the concern there is that they may *sometimes* be discriminatorily enforced; one can easily imagine unproblematic enforcement of a content-neutral claim that one cannot imagine for a content-specific claim.

logically coherent manner, it works as a solution to the problem of facially content-restrictive patent claims.²³⁴

The same is not true for patent claims that are facially content-neutral, but which indirectly implicate free speech concerns because they cover a means of speech. The problem with patent claims on means of speech is not that such claims always restrict speech and always violate free speech principles; it is that the patent *might* confer excessive ownership power and *might* be discriminatorily enforced, and when those things occur there is a conflict with free speech principles. The conditional and qualified nature of the problem means that a legal doctrine that outright invalidated a claim whenever it covers a means for speech is prone to overinclusiveness: if not every patent claim covering a means of speech is problematic from a free speech perspective, then we should not automatically invalidate every patent claim covering a means of speech. If the real problem is excessive ownership power and discriminatory enforcement, then ideally we should be looking for tailored solutions that reduce the ownership power conferred by a patent and limit the ability to discriminatorily enforce a patent. It is blunt overkill to eliminate a patent altogether just because it *might* potentially be misused.²³⁵

Conventional First Amendment scrutiny is not capable of this kind of precise tailoring. As explained in section III.A, judicial review of the constitutionality of a patent is directed to the *PTO's decision to issue the patent*; a private patent owner's choices in enforcement do not constitute state action and cannot violate the First Amendment.²³⁶ As a logical matter, this means that conventional First Amendment scrutiny can only produce two outcomes: either the PTO's decision to issue a patent or claim is unconstitutional (in which case the patent or claim is invalid), or the PTO's decision to issue the patent or claim is constitutional and there is no other constitutional issue with the patent. There is no logical way to reach a conclusion that the PTO's decision to issue the patent was constitutional, but that a patent owner's discriminatory enforcement of the patent violates the First Amendment, because the patent owner's private choices in enforcement are not state action.²³⁷

234. A practical objection here might be that the PTO is not institutionally well-equipped to apply First Amendment doctrine. PTO examiners are trained in science and engineering, not the intricacies of constitutional law. But because strict scrutiny of content-restrictive claims will likely result in all of them being found unconstitutional, PTO examiners will not need to apply a particularly complicated doctrinal test if their task is limited to facial content-restrictions.

235. *Cf.* *United States v. Raines*, 362 U.S. 17, 22 (1960) (“[O]ne to whom application of a statute is constitutional will not be heard to attack the statute on the ground that impliedly it might also be taken as applying to other persons or other situations in which its application might be unconstitutional.”).

236. One authority to the contrary is *Shelley v. Kraemer*, which held private enforcement of racially exclusive covenants to constitute state action. 334 U.S. 1, 19–20 (1948). *Shelley* is widely understood as a unique case, and it has not been applied outside of the context of racial discrimination. *See Chemerinsky, supra* note 146, at 532 (“The Supreme Court . . . largely has refused to apply *Shelley*.”). Another exception is *Marsh v. Alabama*, 326 U.S. 501 (1946), but, as explained in section II.A.2, that exception is very narrow.

237. *See supra* notes 154–58 and accompanying text.

On a more practical level, locating a solution in the direct application of First Amendment law to patents would imply that PTO examiners form the first line of defense, insofar as the PTO would have an obligation to avoid issuing unconstitutional patents. But PTO examiners are ill-suited to apply complex First Amendment doctrine—they can only be realistically expected to perform this type of task in the easiest and most clear-cut cases. Asking PTO examiners to spot facially content-restrictive claims and then to deny such claims outright is not unreasonable. Asking PTO examiners to spot patents directed to a means of speech (versus patents with no speech implications) and then apply a three-part TPM test is unrealistic.²³⁸

Implicit within the prior paragraph is another point in favor of using internal patent law doctrines rather than First Amendment scrutiny to deal with the problem of patents directed to a means of speech. Specifically, First Amendment doctrine draws an important distinction between content-neutral laws targeted at a means of speech, and laws that are simply not targeted at speech at all. This distinction is best illustrated by *Arcara v. Cloud Books, Inc.*, which held that a prohibition on prostitution may be constitutionally applied to punish the owner of a bookstore where prostitution was taking place.²³⁹ The Court held that a ban on prostitution was not a law directed to a means of speech, and thus no First Amendment scrutiny of the law was required at all, even if application of the law in this case had incidental effects on speech by closing the bookstore.²⁴⁰ Because the law was targeted at prostitution and not at bookstores, it did not target a means of speech.

Although the distinction makes some intuitive sense, there are many borderline cases where the distinction is difficult to apply.²⁴¹ For example, is a computer a means of speech? If individual patents were to be subjected to direct First Amendment analysis, then both the PTO and, ultimately, courts must frequently determine whether a particular patent is targeted at a “means of speech” (such that it should be subjected to TPM scrutiny) or not. The Supreme Court has not provided much guidance on this question beyond telling us that prostitution is not a means of speech.²⁴² In contrast, as section IV.B will explain, my proposed fair use and misuse defenses do not require classifying patents as being targeted at

238. Though still more realistic than asking legislators to spot all the free speech issues that might ever arise with patents at the time of writing the Patent Act. See *supra* notes 160–66 and accompanying text. The limitation on PTO examiner capabilities is mainly a matter of economic resources (it would be expensive to send PTO examiners to law school to learn constitutional law). The limitation on legislator capabilities is a matter of intrinsic limitations on human foresight.

239. 478 U.S. 697 (1986).

240. *Id.* at 706–07 (“[W]e have subjected such restrictions to scrutiny only where it was conduct with a significant expressive element that drew the legal remedy in the first place . . . , or where a statute based on a nonexpressive activity has the inevitable effect of singling out those engaged in expressive activity”).

241. See generally Frederick Schauer, *Out of Range: On Patently Uncovered Speech*, 128 HARV. L. REV. FORUM 346, 347–49 (2015) (explaining that borderline cases between coverage and non-coverage are inevitable).

