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Shifting Constitutional Sands: Can and Should Patentholders Rely on the Due Process Clause to Thwart Government Action?

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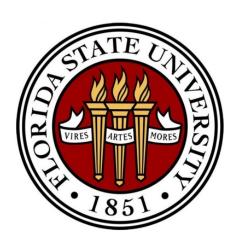
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FLORIDA STATE UNIVERSITY LAW REVIEW



SHIFTING CONSTITUTIONAL SANDS: CAN AND SHOULD PATENTHOLDERS RELY ON THE DUE PROCESS CLAUSE TO THWART GOVERNMENT ACTION?

Davida Isaacs

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DAVIDA H. ISAACS*

ABSTRACT

Today there are more patentholders than ever who may seek relief when government action detrimentally affects the value of their patents. The expected explosion in patentholders' due process claims creates a danger of enjoining government policy changes or crucial government use. Historically, courts have characterized patents as "property" and thus accorded them protection under the Takings and Due Process Clauses. But patents are not a form of traditional property; rather, they are federally granted benefits. In light of the Federal Circuit's recent repudiation of patentholders' rights to Takings Clause protection, and the Supreme Court's denial of certiorari, it is fair to say that courts are no longer reflexively granting patentholders property protection. If the courts choose to reconsider that protection, it would make sense for them to analyze patentholders' rights to such protection using the same test that is used to determine the due process rights of recipients of other government benefits.

Applying this same standard, there is substantial doubt as to whether patents satisfy the requirements for due process protection. Patents have some—but not all—of the characteristics of a protectible federal benefit. Unlike other federal benefits previously awarded protection, patents do not have an easily discernible value, because the value of each patent is dependent on the market for the patented technology. Moreover, because patents, unlike welfare, do not furnish basic living requirements, they do not fall within the realm of "essential" federal benefits. Thus, patentholders should be aware that if this standard is applied, there is some doubt that they will be entitled to due process protection.

Moreover, the Federal Circuit's recent hesitation to accord patents full property status is easily understood in light of the potential impact for providing incumbent protections. Recognizing a patentholder's right to due process protection could have a dramatic effect on government activities. Government action, either in the form of appropriation of an invention or in the form of legislation, may be sus-

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ceptible to either injunctive or monetary relief. If unlicensed use of an invention is found to violate due process, the government may find its use enjoined, possibly making some of its most important government functions more costly or complicated. Similarly, the government may find the patentholders successful in either enjoining retroactive legislation, or obtaining damages up to the value of the patentholders' economic loss—damages that, but for currently proposed legislation, could be as high as \$1 billion dollars. If courts hesitate to accede to these potential outcomes, they could choose to reverse course and deny patentholders that particular protection.

In sum, while patentholders might view their right to due process protection as firmly established, the Federal Circuit's recent decision should give them pause. In circumstances involving government use of inventions or government policy changes, patentholders bringing such claims should expect caution from the courts in reaffirming their right to due process protection.

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I. Introduction

In late 2001, several anthrax-tainted letters were delivered to media and government addresses in Florida, New York City, and Washington D.C.¹ Government officials and the media soon began warning of a shortage of Cipro, the most effective antibiotic to treat anthrax poisoning.² In response, President George W. Bush raised the prospect of breaking the patent on Cipro, which would have permitted other pharmaceutical companies to produce the antibiotic.³ The Government's threatened action would have seriously harmed the value of the patent exclusivity, leading patentholders and patent commentators to ask: "Does such government conduct violate a patentholder's rights?"⁴

If government conduct were to affect patent value only through use in times of national emergency, this question would be less important. But such conduct occurs on a frequent basis. And such conduct is not limited to appropriation of the patented invention, but rather includes deprivation through changes to patent laws and regulations. These changes are often advanced as attempts to balance the benefits to patentholders with the societal cost of those benefits. For instance, the 2007 Patent Reform Act, which is currently under consideration, would eliminate remedies for infringement currently possessed by patentholders of certain "check collection" systems (presumably because of congressional concerns regarding the societal costs of enforcing such patents).⁵ Likewise, proposed changes to patent laws have attempted to reduce the often high mo-

^{1.} See, e.g., Avram Goldstein & Michael Powell, Anthrax in Five More D.C. Buildings, Wash. Post, Oct. 30, 2001, at A1; NBC Tape Sent to Giuliani Contained Anthrax, CNN.COM, Nov. 4, 2001, http://archives.cnn.com/2001/HEALTH/conditions/11/04/anx.nbc.nyc/index.html; Rick Weiss, Source of Florida Anthrax Case Is Sought, Wash. Post, Oct. 6, 2001, at A5.

^{2.} See, e.g., Justin Gillis, Drugmakers Step Forward in Bioterror Fight, WASH. POST, Oct. 31, 2001, at A18 ("Bayer has been caught up in a controversy over whether the government should override its patent on Cipro and order the drug from other companies to ensure adequate supply."); Anthony York, Is It Time to Bust the Cipro Patent?, SALON.COM, Oct. 18, 2001, http://archive.salon.com/tech/feature/2001/10/18/cipro_patent/ (discussing the concern of an inadequate supply of Cipro).

^{3.} See, e.g., Amy Harmon & Robert Pear, The Treatment; Canada Overrides Patent for Cipro to Treat Anthrax, N.Y. TIMES, Oct. 19, 2001, at A1 (noting that Senator Schumer of New York had called Secretary of Health and Human Services Tommy Thompson to encourage the United States to follow Canada's lead and break the Cipro patent).

^{4.} See, e.g., Daniel R. Cahoy, Treating the Legal Side Effects of Cipro: A Reevaluation of Compensation Rules for Government Takings of Patent Rights, 40 AM. BUS. L.J. 125, 175 (2002) (discussing the legal effects of unlicensed government use of Cipro); Lisa A. Haile, Bioterrorism: Can the U.S. Government Ignore Patent Rights of Pharmaceutical Companies?, DLA PIPER NEWS & INSIGHTS (May 6, 2002), http://www.dlapiper.com/global/publications/detail.aspx?pub=166; see also Ciprofloxacin: The Dispute Over Compulsory Licenses, http://cptech.org/ip/health/cl/cipro (providing links to articles and statements regarding the dispute) (last visited June 23, 2008).

^{5.} Patent Reform Act of 2007, S. 1145, 110th Cong. \S 14 (as reported by S. Comm. on the Judiciary, Jan. 24, 2008). The bill is currently on the Senate Legislative Calendar.

nopoly prices of patented pharmaceuticals, a subject that has developed into one of national concern.⁶ Such legislation may arguably have maximized the benefit to society as a whole; however, the tradeoff is the loss of patent value. In the case of the proposed 2007 Patent Reform Act, the estimated loss to the patentholders: \$1 billion dollars.⁷

This Article addresses whether the types of government actions described above⁸ could withstand due process claims. Until recently, aggrieved patentholders focused their efforts on seeking relief through the Fifth Amendment's Takings Clause, under which they may obtain "just compensation" for lost value.⁹ But, as I discussed in a previous article,¹⁰ in its 2006 decision in *Zoltek Corp. v. United States*, the Federal Circuit concluded that patents are *not* property for purposes of the Takings Clause,¹¹ and eliminated patentholders' ability to assert takings claims. In light of the Federal Circuit's important dual role as the sole appellate court for any claims against the government and any claims asserted under the patent laws, its precedent will control this issue, and the Supreme Court's denial of a writ of certiorari in that case leaves the ruling intact. Dismayed patentholders¹² are left with only one other likely constitutional basis for seeking relief from governmental conduct implicating their patented

^{6.} See, e.g., Robert Pear & Robin Toner, Senate Votes to Give Consumers Faster Access to Generic Drugs, Amending Medicare Bill, N.Y. TIMES, June 20, 2003, at A18 (noting amendment to limit the ability of drug companies with patented pharmaceuticals to delay federal approval of competing generic drugs).

^{7.} The Congressional Budget Office reported that "the expected value of the federal government's liability under section 14 [of S. 1145] would total about \$1 billion, representing a royalty of 0.5 cents per check on more than 200 billion checks cleared by financial institutions that would be authorized to infringe on the rights of patent holders under the bill. Depending on the outcome of the likely litigation against the government, the cost could be substantially more." CONG. BUDGET OFFICE, COST ESTIMATE FOR S. 1145, PATENT REFORM ACT OF 2007, at 6 (2008) [hereinafter CBO COST ESTIMATE FOR S. 1145], available at http://www.cbo.gov/ftpdocs/89xx/doc8981/s1145.pdf.

^{8.} The federal government is responsible for most of the unlicensed government use of patented inventions. *But cf.* Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank, 527 U.S. 627 (1999) (addressing federal legislation to compensate patentholders for unauthorized state use of patented inventions). Because patents are a creation of federal law, only the federal government can amend those laws. For those reasons, this Article focuses on patentholder claims against the federal government, rather than state actions.

^{9.} U.S. CONST. amend. V ("[N]or shall private property be taken for public use, without just compensation.").

^{10.} Davida H. Isaacs, Not All Property is Created Equal: Why Modern Courts Resist Applying the Takings Clause to Patents, and Why They Are Right to Do So, 15 Geo. MASON L. Rev. 1 (2007).

^{11.} Zoltek Corp. v. United States, 442 F.3d 1345, 1353 (Fed. Cir. 2006) (per curiam), cert. denied, 127 S. Ct. 2936 (2007) (mem.).

^{12.} See, e.g., Patent Hawk, Patent Prospector: Taking the Fifth (Sept. 23, 2006) http://www.patenthawk.com/blog/2006/09/taking_the_fifth.html (commenting that, thanks to the Federal circuit's decision in Zoltek, "[i]t can be disgustingly impossible to hold the government accountable").

inventions: the Due Process Clause.¹³ Due process claims threaten to invalidate legislation or enjoin executive action, and may also provide the basis for seeking compensation through "Bivens claims."¹⁴ Thus, whether these claims are viable is important, not only to patentholders, but to the public who would be the presumed beneficiary of the changes.

This Article concludes, first, that patentholders should not be as confident as in past decades that courts will recognize due process protection for patents, and, second, that if courts continue to recognize such protection, patentholders may have viable due process claims only in a limited number of circumstances. Part II examines the legal landscape resulting in increased conflict between patent rights and government conduct and explains the new importance of due process claims. Considering the recent elimination of the Takings Clause remedy, as well as the unreliability of statutory relief, it is likely that patentholders will increasingly turn to due process protection.

In light of this expected shift in approach, Part III analyzes whether patentholders can confidently rely on due process claims. In the Supreme Court's only recent consideration of the issue in *Florida* Prepaid Postsecondary Education Expense Board v. College Savings Bank, 15 as well as in modern lower court decisions, the right of patentholders' due process protection was based solely on labeling patents as "property." But such perfunctory reasoning is flawed. Patent rights are not natural rights, but rather benefits granted by the federal government in order to promote innovation. As the Supreme Court has consistently reasoned for forty years, government benefits are not like traditional forms of "property," and thus are not necessarily entitled to the full panoply of constitutional protections. It is true that the Federal Circuit's rejection in *Zoltek* of a Takings Clause remedy does not definitively resolve the question of whether Due Process Clause claims are viable, because there is support for interpreting the scope of protectible interests of each clause differently. But the unwillingness of both the per curiam opinion and the Federal Circuit's subsequent en banc opinion denying rehearing to give any acknowledgement to Florida Prepaid's approach to patents may reasonably be seen to signal a significant shift away from presuming that patents are viewed as property. In light of the Supreme Court's denial of certiorari in *Zoltek*, patentholders should not rely too heav-

^{13.} U.S. CONST. amend. V ("No person shall . . . be deprived of life, liberty, or property, without due process of law").

^{14.} See Bivens v. Six Unknown Named Agents of Fed. Bureau of Narcotics, 403 U.S. 388 (1971). A *Bivens* claim is a common law basis for seeking monetary relief for a federal violation of constitutional rights.

^{15. 527} U.S. 627 (1999).

ily on *Florida Prepaid* when arguing for due process protection at the Federal Circuit. If we assume, however, that patents are not automatically property, we are left with an obvious question: By what standard should courts decide whether or not patents are entitled to due process protection? As this Article explains, it would be both natural and appropriate to consider patents under the same standard that is applied in the government-benefits line of cases, which began with *Goldberg v. Kelly*¹⁶ and *Board of Regents v. Roth*¹⁷ and continues with their progeny, in order to determine if patents are entitled to due process protection.

Since there remains a possibility that the courts will apply the Goldberg/Roth standard to patents, Part IV engages in that analysis and concludes that patents have some but not all of the characteristics of a protectible benefit. The fact that patents provide a public good—an incentive to innovate—supports the idea that patents are worthy of due process protection under Goldberg/Roth. Moreover, patents are established by a nondiscretionary statute with an express duration that creates a reasonable, objective expectation that the benefit will continue. Yet, unlike other federal benefits that the courts have previously awarded protection, patents do not have an easily discernible value (because the value of each patent is dependent on the market for the patented technology), and they do not fall within the category of "essential" federal benefits. Thus, there is substantial doubt if patents could satisfy the Goldberg/Roth requirements for due process protection.

In any case, patentholders will only care about their right to due process protection if that protection will provide them with recourse against legislative and executive action. Thus, in Part V, I assume for the sake of argument that the Federal Circuit and Supreme Court will reaffirm patentholders' due process protection. An examination of this ensuing question demonstrates both the potential value and potential threat of due process claims. Patentholders aggrieved by unlicensed government use might employ due process claims to obtain injunctive relief, thereby hindering government function even for roles as crucial as national defense; patentholders affected by retroactive legislation might be able to rely on such claims to obtain a significant and unanticipated damage award against the government.

In sum, the expected burgeoning of patentholders' due process claims should encourage both patentholders and the government to consider the likelihood of the success of those claims. The Federal Circuit is shifting away from knee-jerk Fifth Amendment property

^{16. 397} U.S. 254 (1970).

^{17. 408} U.S. 564 (1972).

protection of patents, and it is unclear that patentholders can count on such protection. Any hesitation to reaffirm such protection may result from recognition of the potential impact of successful claims, which may permit patentholders to either enjoin government conduct or obtain damage awards for their resulting losses.

