COPYRIGHT REFORM AND THE TAKINGS CLAUSE

Over the last fifteen years, there has been a marked uptick in scholarly and popular calls for the reform, or even the replacement, of the copyright system. Notable academic proposals include reintroducing copyright formalities (like mandatory registration with the Copyright Office), shortening the copyright term, and replacing copyrights with a system of rewards for authors. Politicians have also entered the mix: in 2012, a House Republican study group proposed several fairly radical reforms (which were quickly withdrawn).

Today, the prospects for reform are uncertain. But if they ever do become law, many reforms would have to be applied to existing copyrights to fully realize their ambitions, thus having a retroactive effect on current copyright holders. Take two such reforms: shortening the copyright term and reintroducing formalities. One purpose animating both is to place older works (especially so-called orphan works, whose owners are hard to locate) into the public domain sooner, thus preventing tangles of copyright entitlements from ensnaring the distribution, archiving, and creative reuse of those works. The current copyright term is the life of the author plus seventy years; if these reforms were applied only to future works, they would take an exceedingly long time to achieve their goals.

Applying copyright reforms to existing copyrights raises difficult constitutional questions. This Note will consider the constitutionality of three reforms under the Supreme Court’s takings jurisprudence: shortening the copyright term, eliminating authors’ termination rights, and reintroducing copyright formalities. However, the Note’s conclu-
sions are necessarily tentative for two reasons. First, its analysis is incomplete because it does not consider the Due Process Clause. Second, and probably more importantly, the Court’s takings jurisprudence is notoriously uncertain even as applied to real property, let alone copyrights.

The question is particularly hard because the Takings Clause implications of these particular reforms are largely unexplored. Copyright scholars have briefly discussed takings issues surrounding other reforms and have expressed concern that applying Takings Clause scrutiny to intellectual property might inhibit legal change. Several scholars have addressed the issue of whether government infringement of patents and copyrights is a taking. Finally, in the aftermath of Eldred v. Ashcroft and Golan v. Holder (which upheld Congress’s power, respectively, to retroactively extend the copyright term and to “restore” copyrights in certain foreign works that were in the public

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9 This omission is largely due to space limitations, but it may not be very significant. Copyrights are property interests protected by the Takings Clause. See infra section II.B, pp. 981–83. The Due Process Clause, which guards only against the arbitrary and irrational retroactive impairment of private vested rights, Nat’l R.R. Passenger Corp. v. Atchison, Topeka & Santa Fe Ry. Co., 470 U.S. 451, 472 (1985); Usery v. Turner Elkhorn Mining Co., 428 U.S. 1, 15 (1976), probably offers no more protection than the Takings Clause would for retroactive impairment of property rights. In fact, there is some doubt whether substantive due process offers any additional protection where the Takings Clause applies. See Stop the Beach Renourishment, Inc. v. Fla. Dep’t of Envtl. Prot., 130 S. Ct. 2592, 2606 (2010) (plurality opinion).


11 E.g., FISHER, supra note 4, at 249 (arguing that there would be no Takings Clause problem for a reward system because it would provide just compensation to existing authors).


domain), there has been some online commentary asking whether Congress could, consistent with the Takings Clause, reverse itself.\footnote{16 Brett Bellmore, Comment to Deven Desai, Public Domain? We Ain't Got No Public Domain, CONCURRING OPINIONS (Jan. 3, 2014, 8:00 AM), http://www.concurringopinions.com/archives/2014/01/public-domain-we-aint-got-no-public-domain-we-dont-need-no-public-domain-i-dont-have-to-show-you-any-stinkin-public-domain.html/comment-page-1#comment-87159 [http://perma.cc/M3RB-ASFC]; John Holbo, Copyright Contraction, CROOKED TIMBER (Mar. 12, 2006), http://crookedtimber.org/2006/03/12/copyright-contraction [http://perma.cc/M8H7-ADDX]. Justice Stevens, dissenting in \textit{Eldred}, suggested that the answer was no: “The fairness considerations that underlie the constitutional protections against \textit{ex post facto} laws and laws impairing the obligation of contracts would presumably disable Congress from making such a retroactive change in the public’s bargain with an inventor without providing compensation for the taking.” 537 U.S. at 226 (Stevens, J., dissenting).}

This Note will proceed in four parts. Part I gives an overview of Takings Clause jurisprudence. Part II argues that copyrights are “property” within the meaning of the Takings Clause, but a form of property enjoying less powerful protection than real property does and which should not be subject to per se rules. Part III considers the Takings Clause implications of shortening the copyright term. It argues that shortening the copyright term is probably constitutional, provided that Congress allows for a “grace period”: that is, a minimum period that every existing copyright will last after the reform legislation is implemented. Part IV considers two other potential reforms — eliminating termination rights and reintroducing copyright formalities — and concludes that both are constitutional.

I. THE TAKINGS CLAUSE

The Fifth Amendment provides that “private property [shall not] be taken for public use, without just compensation.”\footnote{17 U.S. CONST. amend. V.} The usual justification for this provision is fairness: government should not require “some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole.”\footnote{18 Armstrong v. United States, 364 U.S. 40, 49 (1960).} This Part provides an overview of relevant Takings Clause jurisprudence, focusing on two issues: what counts as “property” and when is it “taken”?\footnote{19 This Note will not discuss the “public use” requirement. When Congress limits copyright entitlements, those rights fall into the public domain — surely a public use.}


The Constitution itself does not define “property.” All property interests protected by the Fifth Amendment are created and defined by some “independent source such as state law.”\footnote{21} But even though the Constitution does not create any property interests, constitutional
standards determine which rights are protected as “property” by the Takings Clause. The Court has extended Takings Clause protection to a range of property interests, including interests in real property (fee simple estates, leaseholds, easements, and mortgages), personal property (and liens on personal property), and intangible property (such as the right to retain the interest earned on principal and executory rights under a valid contract). And the Court recognized trade secrets as property in Ruckelshaus v. Monsanto Co.

The Takings Clause does not extend equal protection to each form of property it recognizes. Physical property is at the historical core of Takings Clause protection, and within that category the Court has extended stronger protection to real property than to personal property.

31 United States ex rel. Tenn. Valley Auth. v. Powelson, 319 U.S. 266, 279 (1943) (“Though the meaning of ‘property’ as used in . . . the Fifth Amendment is a federal question, it will normally obtain its content by reference to local law.”).