242. See *Arcara*, 478 U.S. at 705.

means of speech or not; they simply ask whether the patentee's enforcement is discriminatory or unfairly burdensome on the free flow of information. Thus, the vagueness of existing First Amendment doctrine on this classification question will not frustrate the analysis.

If we forcibly applied conventional First Amendment doctrine to content-neutral patents, then I think the logical application of existing First Amendment principles leads to the conclusion that the vast majority of patents on the means of speech—and there are many such patents, even if the contours of the category cannot be precisely delineated—are invalid. This is because of the doctrine that a law restricting the manner of speech is valid only if it has “narrowly drawn, reasonable and definite standards” for enforcement.²⁴³ Although the primary concern underlying this doctrine is the possibility of discriminatory enforcement, no actual discriminatory enforcement is required: a law regulating a means of speech that does not provide internal standards for enforcement is invalid on its face.²⁴⁴

Measured against this standard, existing patent law places virtually no limits on how a patent may be enforced, and so any patent that restricts a means of speech and does not specify its own criteria for enforcement²⁴⁵ would be invalid on its face according to the logic of the case law.²⁴⁶ This is by no means a good result—it is severely overinclusive as a policy matter. But the proper way to address this overinclusiveness problem is not to artificially carve out patents from regular First Amendment doctrine for no principled reason; the proper way to address this problem is to impose some limits on patents so that they no longer flunk regular First Amendment standards of review as a routine matter. The next section will discuss some avenues patent law could use to reduce the conflict with free speech principles.

B. FREE SPEECH PROTECTION WITHIN PATENT LAW

This section will discuss how patent law can develop internal doctrines that protect free speech, especially as applied to the problem of patents directed to a means of speech (internal doctrines are not necessary for direct content restrictions, because those patents can and should just be invalidated through strict scrutiny). Section IV.B.1 will first discuss patent law's existing doctrines that touch on the issue of free speech, and explain why these doctrines are inadequate to prevent conflict with the First Amendment. Sections IV.B.2 and IV.B.3 will then propose a fair use defense and a misuse defense, respectively, to address the overbroad suppression and discriminatory enforcement problems.

243. See *Niemotko v. Maryland*, 340 U.S. 268, 271 (1951).

244. See *City of Lakewood v. Plain Dealer Publ'g Co.*, 486 U.S. 750, 755–56 (1988).

245. A patentee could create binding criteria for enforcement through such methods as committing to license on fair, reasonable, and non-discriminatory (FRAND) terms. See Jay P. Kesan & Carol M. Hayes, *FRAND's Forever: Standards, Patent Transfers, and Licensing Commitments*, 89 IND. L.J. 231, 301 (2014) (arguing FRAND commitments should be understood to run with the patent and bind assignees).

246. See *Staub v. City of Baxley*, 355 U.S. 313, 325 (1958) (holding invalid “on its face” a law requiring permits to solicit members for organizations).

1. The Inadequacy of Patent Law's Existing Doctrines

a. The Printed Matter Doctrine

The most obvious doctrine relating to patent protection over speech is the printed matter doctrine, which states that the “mere arrangement of printed matter” is not entitled to any weight in analyzing novelty and non-obviousness.²⁴⁷ For example, if books (in the sense of a bound volume of paper) are already known in the prior art but nobody has previously written a Harry Potter book, then J.K. Rowling cannot obtain a patent on “a Harry Potter book” by arguing that the story of Harry Potter is new and non-obvious—the story of Harry Potter will be deemed to be a “mere arrangement of printed matter” and disregarded in the novelty analysis.²⁴⁸

At first glance, this doctrine would seem to make patents on speech—at least in the sense of facially content-restrictive claims—a moot concern. If expressive content (such as the story of Harry Potter) is disregarded in a novelty and non-obviousness analysis, then there would be no incentive to claim expressive content, and so facially content-restrictive claims would occur only if some incompetent patent attorney made a mistake in drafting. However, in practice, although the printed matter doctrine somewhat limits the prevalence of facially content-restrictive claims, it is inadequate to address patent law's free speech problem. The printed matter doctrine does not at all address the problem of facially content-neutral claims covering the means of speech,²⁴⁹ and even as to the problem of facially content-based claims, the printed matter doctrine is too narrow to fully address the problem.

The first reason why the printed matter doctrine does not solve the problem of facial content restrictions is because it is limited to information that is encoded and communicated in the form of pictures and words designed to be understood by reading or listening.²⁵⁰ The doctrine does not cover informational and expressive content that is encoded and communicated in some other way. For example, a door-knocker made in the shape of a Christian cross is expressive, but the shape of the cross is not printed onto anything, and the message it communicates is not designed to be understood by reading, so it is not considered printed matter.

The second reason why the printed matter doctrine imposes only a modest limit on patenting speech is because the Federal Circuit has developed an exception under which even something that is indisputably printed matter can still be

247. *In re Russell*, 48 F.2d 668, 669 (C.C.P.A. 1931).

248. *See id.* (holding arrangement of names in directory to be not patentably novel).

249. *See In re Distefano*, 808 F.3d 845, 851 (Fed. Cir. 2015) (holding that printed matter doctrine only relevant if “the content of the information” is explicitly claimed).