II. WHY PATENTHOLDERS MAY SEEK TO RELY ON THE DUE PROCESS CLAUSE TO PROTECT THEM FROM GOVERNMENT CONDUCT

A. Concerns of Patentholders Regarding Government Action

In the past quarter-century, intellectual property has become progressively more important to the United States economy. Innovators have developed a heightened awareness regarding the value of technology and are increasingly seeking to protect their inventions. This explains why the number of patent applications has tripled in the past twenty years.¹⁸ This explosion multiplies the already powerful effects of patents on our society. A patent gives its owner the exclusive right to make, sell, use or import the patented technology; the resulting absence of natural competition permits a patentholder to make additional profit, generally referred to as "monopoly profit," and provides the incentive to innovate. If another private actor infringes on these patent exclusivities, the patentholder may seek damages that include its lost profits or a reasonable royalty from a license, and, if the infringement was intentional, possibly even additional damages. While the incentive created by this additional profit benefits society, there are countervailing costs to consumers and the economy as a whole: patentholders' monopoly prices require that consumers pay more for a product or forgo the purchase; a sole source may limit supply of the good and additional technological research in that field.

For most goods, the incentive effect appears to outweigh the costs to society. But in some cases Congress may conclude to the contrary; if so, it may enact legislation removing or restricting the patent exclusivity. Particularly with regard to some especially valuable patents, the cost-benefit analysis has garnered public attention and has been the subject of proposed legislation eliminating some patents' value. One section of the 2007 Patent Reform Act, currently under consideration, would abolish remedies for issued patents regarding various methods of check collection. This amendment would effectively immunize the many financial institutions that use those inno-

^{18.} U.S. PATENT & TRADEMARK OFFICE, NUMBER OF UTILITY PATENT APPLICATIONS FILED IN THE UNITED STATES, BY COUNTRY OF ORIGIN, CALENDAR YEARS 1965 TO PRESENT (2006), available at http://www.uspto.gov/go/oeip/taf/appl_yr.htm.

^{19.} Patent Reform Act of 2007, S. 1145, 110th Cong. \S 14 (as reported by S. Comm. on the Judiciary, Jan. 24, 2008).

vations when paying damages in infringement actions, with the expectation of lowered public expense—but at the cost of rendering these existing patents worthless. With the increasing value of intellectual property and an associated growth in the number of patents comes an upsurge in the potential cost of these types of changes to the patent laws.

Patentholders are also threatened with lost value when the executive branch approves unlicensed use, directly or indirectly, of their inventions. The Cipro event described in the Introduction provides an example of official government sanction of unlicensed use of an invention.²⁰ Granted, those circumstances were compelling, but such use would have effectively deprived the patentholder of the exclusivity which gives the patent its value. Bayer, owner of the Cipro patent, is only one of many affected patentholders; the government frequently makes unauthorized use of patented inventions.21 The mushrooming interest of inventors in patenting has increased the likelihood that the government may tread on patented territory and that such controversies will proliferate. Not surprisingly, patentholders facing losses in value, either from changes to patent laws or from government use of their inventions, are inclined to seek relief from such losses. The next Section addresses what avenues for relief patentholders have relied upon historically and explains the sudden importance of due process claims.

B. Aggrieved Patentholders' Possible Remedies

Patentholder complaints about lost value from changes to patent laws are not new.²² Yet there is no statute authorizing the government to award compensation from such losses, which is not surprising given that patent exclusivities exist only by federal grant in the first place. For many years, those patentholders nevertheless had recourse via the Fifth Amendment's Takings Clause.²³ If such a claim was successful, the patentholder was entitled to "just compensation."

^{20.} Supra note 1 and accompanying text.

^{21.} For example, in 1996, the Defense Department authorized Lockheed Martin to produce the F-22 military aircraft. The government sanctioned the use of patented technology without requiring the contractor to obtain a license from the patentholder, Zoltek Corporation. Zoltek Corp. v. United States, 442 F.3d 1345, 1349 (2006) (per curiam), cert. denied, 127 S. Ct. 2936 (2007) (mem.).

^{22.} See Patlex Corp. v. Mossinghoff, 758 F.2d 594, 599 (Fed. Cir. 1985), modified, aff'd in part and rev'd in part on other grounds, 771 F.2d 480 (Fed. Cir. 1985).

^{23.} U.S. CONST. amend. V ("[N]or shall private property be taken for public use, without just compensation."); Pa. Coal Co. v. Mahon, 260 U.S. 393, 415 (1922) (establishing the regulatory takings doctrine by stating that "[t]he general rule at least is, that while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking").

Unsurprisingly, as patents became increasingly valuable, the volume of such claims grew.²⁴

There remains a statute, referred to as "section 1498," that provides an avenue for "reasonable compensation" to a patentholder for unauthorized government use of his invention. Not all patentholders can rely on that statute for relief, however—as was the case in Zoltek. Thus the Zoltek plaintiff attempted to rely on a takings claim. In that 2006 decision the circuit court held that patents are not "property" for purposes of the Takings Clause. As a result, the court found that the federal government's unauthorized use of a patented invention could not give rise to a takings claim. Sieven the Federal Circuit's important dual role as the appellate court for claims against the government and the appellate court for claims asserted under the patent laws, its precedent controls this issue unless the Supreme Court overturns it.

In light of the *Zoltek* court's elimination of regulatory takings claims, and the occasional inapplicability of section 1498, one can expect aggrieved patentholders to turn to the other property-related provision of the Fifth Amendment: the Due Process Clause. That clause proclaims that, "[n]o person shall . . . be deprived of life, liberty or property, without due process of law."²⁹ Unlike section 1498

^{24.} Isaacs, supra note 10, at 23.

^{25. 28} U.S.C. § 1498. The government has been using patented technology without obtaining licenses since shortly after it began granting patents. See, e.g., Belknap v. Schild, 161 U.S. 10 (1896); United States v. Palmer 128 U.S. 262 (1888); Hollister v. Benedict & Burnham Mfg. Co. 113 U.S. 59 (1885); James v. Campbell, 104 U.S. 356 (1881); Cammeyer v. Newton, 94 U.S. 225 (1876); McKeever v. United States, 14 Ct. Cl. 396 (1878). Yet for over one hundred years the government's sovereign immunity prevented patentholders from obtaining any compensation. Indeed, even after Congress finally waived sovereign immunity in the Tucker Act, Act of Mar. 3, 1887, ch. 359, 24 Stat. 505 (1887) ("An act to provide for the bringing of suits against the Government of the United States") (primarily codified as amended in 28 U.S.C. §§ 1491-1509 (2000 & Supp. II 2002)), the courts still refused to recognize patent infringement claims against the government (though the courts did occasionally recognize claims based on an implied or explicit breach of contract). Schillinger v. United States, 155 U.S. 163, 168-69 (1894).

^{26.} In *Zoltek*, one step of the patented method occurred outside of the United States, defeating section 1498's territorial requirement. *Zoltek*, 442 F.3d at 1370.

^{27.} Zoltek, 442 F.3d at 1362.

^{28.} Id. at 1355.

^{29.} U.S. CONST. amend. V. The Fourteenth Amendment offers the same exhortation with regard to the states: "nor shall any State deprive any person of life, liberty, or property, without due process of law" U.S. CONST. amend. XIV, § 1. As explained in the introduction, because most of the relevant conduct will likely be by the federal government, this Article presumes that the clause at issue would be within the Fifth Amendment. That said, the Supreme Court has not distinguished between the type of conduct prohibited by the Fifth Amendment and the Fourteenth Amendment. Thus, the analysis of patentholder protection is considered with reference to cases applying either amendment.

It is worth a brief detour to ask whether it is even appropriate to evaluate patentholder protections under either the Fifth Amendment's Takings or Due Process Clauses. After all, the Court has clearly stated that if there is a particular Constitutional provision restricting government action, it is *that* provision, rather than the Due Process Clause, that acts as

(or the now unavailable Takings Clause), which offers compensation for government action,³⁰ the Due Process Clause directly provides injunctive relief.³¹ Such injunctive relief might stop any further harm to the patentholders, but at the cost of immediately obstructing government action. Due process protection also indirectly provides monetary relief—specifically, through a "Bivens claim," which is a common law basis for seeking monetary relief for a federal violation of a constitutional right.³²

the touchstone for determining the propriety of the government action. County of Sacramento v. Lewis, 523 U.S. 833, 842-43 (1998) ("Because we have 'always been reluctant to expand the concept of substantive due process,' we held in Graham... that '[w]here a particular Amendment provides an explicit textual source of constitutional protection against a particular sort of government behavior [such as the protections under the Fourth or Eighth Amendments], that Amendment, not the more generalized notion of substantive due process, must be the guide for analyzing these claims.'" (quoting Collins v. City of Harker Heights, 503 U.S. 115, 125 (1992); Albright v. Oliver, 510 U.S. 266, 273 (1994)). But while the Constitution's Copyright and Patent Clause authorizes government action, it does not establish any such restrictions on government action. Because the clause does not contain any language protecting patentholders, a person looking for protection from overreaching government conduct would have to fall back on the default mechanism provided for by the Due Process Clause.

- 30. See Trojan, Inc. v. Shat-R-Shield, Inc., 885 F.2d 854 (Fed. Cir. 1989) (rejecting an argument that section 1498 permits the award of an injunction against an alleged infringer to prevent bidding on a government contract, because section 1498 only authorizes the award of injunctions when the plaintiff is asserting a contract claim).
- 31. Ex parte Young, 209 U.S. 123 (1908). Under some circumstances when the government has appropriated or sanctioned the appropriation of a patented invention, enjoining the government conduct may actually be preferable to section 1498 damages. Trojan, Inc., 885 F.2d 854 (rejecting plaintiff's request for an injunction to prevent an alleged infringer from bidding on a government contract). The patentholder may be concerned that the award will not adequately compensate it for the infringement. For instance, a patentholder and a potential infringer may be competing bidders for a larger government contract. In that case, an award of the royalty that the patentholder would be awarded in a private context may not fully compensate the patentholder for losing the contract. The patentholder may not be legally entitled to the full lost profit that it could have made from the entire contract, or because of the purely business advantage that having a contract can provide—specifically, the opportunity for a company to develop or expand connections within the government and establish its credibility as a reliable supplier.
- 32. Bivens v. Six Unknown Named Agents of Federal Bureau of Narcotics, 403 U.S. 388 (1971). At this point, it is not clear if a violation of a patentholder's due process rights would permit him or her to assert a Bivens claim. On the one hand, the Court has held that, "it is . . . well settled that where legal rights have been invaded, and a federal statute provides for a general right to sue for such invasion, federal courts may use any available remedy to make good the wrong done." Id. at 396 (quoting Bell v. Hood, 327 U.S. 678, 684 (1946)). One would presume that, in comparison to a statutory right, a constitutional right would be even more firmly protected by all types of relief, including damages. But the Court has also declared that, "any freestanding damages remedy for a claimed constitutional violation has to represent a judgment about the best way to implement a constitutional guarantee; it is not an automatic entitlement no matter what other means there may be to vindicate a protected interest." Wilkie v. Robbins, 127 S. Ct. 2588, 2597 (2007). In Wilkie, which addressed retaliation against a property owner's refusal to agree to an easement, the Court refused to recognize the Bivens remedy, id. at 2593, and noted its refusal to apply a Bivens claim to, among others, First Amendment violations by federal employers, Bush v. Lucas, 462 U.S. 367 (1983), harm to military personnel through activity incident to service, United States v. Stanley, 483 U.S. 669 (1987), and a wrongful denial of

Successful due process Bivens claims could have a dramatic impact, because the awards to patent owners might very well be beyond what Congress would anticipate. While other due process plaintiffs have been awarded considerable sums,³³ those numbers would likely pale in comparison to the lost value of a patent related to particularly valuable technology. For example, based on sales figures for 2000, Bayer's patent monopoly on the anti-Anthrax drug, Cipro, was worth nearly \$716 million per year.³⁴ As a result, even limited governmentapproved use of the patent could result in an enormous damage award. And Cipro is not an anomaly. As proposed, the elimination of remedies for infringement of certain check-collection patents would likely result in a loss to the patentholders (either from lost damages or unobtainable royalties from the licenses that they will not negotiate with those financial institutions) of over \$1 billion dollars.35 Granted, as discussed later in this Article, it is not clear that most government conduct would be considered a due process violation. However, changes in the patent laws might have some impact on a minority of the tens of thousands of valid patents.

In sum, in light of *Zoltek*'s recent elimination of the Takings Clause as a remedy, as well as the limitations of section 1498 compensation, one can expect aggrieved patentholders to seek relief through due process claims. Because the available remedies include enjoining government conduct and significant monetary relief, the viability of such claims should be of great interest to patentholders, and of great concern to the public and the government.

III. WHERE THE COURTS GO WRONG: MISAPPLICATION OF THE DUE PROCESS CLAUSE TO PATENTS, IN LIGHT OF THE STATUS OF PATENTS AS FEDERAL BENEFITS

Recognizing the reason for patentholders' interest in asserting due process claims, the next question is whether patentholders can indeed be confident that they are entitled to assert such claims. While courts, including the Supreme Court in *Florida Prepaid Postsecond*-

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Social Security disability benefits, Schweiker v. Chilicky, 487 U.S. 412 (1988). Because this Article considers federal, rather than state, government conduct, the statute providing monetary relief for state violations does not apply here. See 42 U.S.C. § 1983 (authorizing redress for federal violations by state law, regulation, or custom).

^{33.} See, e.g., Harris v. Roderick, 94-0359-CV-BLW (D. Idaho 2000) (awarding plaintiff \$380,000 plus medical expenses in *Bivens* action against FBI agents and supervisors, U.S. Marshals, and the United States for shooting the plaintiff at Ruby Ridge Idaho in August of 1992).

^{34.} See Public Citizen: Congress Watch, Patently Offensive: Congress Set to Extend Monopoly Patents for Cipro and Other Drugs 1 (2001), http://www.citizen.org/documents/ACF34F.PDF.

^{35.} CBO COST ESTIMATE FOR S. 1145, *supra* note 7, at 6.

ary Education Expense Board v. College Savings Bank,³⁶ have been misled by their own reference to patents as "property," the tide may be shifting. In Zoltek, the Federal Circuit rejected the argument that patents were property.³⁷ In denying a rehearing en banc, the Federal Circuit rejected Justice Newman's reliance on Florida Prepaid to suggest that patents are to be treated as property for all constitutional purposes.