40 407 U.S. 986 (1984); see id. at 1003–04.


42 See Lucas, 505 U.S. at 1027–28 (citing Allard v. Allard, 444 U.S. 51, 66–67 (1979)).

43 LAITOS, supra note 22, § 9.02, at 9-5 (Supp. 2014) (noting that some rights of ownership, like the right to exclude, are more heavily protected than others, like the right to make the most profitable use of one’s land).


45 See Babbit v. Youpee, 519 U.S. 234, 244 (1997); Hodel v. Irving, 481 U.S. 704, 716–17 (1987). Compare Irving, 481 U.S. at 717 (holding that a law abrogating the right to pass on property was unconstitutional), with Allard, 444 U.S. at 65–66 (“At least where an owner possesses a full ‘bundle’ of property rights, the destruction of one ‘strand’ of the bundle is not a taking, because the aggregate must be viewed in its entirety.”).

Not all legal rights and privileges amount to “property.” A mere expectancy (for example, the possibility of renewing a lease without a legal right of renewal) is not a property interest.\(^{37}\) Similarly, the mere fact that a person enjoys some legal benefit does not entitle the person to continue enjoying it.\(^{38}\) And a property owner has no right to limitations that inhere in the title (including those imposed by preexisting regulations or background principles like nuisance law).\(^{39}\)

### B. When Is Property “Taken”?

1. **Ways of Taking: Condemnatory, Physical, and Regulatory.** — A traditional taking by eminent domain occurs when the government acquires legal title to land by bringing a condemnation action. The other two ways of taking are forms of government interference with property that entitle the landowner to compel compensation (by an “inverse condemnation” action, so named because the landowner sues the government instead of vice versa).\(^{40}\) The first, the physical taking, occurs when the government physically invades property, causing “a direct and immediate interference with the enjoyment and use of the land.”\(^{41}\)

The other type is the regulatory taking. Such takings may occur when government regulations work a significant deprivation of property rights. The Court first recognized regulatory takings in *Pennsylvania Coal Co. v. Mahon.*\(^{42}\) The Court, speaking through Justice Holmes, noted: “Government hardly could go on if to some extent values incident to property could not be diminished without paying for every such change in the general law.”\(^{43}\) But if a regulation goes “too far,” there is a taking.\(^{44}\)

2. **Modes of Analysis: Per Se Takings and Penn Central.** — When does the government’s interference with private property become a taking? The Supreme Court has articulated two distinct modes of...

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\(^{41}\) United States v. Causby, 328 U.S. 256, 266 (1946). Nonetheless, not every physical invasion amounts to a taking: a merely transitory invasion, akin to a common law trespass, may not amount to a taking at all. Hendler v. United States, 952 F.2d 1364, 1377 (Fed. Cir. 1991); see Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 428 (1982). “Our truckdriver parking on someone’s vacant land to eat lunch is an example.” *Hendler*, 952 F.2d at 1377.

\(^{42}\) 260 U.S. 393 (1921); see Lucas, 505 U.S. at 1014. The original understanding of the Takings Clause probably did not extend to regulatory takings. See *Treasur*, *supra* note 31, at 782.

\(^{43}\) *Pa. Coal*, 260 U.S. at 413.

\(^{44}\) *Id.* at 415.
analysis, one categorical and the other ad hoc. Within the categorical analysis, two types of government interference are considered per se takings and always require just compensation. In *Loretto v. Teleprompter Manhattan CATV Corp.*,\(^45\) the Court held that any permanent physical occupation of land, no matter how small, is a taking.\(^46\) And in *Lucas v. South Carolina Coastal Council*,\(^47\) the Court held that a regulation is a per se taking if it “deprive[s] a landowner of all economically beneficial uses.”\(^48\)

In all other cases, the Court applies the balancing test articulated in *Penn Central Transportation Co. v. New York City*\(^49\) to determine whether a taking has occurred. The three relevant factors are (1) the “economic impact of the regulation,” (2) the interference with the interestholder’s “distinct investment-backed expectations,” and (3) “the character of the governmental action.”\(^50\) This third factor considers the severity of the invasion along with its public purpose.\(^51\)

### C. The Segmentation Problem

Under either the *Lucas* per se rule or the *Penn Central* standard, it is necessary to determine the size of the owner’s loss as a fraction of the property’s value. The critical step is to identify the “denominator” of this fraction, the value of the relevant parcel. The Supreme Court has insisted that the appropriate denominator is “the parcel as a whole.”\(^52\) This statement captures the intuition that the property should not be artificially divided to exaggerate the seriousness of the taking, but otherwise sheds little light on just what the “parcel” is. *Lucas* suggested in dictum that “how the owner’s reasonable expectations have been shaped by the State’s law of property” may provide an answer.\(^53\) But even this suggestion remains frustratingly open-ended and abstract.

The problem is complicated further by the fact that the Court does seem sometimes to have allowed property to be divided for Takings

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\(^{45}\) 458 U.S. 419.

\(^{46}\) *See* id. at 426.\(^\)

\(^{47}\) 505 U.S. 1003.

\(^{48}\) *Id.* at 1018. The Court limited the rule to real property, explicitly excluding personality. *See id.* at 1027–28.


\(^{50}\) *Id.* at 124.

\(^{51}\) *See id.* (“A ‘taking’ may more readily be found when the interference with property can be characterized as a physical invasion by government than when interference arises from some public program adjusting the benefits and burdens of economic life to promote the common good.” (citation omitted)).


\(^{53}\) *Lucas*, 505 U.S. at 1016 n.7.
Clause purposes. And it has done so along three separate dimensions: space, time, and interest. In *Pennsylvania Coal*, the Court treated the subsurface rights alone as the relevant parcel, thus effectively segmenting the property spatially into surface and subsurface. In another case, the Court seemed to segment property by time: when considering just compensation for a temporary occupancy of a leasehold, the Court insisted on using the market value of a short-term lease rather than a share of the tenant’s longer lease. Finally, the Court has also suggested that interference with a single key interest (such as the right to pass by will and intestacy or the right to exclude) can be enough to give rise to a taking.

