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Article

**WHO TOOK MY IP?--DEFENDING THE AVAILABILITY OF INJUNCTIVE RELIEF FOR PATENT OWNERS**

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“Few issues are as important to the current and future economic strength of the United States as our ability to create and protect intellectual property.”<sup>1</sup>

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## \*188 I. Introduction

Property owners’ fundamental rights to exclude are under attack. Specifically, in the field of patent law, a widespread fear of so-called “patent trolls” has led to proposed limitations on patentees’ intellectual property rights. Patent trolls are accused of looting wayward corporations of their profits and impeding their progress, unless a sizeable sum is paid. Because the trolls’ greatest weapon is the threat of a permanent injunction, both the courts and Congress are reconsidering the availability of permanent injunctive relief to patentees.<sup>2</sup>

The Supreme Court addressed this issue in 2006 in *eBay, Inc. v. MercExchange, L.L.C.*<sup>3</sup> The Court was unanimous in its conclusion that a permanent injunction will only issue in a patent case after satisfaction of a four-part test.<sup>4</sup> Although the Court’s statement of this test acknowledges limits to, and casts a shadow over, patentees’ rights to exclude,<sup>5</sup> Justice Thomas’s lead opinion seems unremarkable. A strong, four-justice minority concurrence penned by Justice Kennedy, however, attacked the use of injunctive relief “as a bargaining tool to charge exorbitant fees to companies that seek to buy licenses to practice the patent.”<sup>6</sup> In such cases, Justice Kennedy argued, “legal damages may well be \*189 sufficient to compensate for the infringement and an injunction may not serve the public interest.”<sup>7</sup> Within weeks, several district courts latched onto Justice Kennedy’s remarks, stepped through the door opened by Justice Thomas’s lead opinion, and denied injunctive relief to patent owners.<sup>8</sup> The U.S. Court of Appeals for the Federal Circuit has reversed the grant of at least two injunctions in light of \*190 the Court’s decision,<sup>9</sup> and it has affirmed at least one district court’s denial of injunctive relief.<sup>10</sup>

A similar threat to patentees’ exclusionary rights surfaced in Congress a year earlier amidst waves of patent reform legislation. A committee print of the Patent Reform Act of 2005 included a proposed amendment to 35 U.S.C. § 283 that would create a presumption against entry of a permanent injunction.<sup>11</sup> A month later, on May 19, 2005, the New Democrat Coalition issued an open letter to Representatives Lamar Smith and Howard Berman stating: “We believe injunctive relief is an important legal reform element of patent reform and we encourage the Committee to take aim at those who seek to abuse the patent system for profit.”<sup>12</sup> In the year that followed, the House Subcommittee on Courts, the Internet and Intellectual Property solicited extensive testimony on the need for patent injunction reform.<sup>13</sup> Although no legislation has made its way out of committee, the rise in sentiment against the availability of injunctive relief is clear.<sup>14</sup>

This article defends the availability of injunctive relief for patent owners, arguing that patent rights are properly protected by property rules and suggesting a takings framework for addressing denials of injunctive relief. Part II establishes that patent rights traditionally have been treated as property rights defined by a fundamental right to exclude. These rights have been protected by property rules; injunctive relief has been the norm. In Part III, this article argues that property \*191 rules, as opposed to liability rules, should continue to govern patent law, addressing in particular several of the efficiencies fostered by the consistent and predictable imposition of permanent injunctive relief. In Part IV, this article suggests that the Takings Doctrine may provide a legal tool to combat the denial of, or imposition of limitations to, injunctive relief. First, the viability of a judicial takings argument is established. Second, the removal of injunctive relief by either the courts or Congress is considered in the framework of the three accepted regulatory takings categories. Third, this article argues that at least judicial denials of injunctive relief are impermissible, as they violate the Public Use limitation of the Takings Clause. Finally, Part V concludes that the limitation or elimination of injunctive relief for patent owners is both inefficient and inappropriate. A property right without an enforcement mechanism is meaningless. A patentee’s fundamental right to exclude mandates the availability of injunctive relief.

## II. Background to the Protection of Patent Rights

At the outset, an inquiry into whether the government should remove or limit injunctive relief as a remedy to acts of patent infringement requires a determination of whether, and what, property rights are at stake. This Part briefly outlines the foundations of patent property rights, as well as the property rules that have traditionally protected those rights.