This reassessment is long overdue. A patent is not equivalent to real property; it is a federal benefit provided at the discretion of Congress. If courts were to decide to focus on that genesis, they should consider how the Supreme Court has handled the Fifth Amendment rights of other federal benefits. Starting with two early-1970s cases, Goldberg v. Kelly³⁸ and Board of Regents v. Roth,³⁹ the Supreme Court has repeatedly rejected the notion that all federal benefits qualify for due process protection and has provided factors to consider in determining which benefits qualify. The courts may very well choose to apply the Goldberg/Roth analysis to determine if patents are entitled to due process protection.

A. Earlier Courts Offered No Meaningful Basis for Their Recognition of Patentholders' Rights Under the Due Process Clause

Earlier Court decisions applied the Due Process Clause to patents, but failed to meaningfully justify their decision to do so.⁴⁰ Despite

^{36. 527} U.S. 627, 642 (1999) (noting that patents "have long been considered a species of property" and thus "are surely included within the 'property' of which no person may be deprived by a State without due process of law").

^{37.} Zoltek Corp. v. United States, 442 F.3d 1345, 1349 (2006) (per curiam) (announcing that "[a] patentee's judicial recourse against the federal government, or its contractors, for patent infringement, is set forth and limited by the terms of 28 U.S.C. § 1498"), cert. denied, 127 S. Ct. 2936 (2007) (mem.).

^{38. 397} U.S. 254 (1970).

^{39. 408} U.S. 564 (1972).

^{40.} See, e.g., McCormick Harvesting Mach. Co. v. Aultman, 169 U.S. 606, 608-09 (1898). The McCormick Court held that due process principles prohibit a PTO examiner from rejecting claims in original patent pursuant to abandoned reissue process, stating that once a patent issues,

it has passed beyond the control and jurisdiction of that office, and is not subject to be revoked or canceled by the President, or any other officer of the Government. It has become the property of the patentee, and as such is entitled to the same legal protection as other property.

Id. (citations omitted); United States v. Am. Bell Tel. Co., 167 U.S. 224, 262 (1897) (discussing the standard required to cancel a patent, stating "before the Government is entitled to a decree cancelling a patent . . . it must . . . establish the fraud and the wrong by testimony which is clear, convincing and satisfactory"); McClurg v. Kingsland, 42 U.S. (1. How.) 202, 206 (1843) (rejecting the defendant's attempt to apply a 1836 law to a previously issued patent, holding that the change in law could "have no effect to impair the right of property then existing in a patentee"); Soc'y for the Propagation of the Gospel in Foreign Parts v. Town of New-Haven, 21 U.S. (8 Wheat.) 464, 493 (1823) (stating that "the termination of a treaty cannot devest rights of property already vested under it").

Jefferson's statements repudiating patents as property,⁴¹ midnineteenth century opinions referred to patents as a form of "property."⁴² Thus, when the government's use of patented inventions without payment troubled the courts, they analogized patents to real property.⁴³

^{41.} Thomas Jefferson wrote, "Society may give an exclusive right to the profits arising from [inventions], as an encouragement to men to pursue ideas which may produce utility." Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), in 6 THE WRITINGS OF THOMAS JEFFERSON 181 (H. A. Washington ed., 1856).

^{42.} But see Adam Mossoff, Patents as Constitutional Private Property: The Historical Protection of Patents Under the Takings Clause, 87 B.U. L. REV. 689, 701 (2007) ("Congresses and courts identified patents as property, and invoked natural-rights justifications for property in defining and adjudicating patent rights.") [hereinafter Mossoff, Historical Protection]; Adam Mossoff, Who Cares What Thomas Jefferson Thought About Patents? Reevaluating the Patent "Privilege" in Historical Context, 92 CORNELL L. REV. 953 (2007) [hereinafter Mossoff, Thomas Jefferson]; see, e.g., McClurg, 42 U.S. at 206 (referring to the "right of property then existing in a patentee" in a patent infringement suit between private parties, and, in order to provide due process, requiring application of the law in place at time of issuance of the patent, despite the law's subsequent repeal).

^{43.} See Belknap v. Schild, 161 U.S. 10, 16 (1896) (finding infringement against naval officers for manufacture and use of a patented caisson gate as part of their official duties, and rejecting the government's assertion that sovereign immunity protected against damages, but holding that sovereign immunity prohibited injunctive relief, and stating that "this court has repeatedly and uniformly declared that the United States have no more right than any private person to use a patented invention without license of the patentee or making compensation to him."); United States v. Palmer, 128 U.S. 262, 269-72 (1888) (affirming a judgment against the United States in a case involving the Army's manufacture and use of patented military materials); Hollister v. Benedict & Burnham Mfg. Co., 113 U.S. 59, 67 (1885) (citing James v. Campbell, 104 U.S. 356, 356 (1881)); James, 104 U.S. at 358 (stating that a "patented invention . . . cannot be appropriated or used by the government itself, without just compensation, any more than it can appropriate or use without compensation land which has been patented to a private purchaser"); Cammeyer v. Newton, 94 U.S. 225, 234-35 (1876) ("Agents of the public have no more right to take such private property than other individuals under that provision, as it contains no exception warranting any such invasion of the private rights of individuals.")

This analogy has continued.⁴⁴ Even in the face of the early 1970s Supreme Court rulings in *Goldberg*⁴⁵ and *Roth*,⁴⁶ in which the Court began distinguishing between those federal benefits that are entitled to due process protection and those that are not. Post-*Goldberg* decisions should have applied that analysis to determine if patents are entitled to due process protection. Yet courts have repeatedly ignored the *Goldberg/Roth* line of cases. In its first post-*Goldberg/Roth* decision, the Court of Customs and Patent Appeals (precursor to the Federal Circuit) simply presumed, without any discussion, that the patent application at issue was property protected by due process.⁴⁷ Likewise, shortly after its 1983 creation, the Federal Circuit gave its first consideration to the issue in the 1985 case of *Patlex Corp. v*.

^{44.} See, e.g., Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 730 (2002) (noting that a patent "is a property right"); United States v. Dubilier Condenser Corp., 289 U.S. 178, 187 (1933) (stating that "[a] patent is property"); 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."); Schenck v. Nortron Corp., 713 F.2d 782, 786 n.3 (Fed. Cir. 1983) ("The patent right is but the right to exclude others, the very definition of 'property.' "); Myers v. United States, 613 F.2d 230, 231 (9th Cir. 1980) (holding that "a patent is property, is depreciable and falls within the purview of § 1239" of the tax code, which "treat[s] as ordinary income" any gain resulting from "the sale or exchange of depreciable property"); Pierce v. Allen B. Du Mont Labs., Inc., 297 F.2d 323, 324-25 (3d Cir. 1961) (holding that patent infringement claims survived the death of the patentholder); see also Daniel R. Cahoy, Patent Fences and Constitutional Fence Posts: Property Barriers to Pharmaceutical Importation, 15 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 623, 690-91 (2005) (citing James, 104 U.S. 356); Shubha Ghosh, Reconciling Property Rights and States' Rights in the Information Age: Federalism, the "Sovereign's Prerogative" and Takings After College Savings, 31 U. Tol. L. REV. 17, 41 (1999) (observing that patents are property for purposes of the Taking Clause); Mossoff, Historical Protection, supra note 42, at 700-11 (arguing that, historically, patents have been recognized as property and noting several cases from the nineteenth century, including James v. Campbell, 104 U.S. 356 (1881)); Justin Torres, The Government Giveth, and the Government Taketh Away: Patents, Takings, and 28 U.S.C. § 1498, 63 N.Y.U. ANN. SURV. AM. L. 315 (2007) (arguing similarly).

^{45. 397} U.S. 254 (1970).

^{46. 408} U.S. 564 (1972).

^{47.} In re Meyer, 599 F.2d 1026, 1031 (C.C.P.A. 1979) (finding that the appellant was denied procedural due process). If one presumes that a patentholder has a protectible property right, then perhaps it is not surprising that two courts have found that even patent applicants were found to be entitled to procedural due process. In re Baxter, 656 F.2d 679, 687-88 (C.C.P.A. 1981) (holding that the patent examiner's failure to give the patent applicant proper notice of a modification to the examiner's decision to narrow the scope of the patentable invention constituted a violation of procedural due process); Wm. T. Burnett & Co. v. Cumulus Fibres, Inc., 825 F. Supp. 734, 737 (W.D.N.C. 1993) (finding that the patent examiner's decision to expand the scope of the interference without providing the patent applicant its right to present evidence, as provided for in the patent regulations, violated procedural due process). At least one court has rejected it outright, and another court has questioned that conclusion. See Brenner v. Ebbert, 398 F.2d 762, 764 (D.C. Cir. 1968) (observing that it had "considerable doubt whether appellees' allowed but unissued patent is 'property' as that term is used in the fifth amendment," but concluding regardless that the notice provided by the PTO for payment of the issue fee satisfied due process requirements); Harley v. Lehman, 981 F. Supp. 9, 11 (D.D.C. 1997) (rejecting a patent applicant's challenge to the PTO's withdrawal of a patent after its allowance by the Patent Office holding that pre-issuance a patent applicant has no protectible property interest).

Mossinghoff.⁴⁸ In Patlex, Judge Pauline Newman rotely analogized patents to real property⁴⁹ and concluded that such a description alone justified due process protection.⁵⁰ Similarly, none of the subsequent decisions considering due process claims of patentholders—three by the Federal Circuit, one by another circuit, and one by a district court—contained any significant analysis. Some of those decisions relied on Patlex as precedent,⁵¹ and some blankly assumed the applicability of the Due Process Clause.⁵² At least one limited explanation for the lack of analysis is that these cases did not require the courts to grapple with the potential impact of due process remedies against the government. For one thing, in Patlex, the due process claim was brought as a defense, not as a claim against the government.⁵³ In most other cases, where the claim was asserted against the government, the courts concluded that there was no due process violation.⁵⁴

^{48. 758} F.2d 594, 599 (Fed. Cir. 1985), aff'd in part and rev'd in part on other grounds, 771 F.2d 480 (Fed. Cir. 1985).

^{49.} Patlex Corp., 758 F.2d at 599 (citing Leesona Corp. v. United States, 599 F.2d 958, 966-68 (Ct. Cl. 1979)). "'A patent for an invention is as much property as a patent for land,' and "therefore subject to the principles of eminent domain." Id. (quoting Consol. Fruit-Jar v. Wright, 94 U.S. 92, 96 (1876) (emphasis added)). The court in Patlex stated that "[i]t is beyond reasonable debate that patents are property." Id. Indeed, Judge Newman goes so far as stating that, "[t]he basic right concomitant to the grant of a patent is the right of exclusivity founded in the Constitution." Id. However, there is no right to exclusivity founded in the Constitution.

^{50.} *Id.* at 599. The circuit court then proceeded to uphold a retroactive statute that permitted reexamination of all patents, including patents issued prior to the statute's enactment. *Id.* at 601.

^{51.} Cedars-Sinai Med. Ctr. v. Watkins, 11 F.3d 1573, 1582 (Fed. Cir. 1993) (relying solely on *Patlex* to affirm that patents did constitute due process property: "our precedent clearly establishes that patent property rights, 'of which the patentee cannot be deprived without due process of law'" (quoting *Patlex*, 758 F.2d at 599)); *see* Consol. Fruit-Jar Co. v. Wright, 94 U.S. 92, 96 (1876)); Johnson & Johnson, Inc. v. Wallace A. Erickson & Co., 627 F.2d 57, 59 (7th Cir. 1980) (reaching its conclusion that "[t]he seventeen-year exclusion is a right and not a matter of grace or favor. . . . It is a property right, . . . of which the patentee cannot be deprived without due process of law," solely by relying on two nineteenth century cases supporting the proposition that patents are a form of property (citing James v. Campbell, 104 U.S. 356, 358 (1881)).

^{52.} *In re* Hiniker Co., 150 F.3d 1362, 1367-68 (Fed. Cir. 1998) (accepting, without discussion, the patentholder's assertion of entitlement to due process); Constant v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 1565 (Fed. Cir. 1988) (analyzing plaintiff's assertion that permitting federal courts to invalidate issued patents constitutes a deprivation of a patentholder's right to procedural due process, but assuming that such a right exists); Rydeen v. Quigg, 748 F. Supp. 900, 906 (D.D.C. 1990) (examining patentholder's claim that the PTO's last-minute reminder to pay maintenance fees violated his due process rights, but assuming that such a right exists), *aff'd*, 937 F.2d 623 (Fed. Cir. 1991) (per curiam).

^{53.} Patlex considered whether a recently enacted statute expanding the circumstances under which a defendant could seek reexamination of a patent could apply to a pending patent infringement suit. Patlex, 758 F.2d at 596. The district court hearing the infringement suit permitted the defendant to seek a reexamination by the PTO. Id. The patentholder argued that the retroactive impact of the statute had violated the Fifth Amendment's Due Process Clause. Id.

^{54.} See, e.g., In re Hiniker, 150 F.3d at 1367-68 (rejecting plaintiff's due process claim because of its failure to satisfy the PTO's procedures for requesting a hearing); Cedars-

By finding that there was no due process violation, the courts were able to assume that patents were indeed entitled to such protection without giving much consideration to the merit of those assertions.

Since Goldberg and Roth, only two Supreme Court cases have addressed the due process rights of patentholders. Sadly, the Court's analysis was as perfunctory as that of the lower courts'. In the 1993 case of Cardinal Chemical Co. v. Morton International, Inc., the Court considered a patentholder's allegation that due process was violated by the Federal Circuit's general practice of vacating declaratory judgments of patent validity following a determination of noninfringement. 55 While finding for the patentholder, the Court gave no explanation for the conclusion that patents were entitled to due process. 56 Perhaps the Court felt that detailed discussion of the patentholder's rights was not strictly necessary, because the Court offered an independent reason for enjoining the Federal Circuit practice that it violated the Supreme Court's own established rule of issue preclusion.⁵⁷ In any case, the rare concern regarding judicial appellate practice bears little resemblance to the more common due process claims that can be expected in the future, which are likely to be concerned with unauthorized use of an invention or legislative restriction on patent exclusivity.

The due process question arose once again in *Florida Prepaid*,⁵⁸ though as in *Patlex*, only indirectly. In that case, College Savings Bank sued to recover compensation under the Patent and Plant Variety Protection Remedy Clarification Act (hereinafter "the Patent Remedy Act"), that established a patent infringement claim against states. Florida asserted Eleventh Amendment sovereign immunity; in response, College Savings Bank argued that the Patent Remedy

Sinai Med. Ctr., 11 F.3d at 1585 (rejecting plaintiff's claim as not ripe for adjudication); Rydeen, 748 F. Supp. at 906 (rejecting a patentholder's due process claim, because the PTO had no duty to individually inform patentholders when their maintenance fees were due, so the PTO's last-minute reminder did not violate the patentholder's due process rights); Constant, 848 F.2d at 1565 (rejecting the argument that permitting federal courts to invalidate issued patents constitutes a deprivation of a patentholder's right to procedural due process).