Nonetheless, the modern trend is to avoid such segmentation in regulatory takings cases. In *Penn Central*, the Court refused to treat the “air rights” above Grand Central Station as a separate parcel and thereby divide the property spatially; instead, the Court considered whether New York City’s landmark law worked a taking by considering its effect on the entire property. Similarly, the Court has resisted temporal segmentation: it has refused to extend the *Lucas* rule to cover temporary regulatory takings, which would effectively allow the owner to divide the property into leaseholds for takings purposes. And the Court has usually insisted that property be seen as a bundle of interests, in which the loss of a single stick does not amount to a taking.

II. COPYRIGHTS AS “PROPERTY”

This Part argues that copyrights are “property” for purposes of the Takings Clause. It begins by briefly describing what copyrights are. It then makes the case that copyrights are, in fact, “property.” However, it also argues that copyrights should enjoy relatively meager protection under the Takings Clause. For this reason, applying per se takings rules to copyrights would be inappropriate.

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54 See STEVEN J. EAGLE, REGULATORY TAKINGS § 7-7(e)(2)–(3) (4th ed. 2009).
58 See EAGLE, supra note 54, § 7-7(c). However, *Loretto* established spatial segmentation as the rule in cases of permanent physical occupation. See *Loretto* v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 426 (1982).
A. The Nature of Copyright

Under U.S. law, a copyright is a bundle of federal statutory rights over a creative work, or “original work of authorship.” The creative work is an abstraction that must always be kept separate from individual copies that embody the work. The principal rights are listed in 17 U.S.C. § 106, including the exclusive rights to reproduce the work and to create derivative works. These rights vest initially in the author and can (separately or together) be sold, passed by will or intestacy, licensed, and used as collateral. Transfers may be recorded with the Copyright Office, and priority is governed by a modified race-notice statute. At one time, authors had to comply with certain formalities (such as a printed notice on the work and registration with the Copyright Office) to receive protection, but that is no longer the case.

In the nineteenth century, the labor-desert theory (which says that copyrights are authors’ just rewards for their labor) was the leading justification for copyright, but it has become less influential. Today, the dominant justification for copyright law is economic. Under the economic theory, creative works are public goods: they are nonexcludable (it is hard to prevent someone else from making copies of a work) and nonrivalrous (many people can enjoy the same work at once because it can be copied). In the absence of legal protection, it would be more difficult to recoup the time, effort, and money spent making a work because competition would reduce the unit price to the marginal cost of producing the last copy made. As a result, a subop-

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63 Cf. id. § 201 (“Ownership of a copyright, or of any of the exclusive rights under a copyright, is distinct from ownership of any material object in which the work is embodied.”).
64 Id. § 201(a).
65 Id. § 201(d)(1).
66 See id. § 101 (defining a “transfer of copyright ownership” to mean “an assignment, mortgage, exclusive license, or any other conveyance, alienation, or hypothecation of a copyright or of any of the exclusive rights comprised in a copyright”).
67 Id. § 205.
69 See, e.g., Wheaton v. Peters, 33 U.S. (8 Pet.) 591, 657 (1834) (“The argument that a literary man is as much entitled to the product of his labour as any other member of society, cannot be controverted.”); id. at 682 (Thompson, J., dissenting) (“This act recognizes in the fullest and most unqualified manner, the natural right which an author has to the productions and labour of his own mind.”).
70 Cf. Feist Publ’ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 354 (1991) (rejecting the “sweat of the brow” doctrine (internal quotation marks omitted)).
72 See Fisher, supra note 4, at 199–200.
timal number of creative works would be produced. The copyright system provides the legal tools to render creative works excludable, thereby incentivizing the creation of those works.

The tradeoff is that the copyright holder has by necessity acquired market power that results in higher prices for consumers; some consumers are priced out of the market, producing a deadweight loss.\(^{74}\) Thus, the economic theory views copyright as a necessary evil. Copyright entitlements provide necessary incentives for the production of creative works, but are also harmful because they raise the marginal cost of copies of those works. The economic view thus helps explain the constitutional mandate that copyrights be for “limited Times.”\(^{75}\) The copyright term should last long enough to provide an adequate incentive for creativity, but should end as soon as possible because the deadweight loss to social welfare ends with it.

B. Copyrights as “Property” Under the Takings Clause

The clearest case for copyrights as “property” under the Takings Clause comes from *Monsanto*, which extended Takings Clause protection to trade secrets. The *Monsanto* Court proceeded in large part by examining the characteristics of trade secrets, analogizing them to existing forms of property. It noted that previous decisions had recognized other intangible interests.\(^{76}\) The Court further observed that trade secrets have “many of the characteristics of more tangible forms of property”: for example, they are alienable and can “form the res of a trust.”\(^{77}\) Much the same can be said of copyrights, which can be transferred and used as collateral like real property. Given the range of intangible interests protected by the Court in the past, it seems extremely difficult to conclude that copyright does not count among them.\(^{78}\)

Indeed, the very fact that trade secrets are protected is a compelling reason to protect copyrights as well. As scholars have pointed out, trade secrets are a relatively fragile form of intellectual property: they protect only against wrongful appropriations and are lost if the secret is exposed.\(^{79}\) Copyrights are more durable (at least during their terms) and thus more like the physical property at the core of Takings Clause protection. And copyrights are defined by the right to exclude, seen by the Court as one of the most essential sticks in the property bundle.\(^{80}\)

\(^{74}\) See id. at 18–21.

\(^{75}\) U.S. CONST. art. I, § 8, cl. 8. Indeed, this limitation originated in British law as a way to protect the public from the harms associated with monopoly. See LESSIG, supra note 2, at 88–89.


\(^{77}\) Id. at 1002.

\(^{78}\) See Cotter, supra note 13, at 566.

\(^{79}\) See O’Quinn, supra note 13, at 505–06.

\(^{80}\) See id. at 583.
The Court in *Monsanto* also noted that extending protection to trade secrets accorded with the general principle of awarding property rights over “the products of an individual’s ‘labour and invention.’”81 As discussed above, this labor-desert theory is also a well-pedigreed justification for copyright law.82 And under the economic theory, copyright law is calculated to induce the investment of time, energy, and money in reliance on the promise of future entitlements. The basic fairness orientation of the Takings Clause suggests that, if the government takes away those entitlements after the investment has been made, the taking should receive at least some constitutional scrutiny.