### A. Patents Provide Inventors with a Right to Exclude

The Patent Clause<sup>15</sup> of the Constitution grants to Congress the 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.”<sup>16</sup> From this foundation, an evolving set of patent laws has developed, and with it, the precise set of rights that are said to accompany a patent grant.

The Patent Clause first identifies “Inventors” as those to whom a right should be secured. On this basis, § 101 of the Patent Act reads: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.”<sup>17</sup> The notion of entitlement **\*192** is then explicitly reinforced by § 102 of the Patent Act, which begins, “[a] person shall be entitled to a patent unless . . . .”<sup>18</sup> Indeed, unlike other nations that award patents to those who are first to file applications for patent rights, the United States remains the only nation to award patents to the first person to conceive an invention,<sup>19</sup> provided the invention was not abandoned, suppressed, or concealed.<sup>20</sup> That patent rights rest with inventors in the United States is thus well settled.

Returning then to the constitutional language, the Patent Clause identifies “exclusive” as the type of right to be secured. The precise casting of this “exclusive right,” absent further textual guidance, has evolved over the past two centuries.

As set forth in the Patent Act of 1793, patent rights consisted of “the full and exclusive right and liberty of making, constructing, using, and vending to others to be used” the patented invention.<sup>21</sup> This set of rights, it may be noted, was very similar in scope to the set of rights traditionally associated with real property--the rights to exclude, to use, and to transfer.<sup>22</sup>

Modern patent grants, however, are more limited, devoid of any right (or privilege)<sup>23</sup> to practice. Section 154(a)(1) of the Patent Act now reads:

**\*193** Every patent shall contain a short title of the invention and a grant to the patentee, his heirs or assigns, of the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States, and, if the invention is a process, of the right to exclude others from using, offering for sale or selling through the United States, or importing into the United States, products made by that process, referring to the specification for the particulars thereof.<sup>24</sup>

Thus, although a patent owner has “the right to exclude others” from practicing a patented invention, the patent owner has no more right to practice the invention with the patent than without.<sup>25</sup> Although the lack of a right to use offers a potential distinction between patent rights and, for example, real property rights, the right to exclude becomes all the more crucial as the sole strand in the patentee’s bundle of rights.

Regardless of the precise formulation of the patentee’s “exclusive right,” the patent right itself has been viewed with some consistency as a property right. As early as 1876, the Supreme Court accepted that “[a] patent for an invention is as much property as a patent for land.”<sup>26</sup> Later, the Court acknowledged in the 1945 case *Hartford-Empire Co. v. United States*: “That a patent is property, protected against appropriation both by individuals and by government, has long been settled.”<sup>27</sup>

Following this lead, the U.S. Court of Appeals for the Federal Circuit<sup>28</sup> has taken a similar view of patent rights as property rights.<sup>29</sup> For example, in *Hughes Aircraft Co. v. United States*, the Federal Circuit held that “[t]he government’s **\*194** unlicensed use of a patented invention is properly viewed as a taking of property under the Fifth Amendment through the government’s exercise of its power of eminent domain.”<sup>30</sup> This statement reaffirmed the Federal Circuit’s earlier ruling in *Patlex Corp. v. Mossinghoff* that “[i]t is beyond reasonable debate that patents are property [as contemplated by the Takings Clause].”<sup>31</sup>

Additionally, Congress has acknowledged that patent rights are Fifth Amendment property rights when considering whether

changes to the patent laws would rise to the level of “takings.” For example, during debate over the Hatch-Waxman Act, a House Report addressed the issue of whether the permissive use of patented technologies for research purposes was a taking: “The situation presented in [the Hatch-Waxman Act] does not result in the total extinguishment of the patent owner rights, because the patent owner still maintains a right to exclude others from the commercial marketplace.”<sup>32</sup> While finding that the Hatch-Waxman Act would not effect a taking, the Report recognized that any fundamental alteration to a patentee’s right to exclude could be a taking, thus validating the view that patent rights are, in fact, property rights.<sup>33</sup>

## **B. Permanent Injunctive Relief Has Been the Norm**

Once a patent is granted, an act of infringement under 35 U.S.C. § 271 may provide a cause of action under 35 U.S.C. § 281. For such actions, original jurisdiction lies exclusively with the federal district courts.<sup>34</sup> The United States Court of Appeals for the Federal Circuit is the sole arbiter of appeals in patent cases.<sup>35</sup>