^{55. 508} U.S. 83, 101-02 (1993).

^{56.} *Id.* at 102 (concluding that the circuit court's practice "may unfairly deprive the patentee itself of the appellate review that is a component of the one full and fair opportunity to have the validity issue adjudicated correctly").

^{57.} *Id.* ("The Federal Circuit's practice . . . encourages endless litigation (or at least uncertainty) over the validity of outstanding patents, and thereby vitiates the [issue preclusion] rule announced in *Blonder-Tongue*."); see John Donofrio, *The Disposition of Unreviewable Judgments by the Federal Circuit*, 73 J. PAT. & TRADEMARK OFF. SOC'Y 462, 464 (1991) ("[T]he Federal Circuit's present practice of vacating such judgments [even if it correctly considers them unreviewable] should not continue because it permits litigants to destroy the conclusiveness of invalidity holdings.").

^{58. 527} U.S. 627, 642 (1999).

Act abrogated that immunity.⁵⁹ But the Act could only properly abrogate state immunity if it was intended to remediate or prevent a constitutional violation. College Savings Bank argued that, by using the patented technology without compensating the owner, the state had deprived the patentholder of its property without due process of law.⁶⁰ The Supreme Court once again reflexively held that patents were property for purposes of the Due Process Clause,⁶¹ relying solely on 19th century cases for its conclusion that "[p]atents . . . have long been considered a species of property."⁶² As with many earlier lower court cases, its acceptance of due process protection had no effect on the outcome. The Court found that there was little evidence in the legislative record to support the proposition that Congress was attempting to remedy any potential state due process violations,⁶³ and there was little evidence that such state due process violations were prevalent.⁶⁴

In sum, the recent Supreme Court decisions reiterated the perfunctory and misguided due process protection given by previous courts, without giving any thought to the effect of patentholders' due process claims against the federal government. But as courts begin to see patentholders' claims seeking injunctive relief and compensation from government conduct, it should come as no surprise that they will give the matter deeper consideration. As indicated below, patentholders who might have felt safe relying on *Florida Prepaid*'s analysis, flawed as it might be, should be less certain as to its value since *Zoltek*.

Id. at 642 n.7.

^{59.} Id. at 633.

^{60.} Id. at 641-42.

^{61.} Id. at 642 ("[P]atents may be considered 'property' for the purposes of our analysis").

^{62.} Id. "'For, by the laws of the United States, the rights of a party under a patent are his private property." Id. (quoting Brown v. Duchesne, 60 U.S. (19 How.) 183, 197 (1856)). "'A patent for an invention is as much property as a patent for land." Id. (quoting Consol. Fruit-Jar Co. v. Wright, 94 U.S. 92, 96 (1876)). The court concluded that patents "are surely included within the 'property' of which no person may be deprived by a State without due process of law." Id.

^{63.} *Id.* ("Though patents may be considered 'property' for purposes of our analysis, the legislative record still provides little support for the proposition that Congress sought to remedy a Fourteenth Amendment violation in enacting the Patent Remedy Act.").

^{64.} *Id.* at 646-47. The Court rejected College Savings Bank's contention that the legislation was equally justified under the Takings Clause.

There is no suggestion in the language of the statute itself, or in the House or Senate Reports of the bill which became the statute, that Congress had in mind the Just Compensation Clause of the Fifth Amendment. Since Congress was so explicit about invoking its authority under Article I and its authority to prevent a State from depriving a person of property without due process of law under the Fourteenth Amendment, we think this omission precludes consideration of the Just Compensation Clause as a basis for the Patent Remedy Act.

B. Zoltek Suggests a New Recognition that the Goldberg/Roth Analysis Should Be Applied to Determine Patentholders' Due Process Rights

Earlier courts repeatedly offered nothing more than a knee-jerk response to patentholders' due process claims. Zoltek brought the Federal Circuit face-to-face with a patentholder's attempt to obtain compensation from the government. Under those circumstances, the Federal Circuit was finally motivated to reconsider its previously accepted rationale of patentholder rights, and it found that rationale wanting. Indeed, Judge Dyk, in his concurring opinion in Zoltek, directly rebuked the dissent's argument that, "[a] patent for an invention is as *much* property as a patent for land"65—based on the same cases upon which courts had repeatedly relied—declaring, instead, that "[p]atent rights are creatures of federal statute. They do not exist in the abstract."66 In light of the earlier cases, a gambler might have reasonably wagered that the Federal Circuit would grant a rehearing en banc and overrule the panel in *Zoltek*. Indeed, one poster to the well-established Patently-O Website, in general accord with others on the site, even went so far as to forecast that "[an] [e]n banc petition [is] virtually assured, and reversal [of the panel's decision is] likely."67 Yet, despite the Zoltek panel's indifference to a long line of precedent, the Federal Circuit denied the request for a rehearing en banc and the Supreme Court chose to deny certiorari. 68

Only the Justices know precisely why they voted against hearing Zoltek's appeal; however, one can say at a minimum that no four Justices were so unsatisfied with the *Zoltek* panel's (arguable) contradiction of earlier cases to make overturning it a priority. The Federal Circuit en banc majority might have concluded as Justice Breyer has argued: that the term "property" could have a different significance in the Due Process Clause than in the Takings Clause. Justice

^{65.} Zoltek Corp. v. United States, 442 F.3d 1345, 1374 (Plager, J., dissenting) (quoting Consol. Fruit-Jar Co., 94 U.S. at 96) (emphasis added), cert. denied, 127 S. Ct. 2936 (2007) (mem.).

^{66.} Id. at 1370 (Dyk, J., concurring).

I note that Judge Plager's interesting discourse on takings jurisprudence completely fails to explain how taking of a property right could possibly have occurred here. Patent rights are creatures of federal statute. They do not exist in the abstract. If, as I urge, the patent holder's right to sue the government for infringement under 1498(a) is no broader than the rights of the patent holder against private parties under section 271(a), then there can be no taking resulting from the refusal to recognize a greater right against the government.

Id.

^{68.} Zoltek Corp. v. United States, 464 F.3d 1335 (Fed. Cir. 2006) (denying a request for rehearing en banc), cert. denied, Zoltek Corp. v. United States, 127 S. Ct. 2936 (2007) (mem.)

Breyer has noted that "the word 'property' appears in the midst of different phrases with somewhat different objectives, thereby permitting differences in the way in which the term is interpreted," and has noted that similar distinctions have been made in other constitutional interpretations, even between phrases within the same Amendment.⁶⁹ If this were so, then there might be forms of property that are entitled to due process protection even though they are not entitled to Takings Clause protection. If one were to assume that the textual difference is meant to suggest that "private property" is a subset of all property, then *nonprivate* property would seem to include property interests that exist only if the public—that is, the federal government—creates them. Thus the Court could have reconciled Zoltek with Florida Prepaid to find that federal benefits may qualify as property for purposes of the Due Process Clause even if they do not qualify for purposes of the Takings Clause. 70 But, notably and significantly, neither the *Zoltek* panel's decision nor the Federal Circuit en banc denial of rehearing rested on that linguistic distinction.

A change in mindset would seem to be justified because, as established as patents-as-property analogy was, it is not clearly required by the early understanding of patents. Patents are not like the traditional forms of property to which the Framers assumed a natural right, and nomenclature alone does not clarify which rights should attach to them.⁷¹ It is true that patents share some characteristics

^{69.} E. Enters. v. Apfel, 524 U.S. 498, 557 (1998) (Breyer, J., dissenting) (noting that the Court has held that the term "person" includes corporations for purposes of the Fifth Amendment Double Jeopardy Clause, but not for purposes of the Fifth Amendment Self-Incrimination Clause); see also John D. Echeverria & Sharon Dennis, The Takings Issue and the Due Process Clause: A Way Out of a Doctrinal Confusion, 17 VT. L. REV. 695, 709-10 (1993) (observing the Court's failure to address, in any meaningful way, the distinction between the clauses). In this interpretation, the later Takings Clause reference to "private property" would appear to be a retraction from the first, broader reference to "property" of the Due Process Clause. Id.; Sidney A. Shapiro & Richard E. Levy, Government Benefits and the Rule of Law: Toward a Standards-Based Theory of Due Process, 57 ADMIN. L. REV. 107, 128 n.120 (2005) ("As is the case today, at the time of the framing, the term 'property' had various meanings in various contexts."). While it is fair to note that "one must be cautious about drawing inferences from differences in language" within the Constitution, there has been significant criticism of using the Constitution's precise text to decide the Framers' intended interpretation. Id. at 128. Nonetheless, "the proximity of the Due Process and Takings Clauses suggests that the difference was intended to have some meaning." Id.; see also Echevarria & Dennis, supra, at 709 ("The differences in language between the Due Process and Takings Clauses strongly suggest that each clause has a different scope and meaning.").

⁷⁰. As indicated in my previous article, some federal benefits have received Due Process Clause protection but have been denied Takings Clause protection. Isaacs, supra note 10, at 40-41.

^{71.} Goldberg v. Kelly, 397 U.S. 254, 262 (1970) ("The constitutional challenge cannot be answered by an argument that public assistance benefits are 'a privilege and not a right.'" (quoting Shapiro v. Thompson, 394 U.S. 618, 627 n.6 (1969))).

with ownership of real and personal property; indeed, the document establishing ownership rights in land was traditionally described as a "land patent." Although a patent does not provide an "affirmative" property right—that is, it does not authorize the owner to do anything-it does provide the "negative" property right of exclusive use. 73 Moreover, it provides the right to transfer one's patent interest, a right associated with property.⁷⁴ Nonetheless, it is "an uncontroversial historical observation" that those inventions were not protected at common law, and that "[patents'] origin was found in the English Crown's royal prerogative to grant manufacturing monopolies."75 Throughout most of American legal history, "lawyers, jurists, and scholars agreed that a patent was neither a natural right nor a common law right."⁷⁶ As Thomas Jefferson noted back in 1813, patents are "a special 'gift of social law,' "77 only to be provided to the extent that they "benefit [] society." Given Jefferson's view, it is not surprising that his contemporaries did not establish a requirement within the Constitution's Copyright and Patent Clause that Congress create copyrights and patents; it simply authorizes Congress to provide such exclusivities to the extent they are socially valuable. 79 The Supreme Court's 1834 opinion in Wheaton v. Peters affirmed that

^{72.} See, e.g., Amoco Prod. Co. v. S. Ute Indian Tribe, 526 U.S. 865, 867 (1999) ("Land patents issued pursuant to the Coal Lands Acts of 1909 and 1910 conveyed to the patentee the land and everything in it, except the 'coal,' which was reserved to the United States."); United States v. Beggerly, 524 U.S. 38, 40-41 (1998) (noting that in order to support their Takings Clause claim, petitioners attempted to find evidence of a land patent to assert their claim of title); Markman v. Westview Instruments, Inc., 517 U.S. 370, 382-83 (1996) (noting analogy between the court's role in patent claim construction with "interpreting terms within a land patent").

^{73.} Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1011 (1984) (characterizing the right to exclude others as "essential" and "central" to the value of private property).

^{74.} Blanchard's Gun-Stock Turning Factory v. Warner, 3 F. Cas. 653, 657 (C.C.D. Conn. 1846) (No. 1,521) (recognizing the value to a patentholder of the right to assign his "rights and privileges").

^{75.} Mossoff, *Historical Protection*, *supra* note 42, at 705, 705 n.84. *But see*, *e.g.*, Gayler v. Wilder, 51 U.S. (10 How.) 477, 493 (1850) (recognizing that an inventor is "vested by law with an inchoate right . . . which he may perfect and make absolute" in obtaining a patent); Evans v. Jordan, 8 F. Cas. 872, 873-74 (C.C.D. Va. 1813) (No. 4,564) (noting that an inventor has an "inchoate property which [is] vested by the discovery" and which is ultimately "perfected by the patent").

^{76.} Mossoff, *Thomas Jefferson*, *supra* note 42, at 990; *see*, *e.g.*, Jacobs v. Hamilton County, 13 F. Cas. 276, 278 (C.C.S.D. Ohio 1862) (No. 7,161) ("The patent itself, with all the privileges which it confers, is the creature of the statute . . .").

^{77.} Mossoff, *Thomas Jefferson*, *supra* note 42, at 957 (quoting Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), *in* 13 THE WRITINGS OF THOMAS JEFFERSON 333 (Andrew A. Lipscomb ed., 1903)).

 $^{78.\ \ \}it{Id.}$ at 954 (quoting Letter from Thomas Jefferson to Isaac McPherson, supra note 77.

^{79.} The Copyright and Patent Clause provides that Congress shall have power "[t]o 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" U.S. CONST. art. I, § 8, cl. 8.

view: "There is at common law no property in [patent exclusivities]; there is not even a legal right entitled to protection." Nonetheless, patent exclusivities stimulate innovation, which justified permitting Congress to grant these limited monopolies: "Society may give an exclusive right to the profits arising from [inventions], as an encouragement to men to pursue ideas which may produce utility." Because patents are merely statutory rights, the *Wheaton* Court declared that Congress is empowered to provide as much or as little patent protection as it wishes. Se

In light of the status of patents as federally granted benefits, one would have expected courts to have applied the test used for other federally granted benefits to patents as well. Starting with the early 1970's cases of *Goldberg*⁸³ and *Roth*,⁸⁴ the Supreme Court distinguished between those federal benefits that are entitled to due process protection and those that are not, and began providing a framework for determining when a federal benefit is entitled to due process. The Court has consistently applied this analysis to all types of government benefits. It has accorded the protection of due process to some government benefits, such as the rights to attend public school⁸⁵ and hold a driver's license, ⁸⁶ while rejecting due process protection for other government benefits such as domestic violence re-

^{80.} Wheaton v. Peters, 33 U.S. (8 Pet.) 591, 600 (1834); see Morton v. N.Y. Eye Infirmary, 17 F. Cas. 879, 881 (C.C.S.D.N.Y. 1862) (No. 9,865) ("At common law an inventor has no exclusive right to his invention or discovery."); Motte v. Bennett, 17 F. Cas. 909, 913 (C.C.D.S.C. 1849) (No. 9,884) (discussing the history of patents as "privileges and monopolies" granted by "the kings of England").