Finally, the Court in *Monsanto* mentioned that trade secrets are, in several respects, considered property both under state law and by Congress.83 Whatever one’s view of history, there seems to be little doubt that copyright is almost universally regarded as a form of property among today’s lawyers and judges. Calling copyrights “property” has come in for some (perhaps well-deserved) criticism among those who think the label has been misused to justify excessively strong entitlements.84 But Professor Lawrence Lessig, who shares in this critique, notes that copyrights are “certainly ‘property’ in a nerdy and precise sense that lawyers are trained to understand.”85 In light of this shared legal intuition, it is not surprising that the weight of scholarly opinion is that copyrights are property for takings purposes.86 And there is some direct evidence that the Court would agree. In one modern takings case, a dissent representing the views of the four Justices most skeptical about the reach of the Takings Clause noted: “The ‘private

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81 *Monsanto*, 467 U.S. at 1003 (quoting 2 William Blackstone, Commentaries *405*).
82 Cf. Adam Mossoff, *Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent “Privilege” in Historical Context*, 92 Cornell L. Rev. 953, 977–89 (2007). Professor Adam Mossoff has reminded scholars of the historical importance of the natural rights view of intellectual property, id., although he probably has gone too far in downplaying the well-documented resistance to intellectual property as monopolies and privileges in the Founding era, see Fisher, supra note 4, at 135; Lessig, supra note 2, at 85–94.
83 *Monsanto*, 467 U.S. at 1001–02.
85 Lessig, supra note 2, at 118.
86 E.g., Fisher, supra note 4, at 249; Cotter, supra note 13, at 566; Ghosh, supra note 13, at 691; O’Quinn, supra note 13, at 503–04; see Kwall, supra note 13, at 777; cf. Mossoff, supra note 13, at 602 (concluding that patents were historically considered private property for takings purposes). Contra Tom W. Bell, *Copyright as Intellectual Property Privilege*, 58 Syracuse L. Rev. 523, 539–40 (2008); cf. Isaacs, supra note 12, at 42 (patents). Relying in part on a since-vacated Federal Circuit decision, Zoltek Corp. v. United States, 442 F.3d 1345 (Fed. Cir. 2006) (per curiam), vacated, 672 F.3d 1309, 1317 (Fed. Cir. 2012) (en banc portion of opinion), Professor Thomas Bell has argued that because “copyrights exist only by the grace of the Constitution,” they are not property for Takings Clause purposes. Bell, supra, at 539. This argument has come in for criticism. See Terry Hart, *Copyright and the Takings Clause*, Copyhype (Dec. 10, 2012), http://www.copyhype.com/2012/12/copyright-and-the-takings-clause/ [http://perma.cc/K5UG-FUAK].
property' upon which the Clause traditionally has focused is a specific interest in physical or intellectual property.\footnote{87}

C. Copyrights as “Unique” Property

The conclusion that copyrights are property does not mean they must enjoy the same strong Takings Clause protection as real property. For several reasons, copyrights should be entitled only to weaker, probably much weaker, protection than real property is. Indeed, copyrights are such a distinctive form of property that they ought to be considered “unique” for takings purposes.\footnote{88}

First, copyrights are usually classified as personal property.\footnote{89} Personal property does not receive the same Takings Clause protection as real property — for example, it does not benefit from the Lucas per se rule.\footnote{90} As the Court has explained, owners assume the well-known risk that the government, exercising its power to regulate commercial dealings (or its traditional power to declare contraband\footnote{91}), will render the property useless.\footnote{92} The same thing could happen to a copyright. For example, Congress might render a microwave cookbook worthless by banning the sale of microwaves, or state obscenity laws might (theoretically, at least) render a copyright in an obscene work valueless.

Second, some features of copyrights bear a resemblance to the aspects of unpatented mining rights that led the Court to deem them “unique.” The federal government, the Court noted, “maintains broad powers over the terms and conditions upon which the public lands can be used, leased, and acquired.”\footnote{93} Copyrights are entirely creatures of federal statute,\footnote{94} and Congress has unlimited power to condition or limit copyrights prospectively.\footnote{95} Just as mining claims are subject to certain requirements\footnote{96} that seem unusual in the real property context, copyright entitlements are limited more drastically than traditional

\footnote{92} Lucas, 505 U.S. at 1027–28.
\footnote{93} Locke, 471 U.S. at 104.
\footnote{94} Wheaton v. Peters, 33 U.S. (8 Pet.) 591, 661 (1834) (“Congress, then, by this act, instead of sanctioning an existing right, . . . created it.”).
\footnote{95} Cf. McClung v. Kingsland, 42 U.S. (1 How.) 202, 206 (1843) (“[T]he powers of Congress to legislate upon the subject of patents is plenary by the terms of the Constitution, and as there are no restraints on its exercise, there can be no limitation of their right to modify them at their pleasure, so that they do not take away the rights of property in existing patents.”).
\footnote{96} See Locke, 471 U.S. at 86 (noting requirements of discovery, filing of a notice of location, and performance of $100 in annual assessment work).
property rights.\textsuperscript{97} And like mining claims on public land, copyright’s limits reflect the fact that excessive entitlements work “private appropriation in derogation of the rights of the public.”\textsuperscript{98} Many of copyright’s limits, such as fair use and the idea/expression distinction, are designed to foster important social values like First Amendment freedom of expression.\textsuperscript{99} Perhaps most fundamentally, copyrights are time limited to reduce the economic disadvantages associated with copyright’s legal monopoly.\textsuperscript{100}

Third, copyright’s limits thus reflect the fact that copyright, seen from an economic perspective, is a necessary evil. Professor Landes and Judge Posner point out that property law typically fosters two kinds of benefits: dynamic benefits and static benefits.\textsuperscript{101} Dynamic benefits involve incentives to improve property and create new value. Copyrights are designed to produce dynamic benefits by incentivizing investment in new creative works. Static benefits involve the efficient allocation of existing resources. Because land is rivalrous, real property rights have clear static benefits: the owner of an acre of pasture can prevent overuse by limiting how many cows graze there. But it is doubtful that copyrights produce any static benefits.\textsuperscript{102} Indeed, copyright causes static inefficiencies. This goes back to the nonrivalrous nature of a creative work: in the absence of copyrights, works would be priced at marginal cost and output would be optimal. Because the normal benefits of property ownership are, in a sense, at war with each other in the copyright context, there is a peculiarly strong public interest in limiting copyright entitlements that have grown too strong.