**\*195** For infringement of a utility patent, the prevailing patent owner is entitled under 35 U.S.C. § 284 to recover damages “adequate to compensate” the patent owner for the infringement.<sup>36</sup> Such damages, however, are directed to past acts of infringement. To restrain future infringing activity, the patent owner’s right to exclude is typically protected by entry of a permanent injunction. To this end, § 283 of the Patent Act reads: “The several courts having jurisdiction of cases under this title may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems reasonable.”<sup>37</sup>

For over two centuries of patent practice, the courts used their authority to issue permanent injunctions almost automatically upon a finding of patent infringement.<sup>38</sup> Referring at times to the four-factor test,<sup>39</sup> the courts found that the first three factors (irreparable harm, insufficiency of money damages, and the balance of hardships) tilted presumptively in favor of the patent holder.<sup>40</sup>

Although some commentators have recently argued that the use of the term “may” in § 283 is limiting, the courts have traditionally read the term “may” as explicitly authorizing and empowering them to enter permanent injunctions. As the **\*196** Federal Circuit explained in *KSM Fastening Systems, Inc. v. H.A. Jones Co.*, “[w]hile the grant of injunctive authority is clearly in discretionary terms, . . . injunctive relief against an infringer is the norm.”<sup>41</sup>

Now, in light of the Supreme Court’s decision in *eBay* and threats of legislative action, the “norm” may have changed. Permanent injunctive relief is no longer a foregone conclusion.

## **III. Patent Rights Should Be Protected by Property Rules**

Considered initially from a formalistic perspective, injunctive relief is the only adequate protection for a right to exclude. The essence of this bond between right and remedy was captured aptly by the economist Fritz Machlup in a report to the Congressional Subcommittee on Patents, Trademarks, and Copyrights in 1958. As Professor Machlup explained, “a patent confers the right to secure the enforcement power of the state in excluding unauthorized persons, for a specified number of years, from making commercial use of a clearly identified invention.”<sup>42</sup> A refusal by the government (be it by the judiciary or by the legislature) to enforce this right by a property remedy is thus tantamount to a denial of the exclusion right in the first place. Logically, a right to exclude mandates exclusion. Injunctive relief is, therefore, the only type of relief that is truly aligned with the right.

This formalistic expression, however, is imperfect. As explained earlier,<sup>43</sup> Congress’s constitutional empowerment specifies the granting of “the exclusive Right.” But it may not be necessary for Congress to grant “the exclusive Right” in **\*197** the form of a “right to exclude.”<sup>44</sup> Instead, it may be within the power of Congress to grant, for example, the exclusive right to profit from an invention--a right that could be enforced by a disgorgement remedy under a liability regime.<sup>45</sup> If such alternatives are constitutionally acceptable, a more rigorous analysis of the pairing of right and remedy is required. To that end, the familiar Calabresi-Melamed model for assigning property rules<sup>46</sup> and liability rules<sup>47</sup> validates both the award of patent rights to inventors and the existence of a property regime for patent rights, rooted firmly in notions of both judicial and social efficiency.

## **A. Patent Rights Properly Rest with Inventors**

Necessarily, the analysis begins with the predicate inquiry: with whom does an entitlement rest?<sup>48</sup> In patent law, this question is easily answered--the United States' patent system presupposes a decision to award an entitlement to the inventor of a useful system or method.<sup>49</sup> Although it is not particularly useful to question whether such patent rights should be granted,<sup>50</sup> a reminder of why the entitlement is assigned will be useful to the subsequent decision between the application of property rules and liability rules.

### **\*198 B. Patent Rights Incentivize Efficient Investment**

The most common policy argument in support of our patent system is that, assuming invention to be a social good,<sup>51</sup> a patent system assigns entitlements in such a manner as to incentivize productive inventive activity.<sup>52</sup> Unfortunately, as it is impossible to compare the two alternatives-- a world with a patent system and one without--in any reliable manner, this thesis does not enjoy much empirical support.<sup>53</sup> But the general efficiency argument does find substantial intuitive support.