250. *See In re Lowry*, 32 F.3d 1579, 1583 (Fed. Cir. 1994) (“The printed matter cases ‘dealt with claims defining as the invention certain novel arrangements of printed lines or characters, useful and intelligible only to the human mind.’” (quoting *In re Bernhart*, 417 F.2d 1395, 1399 (C.C.P.A. 1969))). The Federal Circuit in *King Pharmaceuticals, Inc. v. Eon Labs, Inc.* significantly extended the printed matter doctrine to cover verbal communication. *See* 616 F.3d 1267, 1279 (Fed. Cir. 2010) (holding that a claim element of “informing” a patient of a drug's effect was printed matter). But even a generous reading of the case would still confine the printed matter doctrine to pictures and words.

entitled to patentable weight if the information content being claimed is “functionally related to the substrate.”²⁵¹ An illustration of how this exception works can be found in *In re Gulack*, which involved a patent on a circular band (such as a ring or wristband) with a number printed on the surface.²⁵² The number was such that when it was multiplied by an integer, the individual digits of the number “cycled.”²⁵³ Although the only novel facet of the ring was the identity of the number affixed thereto, the Federal Circuit held that the invention was patentable. The court reasoned that because printing the number on a circular band more vividly illustrated its looping nature, the printed content (the number) bore a functional relationship to the substrate (the wristband or ring).²⁵⁴ Although the *Gulack* case is, by itself, insignificant—few people are likely to care about a number printed on a wristband—the logic can be (and has been) extended to cover all sorts of information that produce some kind of functional result,²⁵⁵ such as computer software stored on disks and other mediums.²⁵⁶

The third reason against reliance on the printed matter doctrine is more amorphous but no less important: the Federal Circuit does not seem to like the doctrine and has cautioned against its “liberal use.”²⁵⁷ The printed matter doctrine is therefore widely regarded as a disfavored doctrine that is applied only rarely and in a narrow way.²⁵⁸

From the perspective that maximizing innovation is the patent system’s paramount virtue,²⁵⁹ and that patent law should err on the side of permissiveness in covering (and providing incentives for) inventions that might advance

251. *In re Gulack*, 703 F.2d 1381, 1385 (Fed. Cir. 1983).

252. *Id.* at 1382–84.

253. For example, the number 142,857 cycles when multiplied. If $x=142857$, then $2x=285714$, $3x=428571$, $4x=571428$, $5x=714285$, and $6x=857142$. Note that all of the multiples have the digits 1, 4, 2, 8, 5 and 7, and in the same order when arranged in a loop.

254. *In re Gulack*, 703 F.2d at 1386–87.

255. See Kevin Emerson Collins, *Semiotics 101: Taking the Printed Matter Doctrine Seriously*, 85 IND. L.J. 1379, 1388 (2010) (“[T]he printed matter doctrine does not govern the patentability of many inventions that are readily understood to be information with content . . .”).

256. See *In re Beauregard*, 53 F.3d 1583, 1584 (Fed. Cir. 1995) (dismissing printed matter challenge to software patents).

257. *In re Lowry*, 32 F.3d 1579, 1583 (Fed. Cir. 1994) (“[T]his court notes that *Gulack* cautioned against a liberal use of ‘printed matter rejections’”; *In re Gulack*, 703 F.2d at 1385 n.8 (“A ‘printed matter rejection’ under § 103 stands on questionable legal and logical footing.”)).

258. See Collins, *supra* note 255, at 1381 (“[T]he printed matter doctrine plays a marginal role, at best, in the common explanations of how the patent regime works”); Andrew F. Knight, *A Potentially New IP: Storyline Patents*, 86 J. PAT. & TRADEMARK OFF. SOC’Y 859, 863–64 (2004) (arguing that the printed matter doctrine “has been whittled away to an archaic common law has-been”); see also Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575, 1672 (2003) (“The Federal Circuit eliminated the long-standing rule against patenting business methods in 1998, and the related ‘printed matter’ doctrine is on uncertain footing as well.” (footnote omitted)).

259. See Lisa Larrimore Ouellette, *Patentable Subject Matter and Nonpatent Innovation Incentives*, 5 U.C. IRVINE L. REV. 1115, 1120–25 (2015) (“Many commentators agree that patentable-subject-matter doctrine is (or should be) based on the utilitarian question of whether patents on certain kinds of inventions provide a net benefit to society.”).

technological progress²⁶⁰—a perspective that patent lawyers are naturally inclined to take²⁶¹—the prevailing narrow approach to the printed matter doctrine makes sense. From the perspective that other values such as liberty and democracy matter more, and that content-based restrictions on speech are deeply threatening to democratic freedom—a perspective embedded in constitutional law but foreign to patent law—the limitations and exceptions that have been imposed on the printed matter doctrine make no sense and simply render it a too-permeable shield.

As a prescriptive matter, one could advocate changing the printed matter doctrine to make it less permeable and more speech protective.²⁶² But such an approach is more complicated and less effective than simply applying First Amendment scrutiny to content-restrictive claims.²⁶³ Even if expanded to cover all expression and not just characters and words, and even if the functionally-related-to-the-substrate exception were eliminated, the printed matter doctrine can only ever apply to patent claims that facially claim expressive content. There is no logical way to expand the printed matter doctrine to address the problem of content-neutral claims on means of speech. Given my argument in section IV.A that courts should find all explicitly content-restrictive claims categorically unconstitutional under strict scrutiny, there is little for an expanded printed matter doctrine to do. The only possible comparative advantage of an expanded printed matter doctrine over direct First Amendment scrutiny is that the PTO has experience applying the printed matter doctrine, whereas it has no experience applying First Amendment scrutiny. But since applying strict scrutiny to content-restrictive claims will almost always result in a conclusion that the claim is unconstitutional, it should not be difficult for the PTO to apply this categorical rule. The sum is that reforming the printed matter doctrine offers little advantage over direct First Amendment scrutiny, so the reform effort is not worth the effort.

b. Patentable Subject-Matter Exclusions

To the extent prior literature has addressed the tension between patent law and free speech, a common focus has been on the patentable subject matter doctrine. For example, Judge Mayer's concurring opinion in *Intellectual Ventures I LLC v. Symantec Corp.*, the only significant judicial treatment of the topic to date, argued

260. Cf. *In re Bergy*, 596 F.2d 952, 975 (C.C.P.A. 1979) (“[W]hen [something] is new and unobvious . . . we see no reason to deprive it . . . of the protection and advantages of the patent system by arbitrarily excluding it . . . on the sole ground that it is alive.”), *aff'd sub nom.* *Diamond v. Chakrabarty*, 447 U.S. 303 (1980).