^{81.} Letter from Thomas Jefferson to Isaac McPherson *supra* note 77. The argument that the constitutional authorization in the Copyright and Patent Clause provides the basis for a right has been rejected. *See, e.g.,* Figueroa v. United States, 57 Fed. Cl. 488, 495 (2003) ("[T]he Patent Clause 'does not in any way confer a substantive right on any individual,' and does not mandate the payment of money." (citation omitted)).

^{82.} Wheaton, 33 U.S. (8 Pet.) at 600 ("Congress, therefore, when authorised to secure their rights, are authorised to do every thing; and full power over the subject is delegated to them. . . . In creating patents they take nothing away. They deprive the inventor of no property. He had nothing, and they gave him all merely by securing."); see also Patterson v. Kentucky, 97 U.S. 501, 508-09 (1878). The Patterson Court stated:

[&]quot;[T]he national power will be fully satisfied if the property created by patent be, for the given time, enjoyed and used exclusively, so far as, under the laws of the several States, the property shall be deemed for toleration. There is no need of giving this power any broader construction in order to attain the end for which it was granted, which was to reward the beneficent efforts of genius, and to encourage the useful arts."

Patterson, 97 U.S. at 508-09 (quoting Livingston v. Van Ingen, 9 Johns. 507 (N.Y. Sup. Ct. 1812)).

^{83. 397} U.S. 254 (1970).

^{84. 408} U.S. 564 (1972).

^{85.} Goss v. Lopez, 419 U.S. 565, 574 (1975) (Ohio law conferred a right upon all children to attend school).

^{86.} Bell v. Burson, 402 U.S. 535, 535-39 (1971) (invalidating a statute suspending drivers' licenses where the driver was involved in an automobile accident, unless the driver furnished security to satisfy a judgment or gave proof of financial responsibility).

straining orders⁸⁷ and Medicaid payments.⁸⁸ Notably, in none of those cases did the Court ever indicate that there are government benefits to which the *Goldberg/Roth* analysis should not apply. When the Supreme Court is finally faced directly with a patentholder's due process claim seeking a large monetary award, it may conclude that it is more appropriate to apply the *Goldberg/Roth* standard for determining whether federal benefits are entitled to due process protection.

IV. UNDER THE GOLDBERG/ROTH ANALYSIS, IT IS UNCLEAR IF FEDERAL BENEFITS ARE ENTITLED TO DUE PROCESS CLAUSE PROTECTION

Application of the *Goldberg/Roth* analysis reveals that patents possess some, but not all, of the characteristics of a protectible federal benefit. Thus, a patentholder would be justified in having qualms about whether the Court will award due process protection to his claims.

Not all federal benefits fall within the auspices of "life, liberty and property," and the corresponding Due Process Clause protection.⁸⁹ The question of where to draw the line between a property interest that is protectible, and one that is not, comes into play when the issue of personal (i.e., individualized) government benefits arises because creating rights to these benefits restricts the government's ability to make policy changes.

Starting with *Goldberg* and *Roth* in the early 1970s, the Supreme Court began developing a framework for determining when a federal benefit is entitled to due process. 90 In *Goldberg*, the Court concluded that government benefits provided pursuant to Aid to Families with Dependent Children (AFDC) were a "property interest" entitled to

^{87.} Town of Castle Rock v. Gonzales, 545 U.S. 748, 768 (2005).

^{88.} O'Bannon v. Town Court Nursing Ctr., 447 U.S. 773, 784 (1980) (rejecting the argument that the nursing home residents possessed a property right to Medicaid payments to their preferred nursing home). As to protections for continued government employment, the Court found a property interest in one case while declining to find a property interest in another. *Compare* Roth v. Board of Regents, 408 U.S. 564, 577-78 (1972) (plaintiff was a teacher employed by Wisconsin State University under a limited-time contract that included no provided for renewal; the court found no reasonable expectation of renewal) *with* Perry v. Sinderman, 408 U.S. 593, 599 (1972) (finding that even though the teacher did not have formal tenure, he possessed a legitimate expectation of continued employment based on "a no less binding understanding" fostered by the college administration and the faculty guidebook).

^{89.} Town of Castle Rock v. Gonzales, 545 U.S. 748, 756 (2005) (noting that "[t]he procedural component of the Due Process Clause does not protect everything that might be described as a 'benefit' ").

^{90.} Goldberg v. Kelly, 397 U.S. 254 (1970); Roth, 408 U.S. at 564.

procedural due process protection. ⁹¹ Just a few years later in *Roth*, the Court rejected the assertion of a property interest in renewed employment at a state university. ⁹² Through *Goldberg*, *Roth*, and the cases that followed, the Court developed the requirements for "property interests" worthy of due process protection. A patentholder's entitlement to due process protection depends on whether he meets those characteristics. Patents clearly satisfy some of these requirements, but it is unclear whether they satisfy others.

There would be little value in designating as a protected interest any government benefit that does not serve the public interest. Thus the Court has held that, to be considered due process "property," the benefit must have been provided with the intention of promoting the public welfare. 93 And the modern federal government has instituted many such entitlements: "Society today is built around entitlement Many of the most important of these entitlements now flow from government; subsidies to farmers and businessmen, routes for airlines and channels for television stations; long term contracts for defense, space, and education; social security pensions for individuals."94 Indeed, one would hope that such benefits are given only when they promote the public welfare, rather than the result of undue political influence. As indicated by the Copyright and Patent Clause itself, patent rights meet this requirement by providing both an incentive to pursue new technology and providing the community with access to the innovative knowledge.95

However, even though they provide some use to society, most government benefits have been found not to constitute protected property. The Court requires that federal benefits possess several other characteristics as well. Protected property must be founded upon a statute or regulation, as opposed to common law, and the benefit

^{91.} Goldberg, 397 U.S. at 261-62. Goldberg required that the welfare beneficiary be granted a hearing before removing his benefits. Id. at 264.

^{92.} Roth, 408 U.S. at 578.

^{93.} Goldberg, 397 U.S. at 265.

^{94.} Id. at 262 n.8 (quoting Charles A. Reich, Individual Rights and Social Welfare: The Emerging Legal Issues, 74 YALE L.J. 1245, 1255 (1965)).

^{95.} 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.").

^{96.} See, e.g., Bd. of Regents v. Roth, 408 U.S. 564 (1972) (holding that plaintiff's government employment was not a protectible right, even though the position was beneficial to the public).

^{97.} See, e.g., id. at 262.

^{98.} See, e.g., Ingraham v. Wright, 430 U.S. 651, 675-77 (1977) (rejecting the argument that violation of "the common-law right of a child not to be subjected to excessive corporal punishment in school" could be the basis for a deprivation of due process); Paul v. Davis, 424 U.S. 693, 711-12 (1976) (noting that an interest in reputation, "protect[ed] against injury by virtue of its tort law" was not a property interest protected by procedural due process); see also Arlo Chase, Maintaining Procedural Protections for Welfare Recipients: Defin-

must be nondiscretionary—that is, the statute must necessarily confer the benefit if the person qualifies. But even statutory language purporting to establish a government obligation is not always sufficient to confer a protected status 100: "Although the underlying substantive interest is created by 'an independent source . . .,' federal constitutional law determines whether that interest rises to the level of a legitimate claim of entitlement protected by the Due Process Clause.' "101

Nonetheless, starting the analysis with the statutory language suggests that patents likely meet this requirement. The Patent Act generally requires issuance of a patent if the invention is novel, non-obvious, and useful, and that the inventor sufficiently discloses the invention in his application: "If it appears that applicant is entitled to a patent under the law, a written notice of allowance of the application *shall* be given or mailed to the applicant," and assuming the applicant then pays the required fee, "the patent *shall* issue." But one cannot rest the analysis on that wording alone, because there are in fact circumstances in which the government may refuse issuance from, and may even suppress publication of, an otherwise proper patent application. For instance, specifically exempted from patenting is any invention "which is useful solely in the utilization of spe-

ing Property for the Due Process Clause, 23 N.Y.U. REV. L. & SOC. CHANGE 571, 580 (1997) ("[The] expectation can only come from the specific mandates of the applicable law or regulation."); Cynthia R. Farina, On Misusing "Revolution" and "Reform": Procedural Due Process and the New Welfare Act, 50 ADMIN. L. REV. 591, 616 (1998) ("In Paul v. Davis, it balked at the notion that promises made by government through its judiciary, speaking in the common-law mode, would count as entitlements."). No court has provided a definitive reason why a protected property could not arise from common law, but the ambiguity of common law would make it difficult to define precisely what the property interest is—and clear "metes and bounds" is one of the basic characteristics of property. See also Roth, 408 U.S. at 577 (holding that property interests protected by due process are "defined by existing rules or understandings that stem from an independent source such as state law").

99. Town of Castle Rock v. Gonzales, 545 U.S. 748, 756 (2005) ("Our cases recognize that a benefit is not a protected entitlement if government officials may grant or deny it in their discretion."); see also Goss v. Lopez, 419 U.S. 565, 574 (1975) (Ohio law conferred a right upon all children to attend school).

100. For instance, in *Town of Castle Rock v. Gonzales*, the Court rejected the assertion of a property interest in enforcement of a domestic violence restraining order, even though the statute's language stated that police "shall use" every reasonable means to enforce the order. *Id.* at 752, 768. The Court found that the statute's use of the mandatory "shall" did not obviate discretion. Discretion was indicated by several factors, including the statute's list of alternatives to immediate enforcement of the restraining order, the absence of the express right to request or demand an arrest, and the accepted understanding that arrests are generally held to be discretionary based on the officers' belief that there is probable cause to make it. *Id.* at 760-66.

101. Town of Castle Rock, 545 U.S. at 757 (quoting Memphis Light, Gas & Water Div. v. Craft, 436 U.S. 1, 9 (1978)) (internal quotation marks omitted); see also id. at 756 (noting that "[t]he procedural component of the Due Process Clause does not protect everything that might be described as a 'benefit'").

102. 35 U.S.C. § 151 (2000) (emphasis added).

cial nuclear material or atomic energy in an atomic weapon,"¹⁰³ or when publication or issuance of the patent would "be detrimental to the national security."¹⁰⁴ Thus, while the patent statute appears to be in most cases nondiscretionary, one cannot say that an otherwise qualified applicant possesses an absolute right to this benefit. Nonetheless, on balance, the language of the patent statute approaches the obligatory nature of most protected federal benefits.

Regardless, an initial right to the benefit is not enough to create a property interest. There must be an objectively reasonable expectation that the benefit will continue."¹⁰⁵ An objectively reasonable expectation will be derived from government assurance, based on either regulations and laws or less formal agreements. ¹⁰⁶ Patentholders have a strong argument for having such a reasonable reliance because the Patent Act contains an express statement declaring that a patentholder will maintain his patent rights for a specific period of time—in the case of utility patents, twenty years from the date that the inventor filed his application. ¹⁰⁷

^{103.} Atomic Energy Act, 42 U.S.C. § 2181(a) (1946). The AEA provides compensation to the inventor in order to, as the act's legislative history explains, "assure the [Atomic Energy] Commission of access to new inventions and . . . provide . . . financial inducements in lieu of patent rights" S. REP. No. 79-1211 (1946), as reprinted in 1946 U.S.C.C.S. 1327, 1335.

^{104.} Invention Secrecy Act, 35 U.S.C. § 181 (1952). Like the AEA, the Invention Secrecy Act provides for compensation. *Id.* § 183; *see* Constant v. United States, 16 Cl. Ct. 629 (1989), *aff'd*, 884 F.2d 1398 (Fed. Cir. 1989) (addressing a dispute regarding a claim for compensation provided for by the Act after plaintiff's patent application was placed under a secrecy order pursuant to the Invention Secrecy Act); *see also* Hornback v. United States, 16 F.3d 422 (Fed. Cir. 1993) (same analysis).

^{105.} Bd. of Regents v. Roth, 408 U.S. 564, 577 (1972) ("[t]o have a property interest in a benefit, a person clearly must... have a legitimate claim of entitlement to it).

^{106.} See Regents of Univ. of Mich. v. Ewing, 474 U.S. 214, 223 n.9 (1985) ("We recognize, of course, that 'mutually explicit understandings' may operate to create property interests." (citing *Perry*, 408 U.S. at 601)). But such understandings or tacit agreements must support a "legitimate claim of entitlement" under "'an independent source such as state law" "*Perry*, 408 U.S. at 602 n.7 (quoting *Roth*, 408 U.S. at 577).

^{107. 35} U.S.C. § 154(a)(2) ("Subject to the payment of fees under this title, such grant shall be for a term beginning on the date on which the patent issues and ending 20 years from the date on which the application for the patent was filed in the United States"). In the case of design patents, the time period is fourteen years. 35 U.S.C. § 173. The government might be able to thwart the creation of a property interest by making it clear upon issuance of the patent that the terms and conditions of the patent may change at any time during its effective period (such as to create an exception for the government to the patentholder's exclusivity), or that it retains the right to administratively terminate or change patent rights at an earlier time under conditions that would not satisfy due process. One would expect that any restrictions on the benefits would affect the reasonableness of any new recipient's expectation in light of the statute. Whether such a change in expectation could constitutionally affect the holders of already issued patents depends on how the court treated such retroactive provisions.

The third requirement of the Goldberg test is that the benefit must be connected to wealth. 108 There need not be a direct government payment; even a government benefit that indirectly provides the possibility of obtaining wealth, such as a driver's license, may establish a property interest. 109 But the benefit must generally have an "'ascertainable monetary value '"110 Without that characteristic, the asserted right would not "resemble any traditional conception of property."111 The Court appears to be of two minds as to whether a definable monetary value is an absolute requirement. On the one hand, in Town of Castle Rock v. Gonzales, the Court stated that the absence of an ascertainable monetary value by itself did not disqualify the asserted benefit—a protective order from an abusive spouse from due process protection. 112 But as the Court rejected protection for that benefit, it noted that "even our 'Roth-type property-asentitlement cases' "had "implicitly required" that feature. 113 Nevertheless, apparently the requirement can be tenuous because, in Goss v. Lopez, the Supreme Court found that there was a protectible property interest in a public school education.¹¹⁴ There can be little question that there is a value to education, but education's economic value in any particular circumstance is speculative, and thus not "ascertainable" by any court. Nonetheless, it would appear fair to say that it would be rare for a benefit lacking that feature to qualify.