Returning once again to the Patent Clause, the Constitution envisions a patent system that works "[t]o Promote the Progress of Science and useful Arts."<sup>54</sup> Because of the often significant investments required for both inventive activity (the creation of an idea) and innovative activity (the development of an idea), the patent system "promotes" progress by offering an incentive for these investments--exclusive rights--an incentive that is only strengthened when the exclusive right-holder may enjoin others.<sup>55</sup>

**\*199** The award of an entitlement to an inventor secures the inventor's ability to realize a return on investment.<sup>56</sup> Although other regimes with different entitlements could also offer returns on investment, a patent regime does so efficiently. For example, unlike a hypothetical regime under which all inventive activities would be publicly funded but no entitlement would remain with the "inventor," a patent regime only offers returns on productive efforts. Failure is not rewarded under a patent regime. Moreover, unlike a hypothetical regime under which inventors would receive set monetary rewards for their inventions (but again, no entitlement would remain),<sup>57</sup> a patent regime offers variable returns, based on the market value of each invention.<sup>58</sup> As a result, a socially useless invention will receive little or no reward in the marketplace, while a socially useful invention may garner tremendous rewards.<sup>59</sup> Simply stated, under a patent regime, neither fruitless efforts nor worthless inventions are rewarded. The efficient allocation of resources in favor of valuable inventive activity thus supports the allocation of entitlements to inventors.

### **C. Patent Rights Serve Distributional Goals**

A less discussed but increasingly important value of our allocation of entitlements through the award of patent rights is the distributive effects of those allocative decisions. These distributive effects, both within the boundaries of the United States and internationally, independently validate the existence of strong patent rights.

**\*200** Within the boundaries of the United States, the American reap-what-you-sow value system encourages the distribution of wealth to inventors and producers, and away from free riders and copy-cats. The allocation of entitlements to inventors fosters this value-based distribution.

On a grander scale, however, the allocation of entitlements to inventors may offer beneficial distributive advantages in favor of the United States in the international trade arena. The last several decades have witnessed a shift in the American economy. Heavy industry is no longer the mainstay of American wealth, as the manufacturing of goods has been outsourced to other areas of the world--to Mexico, to China, and to Taiwan, for example. Having instead reverted to a predominantly mercantile, 'thought' economy, the United States increasingly relies on the inventive and innovative capacity of its workforce.

According to the 2006 Economic Report of the President, patents now comprise 11% of the assets (by current market value) of public U.S. corporations.<sup>60</sup> The National Intellectual Property Law Enforcement Coordination Council explains: "Few issues are as important to the current and future economic strength of the United States as our ability to create and protect intellectual property."<sup>61</sup> As the United States continues its economic transition, the distributive effects of assigning patent rights serve a protectionist function, assuring the sustained value of America's most valuable asset--its capacity to achieve. The assignment of entitlements to inventors thus aligns with multiple distributional goals, both cultural and dynamic, while providing for the efficient allocation of resources in productive inventive activities.

## D. Patent Rights Are Properly Protected by Property Rules

As a general matter, property rights should be protected by property rules absent a compelling reason to impose a liability regime.<sup>62</sup> Liability rules, after all, \*201 offer incentives to infringe. Therefore, unless patent infringement is to be viewed as a social good that should be incentivized,<sup>63</sup> the application of property rules should remain the norm.<sup>64</sup>

Those who favor the application of liability rules in patent law often cite a desire to foster competitive markets or to prevent monopolistic practices.<sup>65</sup> Indeed, the patent system has long been described by its critics as a necessary evil, stunting the United States' typical pro-competition posture.<sup>66</sup> There is no reason, however, why a property rule will stifle competition or create monopolies.<sup>67</sup> Moreover, the economic efficiencies, distributional benefits, and other justice reasons in support of a property regime for patent rights far outweigh the associated costs.

### 1. Property Rules Further Foster Efficient Investment

As discussed above, the assignment of entitlements in favor of inventors fosters the efficient allocation of investments in productive inventive activity.<sup>68</sup> The protection of the resultant patent rights by property rules increases the efficiency of those investments and extends the economic efficiencies into the post-\*202 invention marketplace to encompass innovators and competitors as well. The incentive structure functions slightly differently for inventors and innovators, but in both cases, it is premised on an enforceable right to exclude (e.g., by the imposition of permanent injunctive relief under a property regime).

First, the application of property rules provides the possibility of reward by virtue of freedom from free-riders.<sup>69</sup> Absent such a regime, market competition can force returns on investments to zero.<sup>70</sup> Therefore, property rules are necessary to fully realize the economic efficiencies a patent system offers with respect to investment in inventive activity.

Second, investment in innovation is incentivized by enabling innovators to rely on the right to exclude held by inventors. Specifically, application of property rules enables innovators to contract with inventors in a manner that allows the contracting parties to determine an appropriate balance of returns with full knowledge of other, if any, market entrants. By eliminating free-riders, the right to exclude then enables both inventors and innovators “to charge prices in excess of the marginal cost of producing their inventions so that they can not only recover their initial expenditures but also receive profits. The right to exclude is designed to increase appropriability and, consequently, the level of innovation in society.”<sup>71</sup>

Between inventors and innovators, the right to exclude fosters an appropriate division of labor, as the inventor may determine whether it would be more efficient to act also as innovator and bring the invention to market herself or whether it would be more efficient to license her rights to a separate innovator (or multiple innovators), who would then bring the invention to market.