261. See Peter S. Menell, *Forty Years of Wondering in the Wilderness and No Closer to the Promised Land: Bilski's Superficial Textualism and the Missed Opportunity to Return Patent Law to Its Technology Mooring*, 63 STAN. L. REV. 1289, 1305–06 (2011) (arguing that patent lawyers have a “patent-centric viewpoint” that favors more patents); Thomas, *supra* note 14, at 606–07 (“The patent canon . . . reflects a virtually unyielding faith in industrial progress and market mechanisms.”).

262. See Collins, *supra* note 255, at 1417 (arguing for “taking the printed matter doctrine seriously” and conceptualizing it as limiting “the incursion of patent protection into the representational processes of the human mind”).

263. See *supra* notes 230–32 and accompanying text.

that “[m]ost of the First Amendment concerns associated with patent protection could be avoided if this court were willing to acknowledge that *Alice* sounded the death knell for software patents.”²⁶⁴ In a similar vein, the petitioner in *Association for Molecular Pathology v. Myriad Genetics* argued that gene patents posed unique First Amendment problems that should be solved by deeming human genes non-patentable subject matter.²⁶⁵ And Dan Burk’s *Patenting Speech* article focuses on First Amendment concerns arising from the “admission of software into the canon of patentable subject matter,”²⁶⁶ though he does not seem to advocate resuscitating the exclusion of software from patentability. The implicit premise of the prior literature seems to be that the conflict between patent protection and First Amendment principles arises only in narrowly confined fields of technology such as software or genes, and that excluding such fields from patentability would accordingly resolve the conflict.

As I have explained, however, the problem that patents pose for free speech is not limited to narrow fields such as software or genes.²⁶⁷ To be sure, in the modern world of the Internet, many patents implicating speech concerns probably involve the use of computers, so an extremely broad exclusion of software patents—for example, a definition of “software patent” to cover every patent involving the operation of a computer—might significantly mitigate the tension between patent law and free speech principles (though even then it will not truly solve the problem). But hardly anyone advocates such a broad definition of “software patent” as to cover all patents involving the use of computers,²⁶⁸ and such a broad exclusion cannot reasonably be justified by free speech concerns when not every patent involving use of a computer will pose a threat to free speech. And if a “software patent” exclusion is defined more narrowly, such as applying only to patents that claim software code, then a software patent exclusion—or any other technology field exclusion such as an exclusion of gene patents—will only make a small dent in the universe of patents raising free speech issues. The sum is that field-of-technology exclusions are blunt instruments, and as a solution to patent law’s free speech problem they are either so over-inclusive as to be overkill, or so under-inclusive as to be ineffective. The literature that looks to patentable subject matter doctrine as a solution to patent law’s free speech problem, or at least as a historical explanation for why there was purportedly no free speech problem until recent times,²⁶⁹ is looking in the wrong place.

264. 838 F.3d 1307, 1325 (Fed. Cir. 2016) (Mayer, J., concurring).

265. Brief for Petitioners, *supra* note 12, at 55–58 (“The serious constitutional violation raised by these patent claims provides an additional reason for the Court to construe the statute to find the claims invalid.”).

266. Burk, *supra* note 10, at 160.

267. See *supra* notes 73–77 and accompanying text.

268. Cf. John R. Allison & Ronald J. Mann, *The Disputed Quality of Software Patents*, 85 WASH. U. L. REV. 297, 304 (2007) (“[T]here is no universally accepted definition of what a software patent is.”).

269. See Thomas, *supra* note 14, at 570 (“Unbound from technology . . . the potential impact of the patent law upon personal liberties is becoming more apparent and more worthy of concern.”).

c. The Implicit Functionality Mandate

In a recent article, Kevin Emerson Collins argues that patent law has an implicit “authorship screen” that limits the availability of patents on expressive content.²⁷⁰ Although Collins conceptualizes this authorship screen as policing the boundary between patents and copyrights and not as protecting freedom of speech from patent restraints,²⁷¹ it is a simple extension of his argument to see the authorship screen as serving this additional function as well.

As Collins concedes, however, “there is no authorship screen in black-letter patent law that announces itself as such.”²⁷² What Collins calls the “authorship screen” is not a distinct patent law doctrine but rather a hodgepodge collection of penumbras and emanations from other, more established, patent law doctrines. That is, Collins argues that patent law manages to somewhat limit—but not fully eliminate—patents on expressive content through a combination of patentable subject matter limits, the printed matter doctrine, and an implicit functionality mandate in the nonobviousness doctrine.²⁷³ The first two of these have already been discussed above, and they do limit the availability of speech patents to some extent—but *only* to some extent. I will focus here on the third part of Collins’ argument, regarding the existence of an implicit “functionality” requirement.

Collins argues that, in determining whether a purported invention is obvious in comparison to the prior art, courts implicitly attach a “functionality mandate”—specifically, that differences between the claimed invention and the prior art must go to the function, and not merely the appearance, of the thing in question.²⁷⁴ For example, Collins argues that a hammer with a wavy handle (when prior hammers had straight handles) would be considered obvious, because the wavy handle does not change the function or effectiveness of the hammer but only its appearance.²⁷⁵ In simplified terms, Collins’ conception of the functionality mandate appears to be a broader version of the printed matter doctrine—under the printed matter doctrine, differences in printed matter do not count toward non-obviousness, and in Collins’ implicit functionality mandate, aesthetic differences do not count toward non-obviousness. It should be emphasized that Collins is making a descriptive argument—he argues that the functionality mandate *already* exists, not merely that it should, and that this functionality mandate mostly works to keep expressive content out of patent law.

If the implicit functionality mandate were contended to be a hard rule of patent law, its existence would be easy to refute: there are many patents where the only difference from the prior art lies in appearance rather than function, such as the patents on cross-shaped door knockers and pumpkin-head bags described in

270. Collins, *supra* note 87.

271. *Id.* at 1608.

272. *Id.*

273. *Id.* at 1624–32.

274. *Id.* at 1627.