As Professor William Patry has put it: “Copyright is a privilege granted by governments on everyone’s behalf.”\textsuperscript{103}

\textbf{D. Copyrights and Per Se Takings}

For these reasons, the per se takings rules should not be applied to copyrights. Both of the existing per se rules — the \textit{Lucas} total-deprivation rule and the \textit{Loretto} physical-invasion rule — apply on their own terms only to real property.\textsuperscript{104} The rationale for excluding

\begin{itemize}
\item \textsuperscript{97} See \textit{Fisher}, \textit{supra} note 4, at 143–54.
\item \textsuperscript{98} \textit{Locke}, 471 U.S. at 105 (quoting Cameron v. United States, 252 U.S. 450, 460 (1920)) (internal quotation mark omitted).
\item \textsuperscript{99} See \textit{Eldred} v. \textit{Ashcroft}, 537 U.S. 186, 219 (2003).
\item \textsuperscript{100} See \textit{Lessig}, \textit{supra} note 2, at 88.
\item \textsuperscript{101} \textit{Landes & Posner, supra} note 73, at 12–13.
\item \textsuperscript{102} See \textit{id.} at 13.
\item \textsuperscript{103} \textit{Patry, supra} note 3, at 140.
\item \textsuperscript{104} In \textit{Brown} v. \textit{Legal Foundation of Washington}, 538 U.S. 216 (2003), the Court seemed to apply a per se analysis to interest earned on principal, a form of intangible property, and explicitly analogized to \textit{Loretto}. See \textit{id.} at 235. But the Court in fact merely “assume[d]” that a taking had occurred, \textit{id.}, and resolved the case on the ground that no compensation was required, \textit{id.} at 237.
\end{itemize}
personalty from the *Lucas* rule applies equally to copyrights.\textsuperscript{105} Moreover, applying the *Lucas* per se rule to intellectual property is incompatible with *Monsanto*.\textsuperscript{106} There, the Court considered an FDA regulation that destroyed the value of Monsanto’s trade secret by revealing it to the public.\textsuperscript{107} Nonetheless, the Court applied the *Penn Central* analysis and found takings of the trade secret only where Monsanto had a reasonable investment-backed expectation in government confidentiality.\textsuperscript{108}

Attempting to apply the *Loretto* permanent-occupation rule to copyrights is even more difficult because copyrights, unlike physical property, are nonrivalrous. The mere fact that the government has “occupied” the creative work (whatever that might mean) would not necessarily deprive the owner of the ability to use the work or exclude third parties.\textsuperscript{109} Moreover, the *Loretto* Court pointed to the permanence of the occupation as particularly serious and noted that temporary takings are analyzed under *Penn Central*.\textsuperscript{110} But “permanent” has

\textit{Brown} hardly supports extending per se takings beyond real property generally, and at any rate not to a nonrivalrous form of property like copyrights. See infra note 109.

\textsuperscript{105} See supra p. 983.

\textsuperscript{106} Cf. Cotter, supra note 13, at 558 (noting that one must “limit[] *Monsanto* to its facts” to justify the view that all government infringements are takings).


\textsuperscript{108} See id. at 1010–14. Although *Lucas* was decided eight years after *Monsanto*, the Court had previously indicated that total deprivations of real property would normally be a taking. See *Lucas* v. S.C. Coastal Council, 505 U.S. 1003, 1016 (1992) (citing *Agins v. City of Tiburon*, 447 U.S. 255, 260 (1980), abrogated by *Lingle v. Chevron U.S.A. Inc.*, 544 U.S. 528 (2005)). The Court could have applied similar reasoning to intellectual property in *Monsanto*, but it declined to do so.

\textsuperscript{109} Several scholars have effectively proposed per se rules for intellectual property when the government infringes copyrights or patents. See, e.g., RICHARD A. EPSTEIN, SUPREME NEGLECT: HOW TO REVIVE CONSTITUTIONAL PROTECTION FOR PRIVATE PROPERTY (2008); Cotter, supra note 13, at 548; Kwall, supra note 13, at 735–41; see also Mosoff, supra note 13, at 703–11 (reviewing nineteenth-century cases). These arguments are unconvincing because they make too easy an analogy between use of physical property and use of intellectual property. As Professor Thomas Cotter has insightfully pointed out, the consequences of government infringement costs the owner no more than a licensing fee. Cotter, supra note 13, at 562–63.

Cotter could have carried the point even further. A small-scale or isolated act of infringement is often akin to a transitory common law trespass — a government interference with real property that may not amount to a taking at all. Suppose, for example, that ten copies of a government manual take from a textbook an excerpt that is just too long to be a fair use. The act is an infringement but seems hardly more serious than a “truckdriver parking on someone’s vacant land to eat lunch.” Hendler v. United States, 952 F.2d 1364, 1377 (Fed. Cir. 1991).

Even if the government sets itself up as a competitor by producing a copyrighted work, there probably is not good reason to conclude automatically that the copyright has been “taken.” The copyright holder can still exclude all private competitors even as the government pirates the entirety of his work. Cotter, supra note 13, at 562–63. The only result is that the copyright holder’s legal monopoly has now become a duopoly — a situation in which the owner can probably still charge supra-competitive prices.

\textsuperscript{110} See *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 435 n.12 (1982).
an uncertain meaning for copyrights, which are by their nature limited
in time: if a government seizes a copyright with ten years remaining,
is that a temporary or a permanent taking? What if only one day
remains?

Rejecting a per se rule does not, of course, leave copyright holders
without redress from regulations that totally eliminate the value of
their property. Rather, such a regulation would be a strong candidate
for a taking under the Penn Central analysis. The point, however, is
that courts should consider the distinctive policy considerations under-
lying copyrights before finding a taking.