These fundamental efficiencies have weighed strongly in favor of the predictable grant of injunctive relief by the courts.<sup>72</sup> Indeed, in the wake of the \*203 Supreme Court's eBay decision, panels of the Federal Circuit have reaffirmed an endorsement of this efficiency argument. For example, in *Sanofi-Synthelabo v. Apotex, Inc.*,<sup>73</sup> a three-judge panel stressed “the importance of the patent system in encouraging innovation,”<sup>74</sup> rejecting the defendant's arguments that the absence of its generic version of the popular heart medication Plavix® from the market could keep the patented drug out of the reach of some patients.<sup>75</sup>

Additional efficiencies also militate in favor of an injunction-friendly regime. These include the reduction in costs associated with wastefully duplicative research, the encouragement of research into substitute technologies, the post-inventive development and exploitation of technologies, the reduction in transaction costs between firms, and the reduction in costs associated with the maintenance of control.<sup>76</sup>

This is not to say that the application of property rules is costless. Real property law, for example, recognizes the economic costs that may accompany the application of property rules to “innocent” infringers. Where a party in good faith builds on the land of another, a liability rule may be imposed to prevent the economic waste that would result from the destruction or inefficient use of the improvement.<sup>77</sup> This example, however, highlights another difference between tangible and intangible property. Given the inexhaustible and non-exclusive nature of intangible property, it is costless to return the right-holder to her initial entitlement by means of an injunction. In such circumstance, the model proposed \*204 by Haddock, McChesney,

and Spiegel suggests that a property rule is appropriate.<sup>78</sup> Moreover, courts may tailor injunctive remedies to minimize any economic waste associated with an infringer's investment.<sup>79</sup>

## 2. Property Rules Promote Judicial Efficiency

The protection of patent rights by property rules also minimizes the wasteful and inefficient use of judicial resources. Under a property regime, parties are incentivized to settle an infringement dispute outside of court, and the resultant market transaction more accurately reflects the parties' valuation of the patent asset.

First, the availability of permanent injunctive relief promotes settlement.<sup>80</sup> Specifically, under a liability regime, infringers face only the potential award of damages. Although damages awards directed to ongoing activities can be very costly, they need not hamper the long-term viability of a business enterprise. Infringers may expect that courts would offer a better deal than would the marketplace under a liability regime.<sup>81</sup> In addition, other business interests, such as the desire to weed out spurious lawsuits and to dissuade future plaintiffs from bringing suit, may overcome pre-trial risk aversion.<sup>82</sup>

Under a property regime, however, infringers face the potential of a shut-down resulting from the imposition of a permanent injunction. For many businesses, even a partial shutdown is devastating. As a result, the property regime pushes risk-averse infringers towards pre-trial settlement.

Second, it can hardly be disputed that private parties are better equipped than courts to establish the market value of a patented invention.<sup>83</sup> Unlike thick-market **\*205** commodities for which a static market price is readily established (e.g., mass-market copyrighted works such as romance novels), the market in patented technologies is typically "thin"--market prices are determined on a case-by-case basis.<sup>84</sup> If, as discussed above,<sup>85</sup> allocating rewards to inventors on the basis of market valuation properly incentivizes productive inventive activity, then preference should be given to the regime that provides for the most accurate market valuation. This would allow an investor "to reap the maximum future benefit from socially useful present investment."<sup>86</sup> In his well-known decision in *In re Mahurkar*, addressing the appropriateness of a property regime for patent rights, Judge Easterbrook echoed this sentiment: "A private outcome of [injunction-backed] negotiations--whether they end in a license at a particular royalty or in the exclusion of an infringer from the market--is much preferable to a judicial guesstimate about what a royalty should be. The actual market beats judicial attempts to mimic the market every time, making injunctions the normal and preferred remedy."<sup>87</sup>

Some commentators have suggested that this "market" theory is imperfect. For example, Lemley & Weiser recently argued that "injunctive relief can systematically overcompensate plaintiffs and overdeter defendants, with significant negative consequences for innovation and economic growth."<sup>88</sup> In particular, **\*206** Lemley & Weiser point to instances in which the patented technology at issue is "only a small part" of a larger product.<sup>89</sup> Following similar reasoning, the International Trade Commission (ITC) has at times elected not to exclude "downstream products" in which an infringing component is only a small part.<sup>90</sup> But this line of reasoning assumes that market actors are incapable of arriving at compromises that reflect the proportional value of patented components. Although such negotiations are often complex--requiring both determinations of the value of a component to an overall system and probabilistic assumptions about the potential infringement liability of other components under unknown patents--there is no reason rational actors cannot make these judgments. And certainly these negotiations are better left to individuals experienced in their markets than to courts.