275. *Id.* at 1632.

section II.A.²⁷⁶ It is for this reason that Collins concedes that “the functionality mandate exists in contemporary patent law only as an advisory rule of thumb, at best,” and may not exist at all.²⁷⁷ Notwithstanding this concession, Collins argues that there is likely at least some soft version of the functionality mandate in practice, even if not in formal articulated doctrine, simply because he finds no other persuasive explanation for why the PTO database is not overflowing with content-restrictive claims on aesthetic expression.²⁷⁸ However, he does not consider non-legal explanations for why patents on aesthetic expression might be uncommon even if there are no legal restrictions on their obtainment²⁷⁹—such as that people might not have gotten the idea to apply for such patents, or that patents on expression are not often commercially valuable enough to warrant the expense of patent filing.²⁸⁰

My goal here is not to definitively negate the existence of an implicit functionality requirement; such a definitive refutation is not necessary. My point is only that, to the extent that one might contest my prior assertion that patent law today has inadequate doctrinal protections for freedom of speech, by arguing that patent law in fact has an implicit functionality mandate, this counterargument would rest on shaky foundations. First, it is at least questionable that the implicit functionality mandate even exists at all. Second, even if there is some implicit functionality mandate, it is at most a soft requirement that is haphazardly applied. Between the unstated nature of the requirement and its unreliable application in practice, the implicit functionality mandate, if it exists, is not something one would want to bank on to protect important rights.

2. A Fair Use Defense to Prevent Excessive Patentee Power

If patent law’s existing doctrines are inadequate to protect freedom of speech, especially as to the problem of content-neutral claims directed to the means of speech, what should be done? In the remainder of this Article, I will propose two doctrinal solutions, mapping to each of the discrete policy concerns implicated by content-neutral claims on means of speech. The overarching theme of my proposals is to mimic the three-part test for a valid TPM regulation, since the underlying policy objectives are the same, while tailoring them at the edges to better fit patent law’s needs. As discussed in section II.B, the three parts of the TPM test are: (1) the regulation must be narrowly drawn to serve an important government interest, (2) the regulation must leave open ample alternative avenues for speech,

276. See *supra* notes 73–77 and accompanying text.

277. Collins, *supra* note 87, at 1637.

278. *Id.* at 1637–38 (“Presuming that patent law has an aesthetic authorship screen and that aesthetic innovation is not flooding the patent regime, nonobviousness is the screen’s only viable statutory grounding.”).

279. See *id.* at 1608 (“[T]here is clearly law, somewhere, that, somehow, keeps most authorial innovation from infiltrating the patent regime.”).

280. Collins does initially mention the high cost of patent filing in describing differences between patents and copyrights. See *id.* at 1615–16. But he does not return to this point when considering explanations for the relative rarity of patents on expressive content.

and (3) the regulation must have clear standards for enforcement to prevent discriminatory application.²⁸¹ Here, I will argue—in a similarly tripartite structure—that (a) the existing criteria for patentability already seek to ensure that a patent is narrowly drawn to serve an important government interest, so additional doctrine is not necessary for this prong; (b) patent law needs a fair use defense to ensure that no patentee can fully monopolize the means of speech, and (c) patent law needs a more robust misuse doctrine to deter discriminatory enforcement.

On the first prong, it is fair to regard inducing the creation and disclosure of new and useful inventions as an important government interest. Furthermore, if the obviousness standard is achieving its theoretical purpose, then a claim should be found non-obvious only when the incentive of a patent is necessary to induce the creation and disclosure of the invention being patented.²⁸² In other words, if the existing criteria for patentability are functioning correctly, then a valid patent should already be narrowly drawn to serve the purpose of inducing new and useful inventions. Of course, the existing criteria for patentability do not function perfectly, and they cannot be expected to tailor each individual patent to the perfect degree of scope;²⁸³ but these practical real-life limitations would also hamper any new doctrine that attempted the same task.²⁸⁴ The point is that the existing requirements of patentability already ask essentially the same underlying theoretical question as the first prong of the TPM test, so it is not necessary to create a new doctrine to ask this question again.

On the second prong, however, patent law currently has no doctrine to ensure that a patent leaves open adequate alternative channels of communication so that a patentee does not have the power to unduly restrain the free flow of information. It is possible to regard the “abstract ideas” doctrine—which states that a patent may not “wholly pre-empt” an abstract idea²⁸⁵—as potentially serving this function, but impressing the doctrine into serving this function is problematic for three reasons. First, although the abstract idea doctrine is extremely malleable—the Supreme Court has never provided a definition of what constitutes an unpatentable “abstract idea”²⁸⁶—nothing in the semantic meaning of “abstract idea”

281. See *supra* notes 116–28 and accompanying text.

282. See Abramowicz & Duffy, *supra* note 129, at 1596.

283. See FED. TRADE COMM’N, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY 11 (2003) (“From a theoretical perspective, the ‘but for’ approach represents the right way to assess whether to grant a patent. It is not usually possible, however, to use a ‘but for’ approach to analyze whether individual patents should be granted.” (footnote omitted)); see also *supra* note 130 and accompanying text.

284. See Harold Demsetz, *Information and Efficiency: Another Viewpoint*, 12 J.L. & ECON. 1, 1 (1969) (warning against a false comparison between “an ideal norm and an existing ‘imperfect’ institutional arrangement”).

285. *Gottschalk v. Benson*, 409 U.S. 63, 72 (1972).