III. SHORTENING THE COPYRIGHT TERM

This Part considers the constitutionality of shortening the copyright
term. Because of the earlier conclusion that no per se rule should ap-
ply for copyright takings, section III.A applies the Penn Central analy-
sis and identifies potential constitutional problems. Section III.B ar-

A. Penn Central Analysis

1. The Economic Impact of the Regulation. — The economic im-
 pact of shortening the copyright term of most copyrights is likely to be
limited. Experts on valuation of intellectual property have noted that
the economic life of a copyright (that is, the period during which it is
profitable to exploit the copyright) is typically much shorter than the
copyright’s legal life. A copyright’s income stream is characterized by
a rapid peak followed by a gradual decline.\(^{111}\)

The statistics on copyright renewal plainly illustrate the brevity of
copyrights’ economic lives. Under the Copyright Act of 1909,\(^ {112}\) copy-
right holders had two twenty-eight-year terms; if the copyright was
not renewed after the first term, it entered the public domain. Despite
the relative ease of copyright renewal, less than five percent of copy-
rights were renewed at the beginning of the twentieth century — a
number that rose to only twenty percent by the 1980s.\(^ {113}\) As these
numbers show, only a minority of registered works had economic value
after their first twenty-eight years. Most likely, only a subset of those
works would still be valuable toward the end of the current copyright

\(^{111}\) Gordon V. Smith & Russell L. Parr, Valuation of Intellectual Property
\(^{113}\) See Sprigman, supra note 2, at 499.
term, which extends decades after their authors have died. Shortening the copyright term would thus have no economic effect on the vast majority of existing works.

But there are several caveats. First, these numbers show that a significant minority of works do have longer economic lives. Some works experience a sudden resurgence in popularity. Others have enduring economic value (for example, the owner of a popular fictional character may hold derivative-work rights with lasting economic value). Those examples may constitute a minority, but an economically important one.

Second, one must give due attention to the segmentation problem. Consider a copyright owner who has just granted an exclusive license for ten years in the expectation that he will regain control over the work after that time. Now, imagine that Congress has shortened the copyright term and that this copyright is due to expire just as the license ends. The copyright owner bears the full brunt of the regulatory interference, while the licensee is unaffected. If a court were to treat the license and the owner’s reversionary interest as each a separate “parcel,” the economic impact on the owner would be total. A plausible argument in favor of such segmentation could be drawn from Lucas’s dictum that the parcel should be defined by reasonable expectations established by the relevant property law: because the copyright statute explicitly envisions exclusive licensing, such licenses could be considered a naturally foreseeable unit of copyright entitlements.

A compelling rejoinder to this argument comes from Justice Brandeis’s dissent in Pennsylvania Coal: “The rights of an owner as against the public are not increased by dividing the interests in his property . . . .” While Justice Brandeis did not carry the day in Pennsylvania Coal, the Court has become less amenable to recognizing such divisions and especially skeptical of temporal segmentation. In the copyright context, there is even greater reason to be skeptical: there are few natural time divisions within the copyright term. Thus, unlike the subsurface rights in Pennsylvania Coal, which represented a distinct property interest that had become naturalized by custom and state law, there is no reason why a license of a particular duration should serve as the yardstick for Takings Clause purposes. Rather,
such a division seems relatively artificial. Rejecting segmentation here thus does justice both to Lucas’s dictum, which goes to the naturalness of the division, and to Justice Brandeis’s warning.

Third, the economic impact would be particularly harsh for works old enough to have already surpassed the newly shortened term: they would expire as soon as the new law came into effect. Other works may have only months, or even days, remaining. This is a problem because takings cases have used the future value of the property as the denominator in the takings analysis.\(^{119}\) Although the Supreme Court has declined to find takings even when over eighty-seven percent of the property’s value is lost,\(^{120}\) the total elimination of the property’s economic value would tilt the scales of the Penn Central analysis toward the existence of a taking (even if, in the absence of the Lucas rule, a taking would not be automatically found).

2. Reasonable Investment-Backed Expectations. — The next question is what investment-backed expectations of the copyright holder are reasonable and thus deserving of Takings Clause protection.\(^{121}\) Most obviously, the investment made by the copyright’s author in creating the work deserves protection — promoting such investment is the purpose of copyright law. If this were the end of the matter, then Congress would probably have considerable power to reduce the term. That is because there is some doubt about the extent to which copyrights actually incentivize investment, as opposed to simply rewarding creative activity that would have occurred anyway.\(^{122}\)

But the author’s investment is not the end of the matter — it is likely that other persons will have invested in any economically significant copyright. If the author has sold or licensed any of her exclusive rights, the purchaser or licensee presumably paid a price based on the expected economic life of the copyright. Although the economic lives

\(^{119}\) Indeed, it would be impossible ever to have a total deprivation of economic value if the Takings Clause considered the property’s past value — rendering the Lucas per se rule useless.\(^{120}\) See Christine Venezia, Comment, Looking Back: The Full-Time Baseline in Regulatory Takings Analysis, 24 B.C. ENVTL. AFF. L. REV. 199, 210–22 (1996) (arguing that state and federal courts have frequently used a retrospective baseline in evaluating the reasonableness of amortization provisions).


\(^{122}\) Although the presence of reasonable investment-backed expectations is formally one factor in the Penn Central test, lower courts have recognized that it is practically a prerequisite for a proper takings claim. See Pharm. Care Mgmt. Ass’n v. Rowe, 429 F.3d 294, 315 (1st Cir. 2005); Good v. United States, 189 F.3d 1355, 1361 (Fed. Cir. 1999); Allen v. Cuomo, 100 F.3d 253, 262 (2d Cir. 1996). At one extreme, Patry seems to have abandoned the idea that copyright is an effective incentive. See PATRY, supra note 3. But even more sanguine observers admit that a wide variety of incentives to create that exist in the absence of copyright protection. See, e.g., LANDES & POSNER, supra note 73, at 47–50.
of most copyrights are significantly shorter than their legal lives, that does not hold true for all copyrights. And even if any given copyright has only a small likelihood of becoming valuable, a buyer may have purchased a portfolio of works in the reasonable expectation that some of them will. The copyright holder may also have made subsequent investments in reliance on the original copyright — for example, by creating derivative works that would have significantly less value in the presence of competition. It is therefore prudent to assume that someone has a reasonable expectation in the expected economic life of any significantly valuable copyright.