It is unclear whether patent protection would satisfy this quasirequirement. Patent protection provides the potential for economic value through monopoly profits or licensing royalties. The government's grant of a patent does not directly provide wealth, however. If the patented technology does not have significant market value, then the patentholder will not obtain much revenue from the product at monopoly prices, nor will the patentholder be able to obtain substantial licensing royalties. Nonetheless, patents might satisfy the very low minimum threshold for the connection to wealth, much like a public school education. While the monetary value of a patent is not as immediate as it is for a direct subsidy, it is certainly no more tenuous than the connection between public education and wealth.

¹⁰⁸. Goldberg v. Kelly, 397 U.S. 254, 262 n.8 (1970) (quoting Reich, supra note 94, at 1255).

^{109.} Bell v. Burson, 402 U.S. 535, 535-39 (1971) (invalidating a statute suspending drivers' licenses where the driver was involved in an automobile accident, unless they furnished security to satisfy a judgment or gave proof of financial responsibility).

^{110.} Town of Castle Rock v. Gonzales, 545 U.S. 748, 766 (2005) (emphasis added) (quoting Thomas W. Merrill, *The Landscape of Constitutional Property*, 86 VA. L. REV. 885, 964 (2000)).

^{111.} Id.; see Merrill, supra note 110.

^{112.} Town of Castle Rock, 545 U.S. at 766.

^{113.} Id. at 766 (quoting Merrill, supra note 110, at 964).

^{114.} Goss v. Lopez, 419 U.S. 565, 574 (1975).

In any case, the monetary gain cannot be merely a helpful "luxury" to the recipient. 115 Rather, the Court has suggested that the benefit must be, to some extent, essential to the recipient, 116 though it has not attempted to define that nebulous concept. Safely included within that category are entitlements that provide basic living reguirements such as food and shelter, 117 and that requirement appears to extend to any benefit, such as continued possession of a driver's license, which is likely to be sufficiently important "in the pursuit of a livelihood."118 Also included in that category is public education, "'perhaps the most important function of state and local governments ' "119 Patents do not fit as clearly within the realm of "essential" benefits, because they are not necessarily needed in order to make a living. While some goods may be so inexpensive to replicate that the marginal profit in a competitive market would be small, some scholars have argued that the first-comer advantage makes patents unnecessary for sufficient compensation. 20 Either way, re-

^{115.} See Pearson v. Indiana High Sch. Athletic Ass'n, No. IP99-1857-C-T/G, 2000 WL 1030616, at *17 (S.D. Ind. 2000) (rejecting due process claim, stating "what was at stake here, unlike a right to welfare benefits in [Goldberg], or a public education in [Goss], was a tennis match. Granted, it was the state semi-finals, but nevertheless it was just a tennis match").

^{116.} Goldberg v. Kelly, 397 U.S. 254, 262 n.8 (1970). "For qualified recipients, welfare provides the means to obtain essential food, clothing, housing, and medical care." *Id.* at 264; see also Potts v. City of Philadelphia, 224 F. Supp. 2d 919, 943 (E.D. Pa. 2002) ("While [the plaintiff] may have a strong personal interest in his gun permit, the permit does not constitute a basic necessity of life, such as income, or even employment, that would strongly militate in favor of a pre-deprivation hearing.").

^{117.} Goldberg, 397 U.S. at 261 ("'Against the justified desire to protect public funds must be weighed the individual's overpowering need in this unique situation not to be wrongfully deprived of assistance'" (quoting Kelly v. Wyman, 294 F. Supp. 893, 901 (1968))).

^{118.} Bell v. Burson, 402 U.S. 535, 539 (1971) (holding that the government had to provide a hearing before suspending a person's driver's license). In *Bell* the Court held that due process required a prior hearing to determine the probability of a judgment against that driver. *Id.* at 542. While the Court did not outline all of the rights that would be involved in order to meet due process, the opinion indicated that the procedures would be somewhat less than the administrative trial that *Goldberg* had mandated. *Id.* at 540-43. But not all interests in control over daily living fall underneath that protected umbrella. *See* O'Bannon v. Town Court Nursing Ctr., 447 U.S. 773, 784 (1980) (upholding a prehearing termination of Medicaid payments to nursing home that failed to meet minimum government standards; although the ability to remain in the nursing home of their choice was obviously important to the residents, the Court rejected the argument that the nursing home residents possessed a property right).

^{119.} Goss, 419 U.S. at 576 (quoting Brown v. Bd. of Educ., 347 U.S. 483, 493 (1954)).

^{120.} James Bessen, Patent Thickets: Strategic Patenting of Complex Technologies 3 (Boston Univ. Sch. Of Law, Research on Innovation 2003), available at http://ssrn.com/abstract=327760 ("When firms do not assert their patents, innovators may still realize rents because of lead time advantages. Empirical research finds that firms see lead time advantages and related advantages as strong sources of appropriability—stronger than patents, in fact, except in the pharmaceutical and chemical industries." (citing Wesley M. Cohen et al., Protecting Their Intellectual Assets: Appropriability Conditions and Why U.S. Manufacturing Firms Patent (or Not) (Nat'l Bureau of Econ. Research, Working Paper

moval of a possible incentive to future innovation does not necessary equate with removal of a patentholder's essential benefits.

In sum, patents have some but not all of the characteristics of a federal benefit entitled to be considered property for purposes of the Due Process Clause. The benefit is clearly meant for the public good. It is established by a nondiscretionary statute, with only limited exceptions, and has an express duration that would create a reasonable, objective expectation that the benefit will continue. However, the nature of patents leaves some doubt as to whether they fulfill some of the other requirements. Patents do not have an easily discernible value, because the value of each patent is dependent on the market for the patented technology. Moreover, because patents are not needed to furnish basic living requirements, they may not fall within the realm of "essential" federal benefits. Therefore, patentholders should be aware that if courts were to begin to apply the Goldberg/Roth analysis to patents, there is significant doubt that patents would be entitled to due process protection.

V. THE ABILITY OF PATENTHOLDERS TO USE DUE PROCESS PROTECTION TO INVALIDATE IMPINGING GOVERNMENT ACTION

Theoretical consideration of the status of patents as property aside, what aggrieved patentholders care about is whether due process claims would be a viable response to government action. To address this issue, one should keep in mind that the Due Process Clause, meant to protect against arbitrary government action, ¹²¹ creates *two* discrete requirements that must be satisfied: *procedural* due process and *substantive* due process. ¹²² The requirement of "procedural due process" is meant to ensure that, before the government impairs a person's life, liberty, or property, there is a fair decision-making process; the requirement of the "substantive due process" is

No. 7552, 2000); Richard C. Levin et al., Appropriating the Returns from Industrial Research and Developments 783-820 (Brookings Papers on Econ. Activities No. 3, 1987)).

^{121.} *Id.* at 845. "We have emphasized time and again that '[t]he touchstone of due process is protection of the individual against arbitrary action of government'" *Id.* (quoting Wolff v. McDonnell, 418 U.S. 539, 558 (1974)). The *Lewis* Court stated that due process principles "'were intended to secure the individual from the arbitrary exercise of the powers of government, unrestrained by the established principles of private right and distributive justice.'" *Id.* (quoting Hurtado v. California, 110 U.S. 516, 527 (1884)).

^{122.} Id. at 840.

Our prior cases have held the provision that "[n]o State shall . . . deprive any person of life, liberty, or property, without due process of law," U.S. Const., Amdt. 14, § 1, to "guarante[e] more than fair process," Washington v. Glucksberg, 521 U.S. 702, 719 (1997), and to cover a substantive sphere as well, "barring certain government actions regardless of the fairness of the procedures used to implement them," Daniels v. Williams, 474 U.S. 327, 331 (1986); see also Zinermon v. Burch, 494 U.S. 113, 125 (1990) (noting that substantive due process violations are actionable under § 1983).

meant to strictly limit a government's ability to interfere in certain fundamental aspects of life, liberty, or property, regardless of whether the process justifying such interference is fair. Both are intended to prevent government officials "from abusing [their] power, or employing it as an instrument of oppression.'"¹²³ In recognition of each government branch's differing roles and methods of functioning, each branch of government must satisfy different requirements to comport with due process.¹²⁴

A. Claims Asserted by Patentholders Deprived of Patent Value Through the Government's Unauthorized Use of the Invention

As explained earlier, the Due Process Clause directly provides injunctive relief.¹²⁵ Unauthorized government use of a patented invention is not likely to create a viable substantive due process claim, but it may create a successful procedural due process claim. If so, the government may find itself enjoined from certain government conduct.

1. Substantive Due Process Claims

The Due Process Clause's substantive due process requirement protects a person from impingement when the exercise of government power does not serve a legitimate government purpose or there is no reasonable connection to that purpose. As a result, if a government action steps over the line by depriving a person of some aspect of life, liberty, or property without a sufficiently important purpose.

^{123.} Id. at 846 (quoting Collins, 503 U.S. at 126).

^{124.} See, e.g., Griswold v. Connecticut, 381 U.S. 479 (1965) (legislative capacity); Rochin v. California, 342 U.S. 165 (1952) (executive capacities). With rare exceptions, judicial violations of due process are not likely to be relevant to patentholders' claims. But patentholders have occasionally successfully asserted due process violations claims regarding court action. See, e.g., Cardinal Chem. Co. v. Morton Int'l, Inc., 508 U.S. 83, 101-02 (1993) (holding that the Federal Circuit's general practice of vacating declaratory judgments regarding patent validity following a determination of non-infringement "may unfairly deprive the patentee itself of the appellate review that is a component of the one full and fair opportunity to have the validity issue adjudicated correctly."); Johnson & Johnson, Inc. v. Wallace A. Erickson & Co., 627 F.2d 57, 61 (7th Cir. 1980). The Johnson & Johnson court noted that if a district court ordered a patentholder to submit his or her patent to the PTO and apply for a reissue patent prior to adjudication of the infringement action, then due process concerns would be triggered because there is no authority by which

a district court, prior to a trial on the merits, can require a patentee to submit and surrender his patent right to the Patent Office as a condition to pursuing his remedies against an alleged infringer. If such power were authorized, it would be a taking of property without due process of law.

Johnson & Johnson, 627 F.2d at 61.

^{125.} See supra note 31.

^{126.} County of Sacramento v. Lewis, 523 U.S. 833, 846 (1998) (emphasizing its repeated recognition that the substantive due process requirement prevents "the exercise of power without any reasonable justification in the service of a legitimate governmental objective" (citing Daniels v. Williams, 474 U.S. 327, 331 (1986))).

pose, that person's substantive due process right has been violated. No amount of process can shield a violative government action from being unconstitutional, and even the existence of procedures to remedy the impingement is insufficient to avoid a violation. Particularly in the context of executive branch action, the Court has explained that, "the Due Process Clause was intended to prevent government officials 'from abusing [their] power, or employing it as an instrument of oppression.' "127 Even more so than in the procedural context, the Court is hesitant to articulate a bright-line test for substantive violations. 128 Nevertheless, the standard the Court has set is unquestionably high. Executive conduct will only be considered unconstitutionally arbitrary if it is so "egregious" that it "shocks the conscience" of the court. 129 The official conduct "most likely to rise to the conscience-shocking level" is "conduct intended to injure in some way unjustifiable by any government interest "130

There are several obstacles that might prevent a patentholder whose invention has been used from succeeding on a substantive due process claim.¹³¹ The presence of section 1498 is legislative recognition of government use of patented inventions; as a result, it would seem likely that such use would constitute "justifiable government interest" so as to avoid "shocking the conscience" of a court.¹³² A finding of a due process violation is particularly unlikely where the unlicensed use is for military benefit, as was the case in *Zoltek*. Even though much of that use is in a non-emergency context in which the government could engage in licensing negotiations, ¹³³ it is not clear

^{127.} County of Sacramento, 523 U.S. at 840 (quoting Collins v. City of Harker Heights, 503 U.S. 115, 126 (1992)).

^{128.} Id. at 850.

[[]O]ur concern with preserving the constitutional proportions of substantive due process demands an exact analysis of circumstances before any abuse of power is condemned as conscience shocking. . . . "The phrase [due process of law] formulates a concept less rigid and more fluid than those envisaged in other specific and particular provisions of the Bill of Rights. Its application is less a matter of rule. Asserted denial is to be tested by an appraisal of the totality of facts in a given case."

Id. (quoting Betts v. Brady, 316 U.S. 455, 462 (1942)).

^{129.} *Id.* at 846-47, 847 n.8.

^{130.} Id. at 849.

^{131.} In fact, research has uncovered only one instance in which a court has recognized a violation of a patentholder's substantive due process right. In that case, the PTO was held to have violated substantive due process when an examiner rewrote claims to remove a certain aspect of the claimed invention, supposedly because the removal "clarifie[d] the issue." *In re* Baxter, 656 F.2d 679, 688 (C.C.P.A. 1981). According to the *Baxter* court, this constituted a violation of substantive due process because "there [was] no basis in law for denial of patent rights merely because the denial 'clarifies the issue.'" *Id*.

^{132.} See Collins v. City of Harker Heights, 503 U.S. 115, 128 (1992) (There is a "presumption that the administration of government programs is based on a rational decision-making process that takes account of competing social, political, and economic forces").

^{133.} Gargoyles, Inc. v. United States, 113 F.3d 1572 (Fed. Cir. 1997) (government found to have infringed patent on protective ballistic eyewear); Parker Beach Restoration,

that the Due Process Clause obliges the government to do so. In another due process case, the Supreme Court asserted that, "[i]n [a] proprietary military capacity, the Federal Government . . . has traditionally exercised unfettered control." ¹³⁴

In sum, a patentholder facing unlicensed government use of his invention must demonstrate that the executive branch's use "shocks the conscience" in order to success on a substantive process claim. Even where the government fails to provide compensation, it is likely to possess a "justifiable government interest" for that use that would likely preclude a court from finding a violation.

2. Procedural Due Process Claims

Whereas there appears to be little chance of a substantive due process violation, unauthorized government use may create a procedural due process violation in some circumstances. Stated most simply, the Due Process Clause's procedural protection ensures that a person receives "due process" when there is a government action that detrimentally affects any of his or her protected rights. This aspect of due process does not prevent government impairment of a right, as long as the rules of law are applied equitably: "'[i]n procedural due process claims, the deprivation by state action of a constitutionally protected interest . . . is not in itself unconstitutional; what is unconstitutional is the deprivation of such an interest without due process of law.' "135 That process is intended to guarantee that the person has an opportunity to present his or her argument against the government action with the expectation that this opportunity to be heard would thwart an "arbitrary" deprivation. 136 Thus, the executive branch violates procedural due process if it possesses legislatively authorized discretion but then fails to engage in sufficient process before exercising it. 137 For example, when the PTO fails to follow regu-

Inc. v. United States, 58 Fed. Cl. 126 (2003) (noting infringement by the Air Force of patented invention for mesh-net beach restoration device); AM Int'l, Inc. v. United States, 227 Ct. Cl. 632 (1981) (government uses office copiers from competitor that infringes plaintiffs' patents).