286. See Michael Risch, *Forward to the Past*, 2009 CATO SUP. CT. REV. 333, 336 (“[I]t seems that no one can figure out what constitutes abstract ideas, natural phenomena, or products of nature.”); see also *Bilski v. Kappos*, 561 U.S. 593, 612 (2010) (“The Court . . . need not define further what constitutes a patentable ‘process,’ beyond pointing to the definition of that term provided in § 100(b) and looking to the guideposts in *Benson*, *Flook*, and *Diehr*.”).

invokes free speech principles. To the extent there is any coherent understanding of the doctrine, it is commonly understood to be concerned about monopolistic patents that impose excessive *economic* costs,²⁸⁷ whereas my concern is with monopolistic patents that impede the *free flow of information*; both are concerns about excessive monopoly power, but they are concerns about different types of harms. Second, because the abstract idea doctrine is ostensibly housed within section 101 of the patent statute, it is supposed to be a categorical doctrine rather than a matter of totality-of-circumstances analysis.²⁸⁸ But whether a patent is so powerless as to leave open meaningful alternatives is an extremely fact-specific question that is not amenable to categorical lines. Third, the abstract idea doctrine is a validity question that is supposed to be static over time—a patent is either valid for its entire term, or it is void *ab initio*;²⁸⁹ it is never valid until it becomes too powerful. But whether a patent will restrain a lot of speech and whether alternative means of communication are adequate are questions whose answers change over time: in 1996, a monopoly on Internet fundraising for political campaigns would not restrict much speech; in 2016, it would. A static categorical validity doctrine such as the abstract idea doctrine is therefore inherently unsuited to the task of ensuring that patents leave open adequate alternative avenues for speech.²⁹⁰

What patent law needs is a doctrine that is fact-specific, dynamic over time, and can be reasonably understood to serve a speech-protective function. The fair use doctrine of copyright law possesses all of these characteristics. Fair use is notoriously fact-specific.²⁹¹ It is also dynamic because a court's finding of fair use contemplates only that a particular use at a particular point in time constitutes non-infringement; it does not invalidate the copyright, nor does it preclude the same defendant from being found to infringe in the future if circumstances materially change.²⁹² And the Supreme Court has repeatedly described fair use as

287. See *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 88 (2012) (“[T]he underlying functional concern here is a *relative* one: how much future innovation is foreclosed relative to the contribution of the inventor.”); Mark A. Lemley et al., *Life After Bilski*, 63 STAN. L. REV. 1315, 1346 (2011) (arguing that the abstract idea doctrine is about preventing claims that “reach too broadly and thereby threaten downstream innovation”).

288. See *Mayo*, 566 U.S. at 88–89 (“[O]ur cases have not distinguished among different laws of nature according to whether or not the principles they embody are sufficiently narrow. . . . [T]he cases have endorsed a bright-line prohibition . . .”). But see Tun-Jen Chiang, *The Rules and Standards of Patentable Subject Matter*, 2010 WIS. L. REV. 1353, 1385–90 (arguing that the abstract idea doctrine in fact functions as a totality-of-circumstances standard).

289. *Fresenius USA, Inc. v. Baxter Int'l, Inc.*, 721 F.3d 1330, 1346 (Fed. Cir. 2013) (“[C]ancelled claims were void *ab initio*.”).

290. See Katherine J. Strandburg, *Patent Fair Use 2.0*, 1 U.C. IRVINE L. REV. 265, 274–77 (2011) (arguing in favor of more reliance on *ex-post* doctrines to tailor patent rights to fact-specific circumstances).

291. See *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 577 (1994) (“[T]he statute, like the doctrine it recognizes, calls for case-by-case analysis.”).

292. D.R. Jones, *Law Firm Copying and Fair Use: An Examination of Different Purpose and Fair Use Markets*, 56 S. TEX. L. REV. 313, 337 (2014) (“[A] use that qualifies as a fair use at one time may no longer be a fair use in the future . . .”).

serving as copyright's internal free speech protection,²⁹³ such as to render direct First Amendment scrutiny unnecessary in the copyright context.²⁹⁴

Importing the fair use defense into patent law is not a new idea.²⁹⁵ There is an inherent slipperiness, of course, to defining what constitutes a “fair” use, and this indeterminacy objection forms the central criticism of the doctrine.²⁹⁶ I have little to add in terms of how fair use can be defined beyond what has been written on this topic in the copyright and patent literature.²⁹⁷ The one thing I will say is fair use as it currently operates serves many purposes, only one of which is to protect free speech and ensure that an IP owner cannot unduly suppress the flow of information within society.²⁹⁸ The multiplicity of purposes is one of the key reasons why the fair use defense in copyright law is incoherent and fuzzy.²⁹⁹ Because my argument for a fair use defense in patent law rests only on free speech grounds, courts invoking the defense as I have proposed it should only do so when a patentee's enforcement of a patent has the actual or threatened effect of restricting the flow of information in society, and not if the patentee's enforcement is considered distasteful for some other reason. For example, a patentee who holds a patent on a lifesaving vaccine and refuses to either manufacture the vaccine or license the patent to allow others to do so might be acting in a manner that is severely detrimental to social welfare, but he is not restricting the communication of any information, so another company that starts making the vaccine is not engaging in fair use as I am proposing the defense.³⁰⁰ A coherent purpose will not render the fair use defense clear or easy to apply in the patent context, but it helps make the application clearer and easier than otherwise.

3. Resurrecting the Misuse Doctrine to Deter Discriminatory Enforcement

The third prong of the TPM test formally asks whether a time, place, or manner regulation provides “narrowly drawn, reasonable, and definite standards” for

293. *Golan v. Holder*, 565 U.S. 302, 328 (2012) (quoting *Eldred v. Ashcroft*, 537 U.S. 186, 219 (2003)).

294. *Eldred*, 537 U.S. at 221.

295. See, e.g., Lorelei Ritchie de Larena, *What Copyright Teaches Patent Law About “Fair Use” and Why Universities Are Ignoring the Lesson*, 84 OR. L. REV. 779 (2005); O'Rourke, *supra* note 7; Strandburg, *supra* note 290, at 293.

296. See, e.g., *Princeton Univ. Press v. Mich. Document Servs., Inc.*, 99 F.3d 1381, 1392 (6th Cir. 1996) (en banc) (“Fair use is one of the most unsettled areas of the law.”).