3. The Character of the Governmental Action. — The analysis of the character of the governmental action typically asks whether the interference is, on the one hand, a valid exercise of the government’s power to regulate for the “common good”\textsuperscript{123} or, on the other hand, a more qualitatively severe interference — such as a physical appropriation\textsuperscript{124} or interference with essential property rights.\textsuperscript{125} When a regulation does serve the public good, courts ask whether its benefits and burdens are widely dispersed or the expense is unfairly “placed disproportionately on a few private property owners.”\textsuperscript{126}

Advocates of shortening the copyright term can point to widespread public benefits. For the large number of works that have surpassed their economic life, shortening the copyright term would allow for their creative reuse without the new creator having to search (often fruitlessly) for the original author. For all other works, creative reuse, archiving, and distribution could occur without permission of the previous owner, increasing public access to and benefit from those works.\textsuperscript{127} Admittedly, some of the public’s gain would come at the expense of copyright owners, and owners of valuable works would be particularly hard hit. But it is also true that the burdens would be distributed over a broad class (existing copyright holders). Those burdens would be one part of a broader change in the copyright scheme that readjusts the prospective incentives for creative production as it alters retroactive entitlements. And to the extent that copyright owners are creators of derivative works or otherwise seek to license existing content, they would derive some benefit from a shorter term.\textsuperscript{128} Moreover, this is a case where “the Government does not physically invade

\begin{footnotes}
\textsuperscript{123} \textit{Penn Central}, 438 U.S. at 124 (noting that an interference is less likely to be a taking when it “arises from some public program adjusting the benefits and burdens of economic life to promote the common good”).
\textsuperscript{124} \textit{Id.} (citing United States v. Causby, 328 U.S. 256 (1946)).
\textsuperscript{125} \textit{E.g.}, \textit{Hodel v. Irving}, 481 U.S. 704, 716 (1987).
\textsuperscript{126} \textit{Cienega Gardens v. United States}, 331 F.3d 1319, 1338 (Fed. Cir. 2003).
\textsuperscript{127} \textit{See, e.g.}, \textit{PATRY}, supra note 3, at 193–97.
\textsuperscript{128} \textit{Cf.} \textit{Pa. Coal Co. v. Mahon}, 260 U.S. 393, 415 (1922) (noting that “an average reciprocity of advantage . . . has been recognized as a justification of various laws”).
\end{footnotes}
or permanently appropriate any of the [owner]'s assets for its own use.”

Looking at the severity of the interference, one might argue that the government’s action has effected a taking by, in the language of *Loretto*, “chop[ping] through the bundle [of property rights], taking a slice of every strand.” This argument has some support in the cases. In *Louisville Joint Stock Land Bank v. Radford*, the Court considered a federal law that allowed certain bankrupt farmer-mortgagors either to settle with their mortgagees at an appraised price or, if a mortgagee refused, to stay in possession for five years, during which time the mortgage foreclosure was stayed and the mortgagor made low interest payments. Even though the mortgagor was not deprived of the entire value of his mortgage, the Court held that a taking had occurred in part because the law effectively took away “the essence of a mortgage”: the “right of the mortgagor to insist upon full payment before giving up his security.”

This argument is not compelling, however, because it neglects what is distinctive about copyrights. A copyright is, fundamentally, limited in time. While some time limit is essential to the nature of copyrights, no particular time limit is. This fact differentiates the copyright term from the mortgage in *Louisville*. Changing the copyright term alters the value of a copyright, but not its essence. The time-limited nature of copyrights also distinguishes tinkering with the copyright term from the permanent physical invasions held to be per se takings in *Loretto*. Chopping every stick in the bundle of rights is a much less serious deprivation for time-limited copyrights, which will eventually expire anyway, than for (more-or-less) permanent land interests.

**B. Addressing the Problems**

The analysis above has identified a few unresolved constitutional problems with retroactively shortening the copyright term. The biggest constitutional problem associated with shortening the term is the fact that many copyrights would immediately cease to have any economic value. Even under *Penn Central*, this total deprivation would weigh heavily in favor of finding a taking. Suddenly cutting short

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129 Connolly v. Pension Benefit Guar. Corp., 475 U.S. 211, 225 (1986); cf. Buffalo Teachers Fed’n v. Tope, 464 F.3d 362, 375 (2d Cir. 2006) (“[T]he nature of the state’s action is uncharacteristic of a regulatory taking. The wage freeze is a negative restriction rather than an affirmative exploitation by the state. Nothing is affirmatively taken by the government. Instead the government annuls something—namely, the appellants’ contractual right to a wage increase.”).


132 See id. at 591–93.

133 Id. at 580.
some copyrights would also change the character of the government action: the invasion would be more severe, and the burdens of the interference would be felt more heavily by a particular class of rightsholders.

The most plausible solution to this problem is simply to include a "grace period." Congress could guarantee that all copyrights have some set period — for example, ten years — of continued existence.\textsuperscript{134} Because the economic impact of a taking is generally measured prospectively, the result would be to turn what was a total deprivation into a partial deprivation. Congress would merely have to provide enough time for economically viable copyrights to earn substantial revenue. Holders of older copyrights would no longer be subject to the harshness of an immediate deprivation. The grace period would be especially valuable to recent licensees, whose investment-backed expectations might be thwarted in their entirety by an immediate change in the length of the term. These considerations would probably swing the \textit{Penn Central} analysis back toward constitutionality.

Such a solution also has a rough analogy in "amortization" as practiced under the law of nonconforming uses. It is generally thought that a zoning ordinance raises serious constitutional concerns if it demands an immediate end to a prior nonconforming use.\textsuperscript{135} However, many states have enacted laws that allow the nonconforming use to continue for an amortization period, after which the use must end. The purpose of the period is to allow the owner time to recoup his investment in the use, and in the absence of Supreme Court guidance, most state courts have found the practice constitutional.\textsuperscript{136} Here, the purpose of the grace period would be similar: it would allow copyright holders (especially transferees who took shortly before the legislation was announced) to recoup at least some of their remaining investment.\textsuperscript{137}

\section*{IV. RELATED REFORMS: TERMINATION RIGHTS AND FORMALITIES}

This Part will briefly consider two additional reforms that are closely related to adjusting the copyright term. The first is cutting off the right of an author or her statutory successors to terminate assignments and licenses after thirty-five years. This right is implicated to

\textsuperscript{134} This would extend the life not only of copyrights whose terms would end immediately in the absence of the grace period, but also of copyrights whose remaining terms would be shortened to less than ten years.

\textsuperscript{135} \textit{E.g.}, \textit{City of Annapolis v. Waterman}, 745 A.2d 1000, 1014 (Md. 2000).

\textsuperscript{136} \textit{See Bd. of Zoning Appeals v. Leisz}, 702 N.E.2d 1026, 1032 (Ind. 1998).