^{134.} Cafeteria & Rest. Workers Union, Local 473 v. McElroy, 367 U.S. 886, 896 (1961) (holding no due process violation resulting from a commander of a military installation's decision summarily denying, for security reasons, a civilian employee of a private contractor access to the installation).

^{135.} Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank, 527 U.S. 627, 642-43 (1999) (quoting Zinermon v. Burch, 494 U.S. 113, 125 (1990)).

^{136.} In re Baxter, 656 F.2d 679, 687 (C.C.P.A. 1981) ("'An elementary and fundamental requirement of due process in any proceeding which is to be accorded finality is notice reasonably calculated, under all the circumstances, to apprise interested parties of the pendency of the action and afford them an opportunity to present their objections.'" (quoting Memphis Light, Gas & Water Div. v. Craft, 436 U.S. 1, 13 (1978))).

^{137.} For example, assume that the law provides that the government may deny disability benefits to a person if it concludes, after proper process, that the person is sufficiently healthy to perform many types of work. If the executive branch fails to engage in

latory procedures, a patent applicant may have a viable procedural due process claim. 138

When it comes to government appropriation of an invention, there is no preemptive hearing or procedure in place. Section 1498 does not expressly authorize any challenge to such use; as explained earlier, that section only commands that "reasonable compensation" be provided when the government has done so. The absence of *any* procedure prior to government use appears to provide ample argument for a procedural due process violation.

The question then becomes: what is the real danger of a procedural due process claim? In most cases the government expects (or should expect) to pay section 1498 compensation, in which case an equivalent award on due process grounds would likely be unproblematic. But a due process claim should be of greater concern when the government has expected to be in the unusual circumstance in which section 1498 does not apply (e.g., *Zoltek*). Even a monetary award may leave the government in a less than optimal situation, if the government did not properly compare the effect of unauthorized use to other available options (for instance, using a substitute product). In such a case, however, the harm—though possibly dramatic—is merely budgetary. More problematic would be the availability of

sufficient procedure prior to denying those benefits, the denied individual may have a viable procedural due process claim.

138. Wm. T. Burnett & Co. v. Cumulus Fibres, Inc., 825 F. Supp. 734, 737 (W.D.N.C. 1993) (noting that the patent examiner's decision to expand the scope of the interference without providing the patent applicant its right to present evidence of patentability and/or amend its claims, as provided for in the patent regulations, violated procedural due process); In re Baxter, 656 F.2d 679, 687 (C.C.P.A. 1981) (holding that the patent examiner's failure to give the patent applicant proper notice of a modification to the examiner's decision to narrow the scope of the patentable invention constituted a violation of procedural due process); In re Meyer, 599 F.2d 1026, 1031 (C.C.P.A. 1979) ("Those cases [citing the above relationship between obviousness and novelty (anticipation)] do not provide a license for the board to shift the statutory basis of rejection from § 103 to § 102 while denying appellant the procedural due process provided for by 37 CFR 1.196(b)."). Though interestingly, none of the claims brought by actual patentholders have been successful. See In re Hiniker Co., 150 F.3d 1362, 1367-68 (Fed. Cir. 1998) (rejecting patentholder's claim that the PTO violated procedural due process by failing to provide a hearing, because the patentholder "failed to satisfy a condition necessary to receive an oral argument," and stating that "'[a]n appeal decided without an oral hearing will receive the same consideration by the [Board] as appeals decided after oral hearing." (quoting 37 C.F.R. § 1.194(a) (1997))); Rydeen v. Quigg, 748 F. Supp. 900 (D.D.C. 1990), aff'd, 937 F.2d 623 (Fed. Cir. 1991) (per curiam) (rejecting patentholder's due process claim, because the PTO had no duty to individually inform patentholders when their maintenance fees were due, so the PTO's lastminute reminder did not violate the patentholders' due process rights).

139. It would be reasonable to suggest that use of the invention without compensation (as in *Zoltek*) might even "shock the conscience," whereas use which includes providing compensation would not. If so, an uncompensated patentholder like *Zoltek* might suffer a cognizable substantive injury, whereas a compensated patentholder would not (even if the patentholder believes the compensation to be inadequate and would prefer to stop the use).

injunctive relief. Section 1498 does not allow for that form of relief, ¹⁴⁰ but it is a common remedy sought in due process cases. This opens up the possibility of an injunction in the hands of a patentholder who is unwilling to license its product. Perhaps the patentholder has an exclusive agreement with another company or government; or perhaps the patentholder is a foreign person or entity, and doesn't wish to assist the United States government. If the patentholder is entitled to obtain injunctive relief, it could seriously impair some established government function—and, indeed, when dealing with military hardware (as many section 1498 situations do), go so far as undermining national security. While courts may not be obligated to provide injunctive relief rather than a monetary remedy, this complication may very well lead courts to scrutinize more carefully the need to offer patentholders due process protection.

B. Claims Asserted by Patentholders Deprived of Patent Value Through Amendments to the Patent Laws

Under most circumstances, the action affecting the greatest number of patentholders is an amendment to the patents laws. Rather than lessening the value of the few patents that may cover any one appropriated invention, such an amendment potentially diminishes hundreds, or thousands (or possibly even tens of thousands) of valid patents. These numbers expose the potency, and (on the flip side) the problem, of providing due process protection. For patentholders in this situation (unlike in the situation discussed in Part V.A), procedural due process protection will not furnish a basis for relief. However, these patentholders may have a viable substantive due process claim when the claim is in response to retroactive, rather than prospective, legislation. As a result, courts may choose to tread carefully in assessing whether such legislative action should entitle a patentholder to any relief, whether injunctive or monetary.

1. Procedural Due Process Claims

The question of procedural due process generally does not arise when the government acts through its legislative process:

^{140.} See, e.g., Trojan, Inc. v. Shat-R-Shield, Inc., 885 F.2d 854, 856 (Fed. Cir. 1989) (rejecting an argument that section 1498 permits the award of an injunction against an alleged infringer to prevent bidding on a government contract, explaining that "[t]he patentee takes his patent from the United States subject to the government's eminent domain rights to obtain what it needs from manufacturers and to use the same. The government has graciously consented, in the same statute, to be sued in the Claims Court for reasonable and entire compensation, for what would be infringement if by a private person. . . . Though injunctions may seem to say that making for and selling to the government is [sic] forbidden, injunctions based on patent rights cannot in reality do that because of § 1498(a)." (emphasis added)).

General statutes within the state power are passed that affect the person or property of individuals, sometimes to the point of ruin, without giving them a chance to be heard. Their rights are protected in the only way that they can be in a complex society, by their power, immediate or remote, over those who make the rule. ¹⁴¹

Consequently, patentholders whose patent value was negatively affected by a law or regulation would have little chance of succeeding on procedural due process grounds. These patentholders may not always be without recourse, however. As discussed below, under some circumstances, substantive due process may provide the protection that they seek.

2. Substantive Due Process Claims

Not all interests mentioned in the Due Process Clause—life, liberty, and property—are given equal levels of protection from legislative action. As a result, patentholders' chances of success hinge on the level of protection the courts afford to patent rights. So-called "fundamental rights"—that include rights based on the concepts of personal autonomy and dignity, such as the right to marry, the right to reproduce, and the right to die (the "life" and "liberty" aspects)¹⁴²—receive the highest level of protection from government intrusion. Legislation impinging on these fundamental rights must survive "strict scrutiny"; in order to survive, the legislation must be narrowly tailored to advance a compelling government interest.¹⁴³ In contrast, economic rights are not considered to be fundamental rights. Courts have concluded that economic regulation most often involves an extremely complex policy balance of competing interests, and legislatures presumably weigh those interests in formulating regulations.¹⁴⁴

^{141.} Bi-Metallic Inv. Co. v. State Bd. of Equalization, 239 U.S. 441, 445 (1915); see Atkins v. Parker, 472 U.S. 115, 130 (1985) (discussing congressional decision to lower earned-income deduction and declaring that the "'legislative determination provides all the process that is due.'" (quoting Logan v. Zimmerman Brush Co., 455 U.S. 422, 432-33 (1982)) (emphasis added)); 3 Ronald D. Rotunda & John E. Nowak, Treatise on Constitutional Law: Substance and Procedure § 17.8 (3d ed. 1999) ("When the legislature passes a law which affects a general class of persons, those persons have all received procedural due process—the legislative process."); accord O'Bannon v. Town Court Nursing Ctr., 447 U.S. 773, 784 (1980).

^{142.} See Washington v. Glucksberg, 521 U.S. 702 (1997) (right to die); Roe v. Wade, 410 U.S. 113 (1973) (abortion rights); Eisenstadt v. Baird, 405 U.S. 438 (1972) (right to reproduce); Skinner v. Oklahoma ex rel. Williamson, 316 U.S. 535 (1942) (marriage and procreation).

^{143.} Washington, 521 U.S. at 721 (noting substantive due process protects "'fundamental liberty interests' "from deprivation by the government, regardless of the procedures provided, "unless the infringement is narrowly tailored to serve a compelling state interest").

^{144.} See, e.g., Williamson v. Lee Optical of Oklahoma, Inc., 348 U.S. 483, 487 (1955) ("The Oklahoma law may exact a needless, wasteful requirement in many cases. But it is for the legislature, not the courts, to balance the advantages and disadvantages of the new

As a result, legislatures "ha[ve] considerable leeway to fashion economic legislation"¹⁴⁵ Therefore " 'legislative Acts adjusting the burdens and benefits of economic life' " receive strong judicial protection. ¹⁴⁶ Not only are such acts given "a presumption of constitutionality," but the plaintiff must additionally establish that the legislature has acted in an "arbitrary and irrational way."¹⁴⁷ Legislation will survive this "rational basis" test so long as there is a legitimate governmental goal and the legislation is rationally related to that goal. The government need not show "mathematical precision in the fit between justification and [the economic legislation]."¹⁴⁸ Whether different economic legislation would have been wiser "is not a question of *constitutional* dimension."¹⁴⁹ Unsurprisingly, only once has the Supreme Court found that economic legislation failed this test. ¹⁵⁰

requirement."). It is certainly arguable that the lesser ability of property owners to influence the courts, as opposed to Congress, might lead to more equitable outcomes. But the propriety of the economic legislation standard is not the topic of this Article, and this paper does not attempt to wrestle with the question of whether the "rational basis" test applied to economic legislation is the most desirable one.

145. E. Enters. v. Apfel, 524 U.S. 498, 528 (1998) (citing Usery v. Turner Elkhorn Mining Co., 428 U.S. 1 (1976); Connolly v. Pension Benefit Guaranty Corp., 475 U.S. 211 (1986); Concrete Pipe & Products of California, Inc. v. Construction Laborers Pension Trust, 508 U.S. 602 (1993)) (emphasis added).

146. Concrete Pipe, 508 U.S. at 637 (quoting Usery, 428 U.S. at 15).

147. *Id.*; *Williamson*, 348 U.S. at 487-88; *cf.* Nebbia v. New York, 291 U.S. 502 (1934) (law should not be unreasonable, arbitrary, or capricious).

148. Concrete Pipe, 508 U.S. at 637-41 (reviewing under substantive due process the imposition of liability on an employer for withdrawal from multiemployer pension fund); see Usery, 428 U.S. 1; Bowen v. Gilliard, 483 U.S. 587, 598-603 (1987) (reviewing under substantive due process a reduction in welfare benefits); Regents of the Univ. of Mich. v. Ewing, 474 U.S. 214, 222-23 (1985) (assuming without deciding that continued enrollment in a medical school program is a property interest protected by substantive due process); see Merrill, supra note 110. Cf. R.R. Ret. Bd. v. Alton R.R. Co., 295 U.S. 330 (1935) (invalidating various provisions of the Railroad Retirement Act of 1934 as arbitrary, including a provision for employer-financed pensions for former employees who, though not in the employ of the railroads at the time of enactment, had been so employed within the year).

149. Usery, 428 U.S. at 18-19.

We are unwilling to assess the wisdom of Congress' chosen scheme by examining the degree to which the "cost-savings" enjoyed by operators in the preenactment period produced "excess" profits, or the degree to which the retrospective liability imposed on the early operators can now be passed on to the consumer. It is enough to say that the Act approaches the problem of cost spreading rationally; whether a broader cost-spreading scheme would have been wiser or more practical under the circumstances is not a question of constitutional dimension.

Id. (citing Ferguson v. Skrupa, 372 U.S. 726, 730-32 (1963); Williamson, 348 U.S. at 488) (emphasis added); see also E. Enters., 524 U.S. at 537 ("[T]his Court has expressed concerns about using the Due Process Clause to invalidate economic legislation.").

150. BMW of N. Am., Inc. v. Gore, 517 U.S. 559, 582-83 (1996). "[A] reviewing court engaged in determining whether an award of punitive damages is excessive should 'accord substantial deference to legislative judgments concerning appropriate sanctions for the conduct at issue.' " *Id.* (quoting Browning-Ferris Indus. of Vt., Inc. v. Kelco Disposal, Inc., 492 U.S. 257, 301 (1989)). Nonetheless, the court found that the "breathtaking" punitive damage award, which was 500 times the damage incurred, could not be justified on the

No court has clearly decided whether patent rights should enter the pantheon of fundamental rights, or whether they constitute economic rights. The Supreme Court often uses one of two phrases (or both) to describe the type of right entitled to that level of protection: either a right that is "deeply rooted in this Nation's history and tradition," or one that is "implicit in the concept of ordered liberty." 151 Patentholders might justifiably note that patent rights have existed almost since the country's founding, and indeed the Framers even included a call to establish such rights. There is little doubt, then, that such rights are deeply rooted in the country's history and tradition. On the other hand, it is difficult to claim that patent rights are implicit in the concept of ordered liberty, as the Court generally understands it. First, a patent's sole purpose is to provide monopoly profits; patents do not actually give a person the right to do anything that they could not otherwise do. Second, the government could have chosen not to create patent rights. If they are implicit in the concept of ordered liberty, then the Framers left open the possibility that Congress would fail to establish a crucial right. Third, unlike every established fundamental right, patent rights expire. After a patent's established duration is over, the right ceases to exist. In sum, while patent rights have traditionally existed, they are not any more crucial to personal liberty than other economic rights. At the end of the day, the decisive factor may be the Court's stated hesitation to increase the number of fundamental rights. 152 In light of that disinclination and the limited value of patents to a civilized society, it seems likely that patent rights will not be considered "fundamental rights."153

Because patent rights are unlikely to get the elevated treatment of a "fundamental right," a patentholder raising a substantive due process claim will have to demonstrate that the law was arbitrary and irrational. This is a high hurdle to satisfy, making it unlikely

ground that it was necessary to deter future misconduct. *Id.* Some argue that this distinction is inappropriate considering the importance of property rooted in the origins of our legal system. *See* Ronald J. Krotoszynski, Jr., *Fundamental Property Rights*, 85 GEO. L.J. 555 (1997) (noting the contrast between substantive due process protection of liberty and property and urging recognition of fundamental property rights).