297. See generally Wendy J. Gordon, *Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and its Predecessors*, 82 COLUM. L. REV. 1600 (1982) (providing the theory of fair use as a remedy for market failures); Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1110 (1990) (advocating a utilitarian balancing where “the use must be of a character that serves the copyright objective of stimulating productive thought and public instruction without excessively diminishing the incentives for creativity”); O'Rourke, *supra* note 7, at 1203–11.

298. See Lloyd L. Weinreb, *Fair's Fair: A Comment on the Fair Use Doctrine*, 103 HARV. L. REV. 1137, 1140 (1990) (“Rather than being a provision intended solely to fulfill the copyright scheme in special circumstances, fair use has a more multiform function . . .”).

299. See Samuel L. Bray, *On Doctrines that Do Many Things*, 18 GREEN BAG 2D 141, 141 (2015) (“It often happens that a scholar will criticize a legal doctrine because it serves multiple purposes and is therefore incoherent.”).

300. See de Larena, *supra* note 295, at 786–87.

enforcement. The reason for this requirement is that, without clear standards for enforcement, there is a risk that a facially content-neutral speech regulation would be discriminatorily enforced against disfavored content or viewpoints.³⁰¹

As explained in section IV.A, blindly importing the third prong of the TPM test into patent law is deeply problematic because it will result in the wholesale invalidation of almost all patents on means of speech. What my proposal seeks to do is to address the underlying policy concern—preventing discriminatory enforcement—without the overkill that would accompany a direct application of First Amendment TPM scrutiny. The most obvious doctrinal home for a limit on patentee enforcement rights is the misuse doctrine.

By way of background, patent law gives a patentee almost unlimited control over how a patent is used and enforced.³⁰² The primary exception is the misuse doctrine, which states that a patent that is “misused” becomes unenforceable.³⁰³ Unsurprisingly, the entire question turns on what activities constitute “misuse” and how to figure this out.³⁰⁴ Because courts have not to-date managed to develop a clear theory to answer this question,³⁰⁵ they have been reluctant to apply the misuse doctrine, with the result that the misuse doctrine is largely a dead letter.³⁰⁶ The prevailing sentiment is well encapsulated by the Federal Circuit’s en banc decision in *Princo Corp. v. U.S. International Trade Commission*: “Because patent misuse is a judge-made doctrine that is in derogation of statutory patent rights against infringement, this court has not applied the doctrine of patent misuse expansively.”³⁰⁷

301. See *Cox v. Louisiana*, 379 U.S. 536, 557 (1965).

302. *Cont’l Paper Bag Co. v. E. Paper Bag Co.*, 210 U.S. 405, 424 (1908) (stating that a patent is the inventor’s “absolute property”); *Radio Corp. of Am. v. Hygrade Sylvania Corp.*, 10 F. Supp. 879, 883 (D.N.J. 1934) (“Whether the refusal to license is based on a commendable or odious reason is immaterial. The law allows the inventor absolute property in his invention.”).

303. *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1372 (Fed. Cir. 1998) (“[A] holding of misuse renders the patent unenforceable until the misuse is purged; it does not, of itself, invalidate the patent.”).

304. See *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700, 704 (Fed. Cir. 1992) (“The concept of patent misuse arose to restrain practices that did not in themselves violate any law, but that drew anticompetitive strength from the patent right, and thus were deemed to be contrary to public policy.”); see also Christina Bohannon, *IP Misuse as Foreclosure*, 96 IOWA L. REV. 475, 476 (2011) (“[T]he doctrine lacks coherence and certitude in determining the types of practices that should be condemned and why.”).

305. See 6A DONALD S. CHISUM, *CHISUM ON PATENTS* § 19.04 (2018) (“[T]he absence of a clear and general theory for resolving the problem of what practices should be viewed as appropriate exercises of the patent owner’s statutory patent rights.”).

306. See *USM Corp. v. SPS Techs., Inc.*, 694 F.2d 505, 510 (7th Cir. 1982) (stating that, because “taken seriously [the misuse doctrine] would put all patent rights at hazard,” “in application the doctrine has largely been confined to a handful of specific practices”); see also L. Peter Farkas, *Can a Patent Still Be Misused?*, 59 ANTITRUST L.J. 677, 686 (1991) (answering the question in the title with, “barely, and perhaps not for long”); Robert J. Hoerner, *The Decline (and Fall?) of the Patent Misuse Doctrine in the Federal Circuit*, 69 ANTITRUST L.J. 669 (2001) (describing the Federal Circuit’s narrowing of misuse doctrine); David S. Olson, *First Amendment Based Copyright Misuse*, 52 WM. & MARY L. REV. 537, 540 (2010) (stating that patent misuse is “in a state of inevitable decline”).

307. 616 F.3d 1318, 1321 (Fed. Cir. 2010) (en banc); see also Thomas F. Cotter, *Misuse*, 44 HOUS. L. REV. 901, 903 (2007) (providing an economic analysis of misuse doctrine and arguing it should be “safe, legal, and rare”).

As it currently stands, the misuse defense is applied only to categories of cases where courts have previously—in a bygone era where judges felt freer to invent non-statutory limitations on patent rights—found misuse,³⁰⁸ such as where a patentee licenses the patent for a term beyond the expiration date of the patent,³⁰⁹ or calculates royalties based on a licensee’s total sales from both patented and unpatented products.³¹⁰ Because there is no recognized case holding discriminatory patent enforcement against particular defendants based on the content or viewpoint of their speech to be misuse, any descriptive account of current law must concede that the misuse defense does not currently apply to such a situation.

There is no reason in principle, however, why the misuse doctrine cannot be changed to make it such that discriminatory enforcement of a patent based on a defendant’s speech content or viewpoint would be deemed to be misuse. A patentee who attempted to discriminatorily enforce his patent would then find the patent unenforceable, alleviating the First Amendment concern. An important point here is that my argument for a misuse defense in situations of discriminatory enforcement has a clear underlying theory: the patentee should be stopped from enforcing his statutory patent rights, not merely because some judge subjectively thinks that such enforcement is a bad idea, but because the patentee is enforcing his patent rights in a manner contrary to free speech principles that are enshrined in the First Amendment (even if the First Amendment itself does not directly forbid such discriminatory enforcement due to the state action requirement). The presence of a theory allows courts to better answer the challenge of justifying judicial imposition of limits on statutorily-created patent rights³¹¹—the limits are being imposed to vindicate the constitutional value of free speech, not simply as a raw imposition of a judge’s personal policy preferences.