\textsuperscript{137} Admittedly, the totality of the loss renders the analogy to an amortization period inexact. After the amortization ends, the property still has economically viable uses — just not the more valuable preexisting use.
some degree by the discussion in Part III, because reducing the copyright term would likely affect termination rights. The second is the reintroduction of formalities as a condition of continuing copyright protection or the availability of substantial damages. Both reforms would be constitutional.

A. Eliminating Termination Rights

Another takings issue would arise if Congress altered the termination rights available to the author’s statutory successors. The Copyright Act of 1976 gives the author and her statutory successors (usually her surviving spouse and children) a right to terminate transfers and licenses made by the author during her lifetime. Under the statute, a window opens thirty-five years after the license or transfer was executed and closes five years later. Two to ten years before any date within that window, the author or her statutory successors must serve written notice on the transferee of the intent to terminate. Effective as of the date selected from within the termination window, the grant is undone and the rights under it revert (with some exceptions) to the author or her statutory successors. The purpose of this provision is to protect authors, who are supposedly prevented from striking a fair bargain by their “unequal bargaining position” and “the impossibility of determining a work’s value until it has been exploited.”

This issue is important because cutting short the copyright term would likely also rob authors and their statutory successors of termination rights. (Some have proposed eliminating those rights anyway, criticizing them as paternalistic.) Such an interference is probably not a taking for two reasons. First, it is doubtful that termination rights rise to the level of a property interest under the Takings Clause. They have few of the characteristics of property: they are personal rights that vest only once the termination election is made and are not assignable. Termination rights seem more like an expectation that arises purely from legislative grace. They most closely resemble a right of reentry conditioned on the survival of the particular claimant. State and lower federal courts have generally refused to recognize such

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139 See id. § 203(a).
140 Id. § 203(a)(3).
141 Id. § 203(a)(4).
142 Id. § 203(b).
144 See Samuelson et al., supra note 4, at 1242.
145 See 17 U.S.C. § 203(b)(a)-(j). The rights can be passed by will or intestacy, but only if the author has no surviving spouse, children, or grandchildren. See id. § 203(a)(2XO).
contingent future interests as property when the possibility that they will be exercised is uncertain.146 Second, even if termination rights were to be recognized as a property right, they are probably not backed by reasonable investment-backed expectations;147 any interference is thus unlikely to be recognized as a taking under Penn Central.

B. Restoring Formalities

One of the most intriguing reform proposals of the last decade is Professor Christopher Sprigman’s suggestion to reintroduce copyright formalities.148 For most of U.S. history, copyright owners had to comply with certain formalities to receive copyright protection. Most notably, owners had to put a copyright notice on published works, to register with the Copyright Office upon publication, to deposit a copy of the work with the Library of Congress, and to file again to renew the copyright.149 Today, the United States has almost entirely eliminated such formalities, largely because of international agreements that forbid them.150 Sprigman has convincingly argued that such formalities serve a useful function by eliminating copyrights that are no longer commercially viable, thereby freeing up room for creative reuse.151 What would almost certainly be unacceptable would be to invalidate existing copyrights because the author or owner had failed to comply with formalities that were not required at the time. It would, however, be constitutionally permissible to condition the continuation of existing entitlements on the owner complying with copyright formalities today.

This principle was established in Texaco, Inc. v. Short152 and United States v. Locke.153 In Texaco, Indiana law provided that a severed mining interest that had not been used within the past twenty years would lapse unless the interestholder filed a statement of claim in the county recorder’s office; the statute had a two-year grace period.154 The Court noted that the provision accorded with the state’s tradi-

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146 See B. Glenn, Rights in Condemnation Award Where Land Taken Was Subject to Possible Rights of Reverter or Re-Entry, 81 A.L.R.2d 568, § 2 (WestlawNext) (last visited Nov. 23, 2014).
147 An author could perhaps argue that he had written the work knowing that he or his successors would someday be able to enjoy future profits if it were a runaway success. But this argument attributes an implausibly high level of foresight and legal acumen to authors.
148 Sprigman, supra note 2.
149 Id. at 492–93.
150 Formalities still play a small role in the U.S. copyright system. Most notably, registration is a prerequisite to bringing an infringement suit, 17 U.S.C. § 411(a), and to the recovery of statutory damages, id. § 412.
151 See Sprigman, supra note 2, at 489.
154 Texaco, 454 U.S. at 518.
tional power to allow reversion of abandoned property and held that “the State has the power to condition the permanent retention of that property right on the performance of reasonable conditions that indicate a present intention to retain the interest.”155 In *Locke*, Congress sought to address the problem of unpatented mining claims, which had for decades been recognized without a filing requirement. The result was a congested mess of claims that made it difficult to tell what claims existed on any given piece of federal property. Hoping to eliminate “stale” claims, Congress imposed a recording requirement (with a three-year grace period).156 Applying the rule from *Texaco* with an eye to the unique nature of patented mining claims, the Court upheld the condition. By analogy, Congress could condition the continuation of existing copyrights on compliance with formalities (at least, if it included a reasonable grace period).157

**CONCLUSION**

Without purporting to offer ironclad conclusions, this Note has attempted to strike the right balance between the competing policy goals of the Takings Clause and copyright law. On the one hand, it recognizes copyright as a property right on which authors and transferees have reasonably relied in investing their energy and capital. Accordingly, this Note has argued that Congress should take steps to soften the blow of copyright reform. But it also recognizes that there is a distinctive public interest in ensuring that copyright entitlements are not excessive: copyright entitlements incentivize cultural production only through supracompetitive pricing.

Already extremely politically difficult, copyright reform might very well be politically impossible if it requires huge public outlays for takings claims. As Justice Holmes taught, the Takings Clause should not be a stumbling block in the path of effective government. In that spirit, this Note has tried to suggest a way to make meaningful reform possible.

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155 Id. at 526.
157 Trying to work around the limits of our international copyright obligations, Sprigman suggests applying “new formalities.” Under this model, failure to comply with formalities would not cause the copyright to lapse. Instead, rightsholders who failed to comply with formalities would be subject to a minimal default license — replacing the property rules normally governing copyright with a liability rule. Sprigman, *supra* note 2, at 554–57 (citing Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089, 1092–93 (1972)). Because these “new formalities” would work a less severe interference with copyright entitlements than traditional formalities (failure to comply with which would eliminate entitlements entirely), they too should raise no constitutional problems.