^{151.} Washington v. Glucksberg, 521 U.S. 702, 721 (1997); accord County of Sacramento v. Lewis, 523 U.S. 833, 846 (1998); Chavez v. Martinez, 538 U.S. 760 (2003).

^{152.} Collins v. City of Harker Heights, 503 U.S. 115, 125 (1992) ("As a general matter, the Court has always been reluctant to expand the concept of substantive due process because guideposts for responsible decisionmaking in this unchartered area are scarce and open-ended." (citing *Ewing*, 474 U.S. at 225-26)).

^{153.} Christina Bohannan & Thomas F. Cotter, When the State Steals Ideas: Is the Abrogation of State Sovereign Immunity from Federal Infringement Claims Constitutional in Light of Seminole Tribe?, 67 FORDHAM L. REV. 1435, 1507 (1999) (discussing whether state infringement of intellectual property could be a violation of substantive due process and observing that "it is unlikely that intellectual property is a 'fundamental' property interest in modern constitutional parlance").

that patentholders will be able to demonstrate that any legislation *prospectively* eliminating or restricting their patent rights constitutes a violation of substantive due process. For instance, suppose that Congress approved legislation to eliminate remedies on *future* check collection patents. As long as the law was passed for a reason rationally related to its effect, it would meet the requirements of substantive due process.

However, not all patent legislation is prospective. Courts have traditionally applied the highly deferential standard to retroactive as well as prospective legislation, ¹⁵⁴ with court recognition that the "practicalities of producing national legislation" may justify imposing retroactive deprivation where it is "confined to short and limited periods." ¹⁵⁵ Indeed, in the only Federal Circuit opinion considering legislation with retroactive effect, *Patlex Corp. v. Mossinghoff*, the court upheld a statute that permitted reexamination of all patents, including patents issued prior to the statute's enactment. ¹⁵⁶ But little should be presumed from the *Patlex* court's analysis because its overall reasoning was flawed in ways that were clearly repudiated in a recent Supreme Court opinion. ¹⁵⁷

Recently, however, the Supreme Court has shown skepticism towards retroactive economic laws, declaring that "a law that is fundamentally unfair because of its retroactivity is a law that is basi-

^{154.} E. Enters., 524 U.S. at 537 ("[T]his Court has expressed concerns about using the Due Process Clause to invalidate economic legislation," and thus "[t]o succeed, Eastern would be required to establish that its liability under the Act is 'arbitrary and irrational.'").

^{155.} Id. at 528; see United States v. Carlton, 512 U.S. 26, 30-31 (1994).

[&]quot;Provided that the retroactive application of a statute is supported by a legitimate legislative purpose furthered by rational means, judgments about the wisdom of such legislation remain within the exclusive province of the legislative and executive branches....

^{... [}The] burden is met simply by showing that the retroactive application of the legislation is itself justified by a rational legislative purpose."

Id. at 30-31 (quoting Benefit Guar. Corp. v. R.A. Gray & Co., 467 U.S. 717, 729-30 (1984)).

^{156. 758} F.2d 594, 603 (1985). The Patlex statute added a new post-issuance procedure permitting the PTO to reconsider whether the patent claims were properly granted. Id. at 597. Although the statute was procedural in nature, the impact was certainly substantive. Because the post-issuance PTO hearing did not offer patents the same presumption of validity as the district courts, id. at 605, certain existing patents that might survive an invalidity hearing in the court could have been invalidated (cancelled) by the PTO.

^{157.} The *Patlex* court improperly examined the substantive due process claim by blending its due process analysis with a takings analysis, improperly reshaping the issue as a determination of "the nature and the magnitude of [the effect of the reexamination statute] on preexisting property values" and applying the *Penn Central* regulatory takings test. *Id.* at 602-03. In *Lingle v. Chevron U.S.A., Inc.*, the Court expressly criticized the intermingling of the due process analysis and the takings analysis. 544 U.S. 528, 540-42 (2005) (emphasizing that asking "whether a regulation of private property is *effective* in achieving some legitimate public purpose" is different from "discerning whether private property has been 'taken' for purposes of the Fifth Amendment").

cally arbitrary."¹⁵⁸ While "legislation readjusting rights and burdens is not unlawful *solely* because it upsets otherwise settled expectations,"¹⁵⁹ legislation must be rational *in light of its effect on settled legal relationships*. ¹⁶⁰ In the most recent case considering a retroactive law, both Justices Breyer and Kennedy emphasized that the goal of law is to ensure the stability of legal relationships, with Justice Breyer declaring that, "an unfair retroactive assessment of liability upsets settled expectations, and it thereby undermines a basic objective of law itself,"¹⁶¹ and Justice Kennedy emphasizing that, "[b]oth stability of investment and confidence in the constitutional system, then, are secured by due process restrictions against severe retroactive legislation."¹⁶² Justice Kennedy expressly suggested that retroactive laws, that undermine legal relationships, are not deserving of the same presumption of constitutionality as other economic laws. ¹⁶³

158. E. Enters., 524 U.S. at 558-59 (Breyer, J., dissenting); see United States v. Carlton, 512 U.S. 26, 30 (1994) (noting that retroactive economic regulations are not tested under a stricter standard—"whether 'retroactive application is so harsh and oppressive as to transgress the constitutional limitation.'...'does not differ from the prohibition against arbitrary and irrational legislation' that applies generally to enactments in the sphere of economic policy." (quoting Welch v. Henry, 305 U.S. 134, 147 (1938); Pension Benefit Guaranty Corp. v. R.A. Gray & Co., 467 U.S. 717, 733 (1984))).

159. Concrete Pipe & Prods. of Cal., Inc. v. Constr. Laborers Pension Trust, 508 U.S. 602, 637 (1993) (emphasis added).

160. E. Enters., 524 U.S. at 558 (Breyer, J., dissenting) ("Unless it is fundamentally unfair and unjust, in terms of Eastern's reasonable reliance and settled expectations, to impose that liability, the Coal Act's 'reachback' provision meets that challenge."). Of course, like many legal doctrines that determine reasonableness based on the party's expectations, there is a substantial level of cause-and-effect—once the courts hold that a party did not have a reasonable expectation under the circumstances, other similarly-situated parties could conclude that the courts would not find their reliance to be reasonable. Until that first decision, however, those parties' expectation would seem to be reasonable. In this sense, it is much like the chicken-and-egg problem that exists with personal jurisdiction—whether it is foreseeable that a defendant would be subject to the jurisdiction of a particular court depends, in part, on earlier court decisions exercising or refusing to exercise such jurisdiction.

161. *Id.* at 558 ("[T]o find that the Due Process Clause protects against . . . fundamental unfairness . . . of specially arbitrary retroactive [laws] is to read the Clause in light of a basic purpose: the *fair application of law*, which purpose hearkens back to the Magna Carta.").

162. Id. at 549 (Kennedy, J., concurring in the judgment and dissenting in part). Groups targeted by retroactive laws, were they to be denied all protection, would have a justified fear that a government once formed to protect expectations now can destroy them. Both stability of investment and confidence in the constitutional system, then, are secured by due process restrictions against severe retroactive legislation.

Id.

163. *Id.* Justice Kennedy in *Eastern Enterprises* stated "In our tradition, the degree of retroactive effect is a significant determinant in the constitutionality of a statute." *Id.* (citing United States v. Carlton, 512 U.S. 26, 32 (1994); United States v. Darusmont, 449 U.S. 292, 296-97 (1981)). "If retroactive laws change the legal consequences of transactions long closed, the change can destroy the reasonable certainty and security which are the very objects of property ownership." *Id.* at 548. The Court expressly "left open the possibility that legislation might be unconstitutional if it imposes severe retroactive liability on a limited

But Justice Breyer was so discomfited that he implicitly endorsed the same notion, emphasizing that grounds that would save a prospective law might be insufficient to justify a retroactive law. 164 As a result, a current patentholder might reasonably hope that the Supreme Court would agree with the only other uncovered due process case considering retroactive patent legislation—a district court case that found that such legislation violated the patentholder's right to substantive due process. 165

The section of the proposed Patent Reform Act of 2007 abolishing remedies for existing patents, thereby rendering them worthless, would seem to be of the type of retroactive amendment that the Court would find to unacceptably change the patent bargain. The settled legal relationship behind patents presumes that an inventor's disclosure of the nature of his invention, along with information to enable its creation and use, is exchanged for patent protection. But this proposed section would leave the affected patentholders with no recourse when private financial institutions violate their patent exclusivity—a patent exclusivity objectively estimated to be worth as much as \$1 billion dollars. 166 Thus if this legislation is indeed enacted, those patentholders can be expected to seek to either enjoin the enforcement of that provision or to recoup the diminished value from the government, through Bivens claims. An injunction would reestablish the availability of damages against the infringing private actors, thereby indirectly costing the public much of that amount as well as any indirect loss to the economy from the more expensive financial transactions. More problematically for the government, a

class of parties that could not have anticipated the liability" *Id.* at 528 (majority opinion). Justice Kennedy was unequivocal that, in that case, "[a]ccepted principles forbidding retroactive legislation" would have required invalidation of the statute. *Id.* at 547 (Kennedy, J., concurring in the judgment and dissenting in part).

^{164.} See Carlton, 512 U.S. at 31.

[&]quot;To be sure, . . . retroactive legislation does have to meet a burden not faced by legislation that has only future effects. . . . The retroactive aspects of legislation, as well as the prospective aspects, must meet the test of due process, and the justifications for the latter may not suffice for the former"

Id. (quoting Benefit Guar. Corp. v. R.A. Gray & Co., 467 U.S. 717, 729-30 (1984)).

^{165.} Diebold, Inc. v. Record Files, Inc., 114 F. Supp. 375 (N.D. Ohio 1953). In *Diebold, Inc.*, the defendant in a patent infringement case asserted that certain patent claims were invalid. The defendant relied on the Patent Codification Act (PCA), which purported to disallow previously proper partial disclaimers of a patent, which would have thereby invalidated many claims. *Id.* at 376 (citing 35 U.S.C. § 253). The PCA was apparently retroactive and applied to all patents, not just subsequent filed ones. *Id.* The district court held that the act could only apply to patents in which "the facts giving rise to a new claim or defense [in that case, the patent issuance, presumably] under the Act occurred after its effective date" and declared that applying the act to disclaimers filed earlier would violate substantive due process. *Id.* ("The constitutional principle of due process prohibits the retroactive application of the new statute and a resultant invalidation of the plaintiff's patent claims.").

^{166.} See CBO COST ESTIMATE FOR S. 1145, supra note 7, at 6.

damage award would avert those direct and indirect costs from infringement actions, but at a very direct and considerable cost to the public coffers. While it is indeed the immensity of the loss itself that would motivate patentholders to seek relief, the possibility of such awards might encourage a court to reassess the obligation to provide patentholders' with a right to such relief.

VI. CONCLUSION

There are more patentholders than ever who may seek relief when government action detrimentally affects the value of their patents. The expected explosion in patentholders' due process claims creates a danger of enjoining government policy changes or crucial government use. Historically, courts have repeatedly characterized patents as "property" and thus accorded them protection under the Takings and Due Process Clauses. But patents are not another form of traditional property; rather, they are federally granted benefits. In light of the Federal Circuit's recent repudiation of patentholders' right to Takings Clause protection, and the Supreme Court's denial of certiorari, it is fair to say that courts are no longer reflexively granting patentholders property protection. If the courts choose to reconsider that protection, it would make sense for them to analyze patentholders' rights to such protection using the same Goldberg/Roth test that is used to determine the due process rights of recipients of other government benefits.

Applying the *Goldberg/Roth* standard, there is substantial doubt as to whether patents satisfy the requirements for due process protection. Patents have some—but not all—of the characteristics of a protectible federal benefit. Unlike other federal benefits previously awarded protection, patents do not have an easily discernible value, because the value of each patent is dependent on the market for the patented technology. Moreover, because patents, unlike welfare, do not furnish basic living requirements, they do not fall within the realm of "essential" federal benefits. Thus, patentholders should be aware that if that standard is applied, there is some doubt that they will be entitled to due process protection.

Moreover, the Federal Circuit's recent hesitation to accord patents full property status is easily understood in light of the potential impact of the incumbent protections. Recognizing a patentholder's right to due process protection could have a dramatic effect on government activities. Government action, either in the form of appropriation of an invention or in the form of legislation, may be susceptible to either injunctive or monetary relief. If unlicensed use of an invention is found to violate due process, the government may find its use enjoined, possibly making some of its most important government func-

tions more costly or complicated. Similarly, the government may find the patentholders successful in either enjoining retroactive legislation or obtaining damages up to the value of the patentholders' economic loss—damages that, for currently proposed legislation, could be as high as \$1 billion dollars. As such claims become more common, the danger is not simply that the government might be compelled to pay damage awards, but that such awards, or injunctions, might severely hamper the government's ability to make socially valuable changes to patent policy. Indeed, hesitation to create such a situation was suggested by the *Zoltek* Court's finding that patents are not property for purposes of the Takings Clause. If courts hesitate to accede to these potential outcomes, they could choose to rely on the *Goldberg/Roth* test to reverse course and deny patentholders that particular protection.

In sum, while patentholders might view their right to due process protection as firmly established, the Federal Circuit's recent *Zoltek* decision should give them pause. In circumstances involving government use of inventions or government policy changes, patentholders bringing such claims should expect caution from the courts in reaffirming their right to due process protection.