An objection to this proposal might be that, in penalizing patentees for engaging in discriminatory enforcement, I am denying them their own First Amendment rights. For example, a devout Christian owner of a patent on a cross-shaped door-knocker might understandably wish to license the patent only to Christians, and might plausibly be able to argue that compelling him to license the patent to non-Christians amounts to coerced speech by sending a message of endorsement of those non-Christians.³¹² My response is that nothing in my proposal requires patentees to affirmatively license to or otherwise endorse entities whose views they find distasteful—all my proposal requires is that they *not file infringement suits* against disfavored entities on a discriminatory basis. Although

308. See *C.R. Bard*, 157 F.3d at 1373 (“M3 Systems did not propose any of the classic grounds of patent misuse [T]he body of misuse law and precedent need not be enlarged into an open-ended pitfall for patent-supported commerce.”).

309. See *Brulotte v. Thys Co.*, 379 U.S. 29 (1964).

310. See *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100 (1969).

311. See ALEXANDER M. BICKEL, *THE LEAST DANGEROUS BRANCH: THE SUPREME COURT AT THE BAR OF POLITICS* 16 (1962) (“The root difficulty is that judicial review is a counter-majoritarian force in our system.”).

312. Cf. *Masterpiece Cakeshop, Ltd. v. Colo. Civil Rights Comm’n*, 138 S. Ct. 1719, 1728 (2018) (addressing, but not resolving, this type of “compelled endorsement” argument).

the difference between an affirmative license and abstention from filing suit is largely symbolic,³¹³ the symbolism makes all the difference in the world when the issue is whether the patentee is being compelled to communicate an unwanted symbolic message. Because my proposal requires the patentee to take no actions whatsoever, it does not compel patentee speech and does not violate their First Amendment rights.

A reader may ask why I argue for a misuse defense to address the problem of discriminatory enforcement rather than simply relying on the fair use defense outlined previously. The difference between a misuse defense and a fair use defense is that a finding of misuse has broader collateral effects on the enforceability of the patent. As the terminology is generally understood in intellectual property law, a *misuse* defense renders the entire intellectual property right unenforceable, not only against a particular defendant in a particular case but against all defendants and in all cases. In contrast, a *fair use* defense is a good-for-one-ride-only ticket, relieving a particular defendant of liability in a particular case but extending no further. A misuse defense therefore has a punitive element—it is designed to deter a patentee from engaging in the behavior that the law regards as misuse.³¹⁴ As applied to the problem of overbroad suppression, a misuse defense is inappropriate because the patentee is not really engaging in any behavior that patent law should seek to deter—the problem is the PTO’s *conferral* of an overbroad right rather than the patentee’s choices in how to exercise the right (a patentee demanding high prices from everyone to use the Internet would create a problem of excessive suppression of speech, but it is difficult to argue that any patent system should find fault with patentees charging as much as they can), and a fair use defense helps narrow down the right conferred by imposing case-by-case exceptions. As applied to the problem of discriminatory enforcement, however, a misuse defense is more appropriate because we are ultimately trying to deter patentees from engaging in discriminatory enforcement, and the punitive element of a misuse defense provides this deterrence in a manner that a fair use defense does not.

CONCLUSION

In his article arguing that copyright violated the First Amendment, Jed Rubinfeld posed the *reductio ad absurdum* that, if there is no First Amendment limitation on copyright, then there would be “no First Amendment problem with, say, a statute granting Microsoft the exclusive right to use English on the Internet.”³¹⁵ As an argument about copyright, the *reductio ad absurdum* fails, because no copyright can broadly cover all use of English (or any other language)

313. See *TransCore, LP v. Elec. Transaction Consultants Corp.*, 563 F.3d 1271, 1275 (Fed. Cir. 2009) (“[A] non-exclusive patent license is equivalent to a covenant not to sue . . .”).

314. See Mark A. Lemley, Note, *The Economic Irrationality of the Patent Misuse Doctrine*, 78 CALIF. L. REV. 1599, 1614 (1990) (“In essence, then, the doctrine punishes patentees for choosing to misuse their patents.”).

315. Rubinfeld, *supra* note 4, at 30.

on the Internet.³¹⁶ What Rubinfeld might not have realized is that his *reductio ad absurdum* precisely describes not only the potential but the reality of patent law. Samuel Morse not only could, but *did*, obtain a legally granted exclusive right to use Morse Code over telegraphs.³¹⁷

The existing literature on the interaction between intellectual property law and the First Amendment almost always operates with the explicit or implicit assumption that patent law has no free speech issues. This assumption is not only wrong but backwards. Far from being no threat to free speech, patent law poses a greater threat to free speech than copyright law, both because patent protection is inherently stronger than copyright protection, and because patent law has developed none of the internal protections for free speech that copyright law has. The dominance of copyright law in the IP-and-First-Amendment conversation—and the near-total absence of patent law from that discussion—should be recalibrated. This Article is an attempt to start that recalibration.

A simple but blunt solution to the issue would be to simply apply First Amendment scrutiny to patents. Although this solution has the benefit of ease—courts could (and as a matter of logic should) implement it tomorrow if they wished—it has the downside of overinclusiveness, in that direct scrutiny and invalidation is only really appropriate for the small set of patents that make facial content-based claims. To avoid the logical conclusion that broad swaths of additional patents covering the means of speech are likewise invalid, it behooves patent law to develop internal protections so as to remove the present conflict with First Amendment law.

316. See 17 U.S.C. § 102(b) (2012) (precluding copyright protection for any “procedure, process, system, [or] method of operation”).

317. U.S. Patent No. RE 117 (granted June 13, 1848).