## 3. Property Rules Are Necessary in the Global Marketplace

Finally, just as the choice to award patent rights to inventors may have international distributive effects, the decision to enforce those entitlements by property rules is critical to the United States' ability to trade and compete effectively in the global marketplace. Before any modification is made to the availability of permanent injunctive relief, consideration must be given to the United States' international obligations, as well as the role the United States plays in modeling the appropriate treatment of private property rights. The United States' trade relationships may be adversely affected by inconsistent positions on the need for property rules domestically and abroad, and by inconsistent enforcement of patent rights against foreign and domestic infringers.

A shift in United States patent law away from the application of property rules towards a liability regime would likely raise concerns with signatory nations to the World Trade Organization's Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement. The TRIPS Agreement is an attempt to harmonize the way in which intellectual property rights are protected around the world and to establish a minimum level of protection afforded to each member nation's **\*207** intellectual

property.<sup>91</sup> Among the limitations of the TRIPS Agreement, Article 31, entitled “Other Use Without Authorization of the Right Holder,” places restrictions on the abilities of Member nations to override patentees rights by granting compulsory licenses.<sup>92</sup> While allowing for the grant of compulsory licenses in some circumstances, Article 31 contemplates that those circumstances would be exceptional and limited in both scope and duration.<sup>93</sup> At all other times, the TRIPS Agreement contemplates that property rules should be used to protect intellectual property rights.<sup>94</sup>

Beyond the obligations of TRIPS or other agreements, the United States’ “moral high ground” position with respect to the treatment of property rights abroad would be compromised by a shift towards lesser treatment of those rights domestically, and it can be expected that the resulting inconsistency would adversely impact the ability of United States corporations to engage profitably in the international trade of patented goods.<sup>95</sup>

**\*208** Additionally, a shift towards a liability regime by the federal courts creates a disparity between the treatment of patent rights in the courts and in the United States International Trade Commission. At the request of a patent right-holder, or on its own initiative, the ITC can institute an investigation into the potential infringement of United States patent rights by foreign goods.<sup>96</sup> Upon a finding of infringement, the ITC typically issues an Exclusion Order, preventing the entry of infringing foreign goods into the United States and seizing infringing foreign goods within the United States.<sup>97</sup> Therefore, like a federal district court, the ITC has traditionally protected patent rights using property rules. If, however, federal district courts transition to the application of liability rules, then the result will be a highly preferential patent regime, favoring domestic infringing goods over foreign infringing goods. Such an outcome would violate the United States’ obligations under various trade agreements,<sup>98</sup> and would certainly impact the ability of the United States to argue against disparate treatment of United States corporations abroad.

#### **IV. Takings Doctrine Provides a Legal Tool to Protect the Availability of Permanent Injunctive Relief**

In the present economic climate, in which a fear of patent trolls and “bad patents” creates a backlash against the enforcement of patent rights, the preservation of the current property regime will be challenging. The Takings Clause of the Fifth Amendment,<sup>99</sup> however, may prove useful as a legal foothold to combat the conversion from property rules to liability rules. Although the Takings Clause explicitly recognizes the ability of governmental actors to override property rights under a liability regime, it also limits the circumstances in which such a conversion will be permitted--for “public use.”<sup>100</sup>

##### **\*209 A. Patent Rights Are Fifth Amendment Property Rights**

A finding of a “taking” must be premised on an existing, enforceable private property right.<sup>101</sup> Although patent rights have traditionally received no less protection from the Takings Clause than have rights to real property,<sup>102</sup> a recent push by some jurists and commentators towards the opposite conclusion forces a brief re-evaluation of this premise.<sup>103</sup>

“Property” and the concept of appropriation are most naturally viewed in the context of tangible things: “He stole my wallet!” “She built a fence on my land!” These examples are easily understood as appropriations of property that is both **\*210** physical and exhaustible. But property need not be either physical or exhaustible. It is well-settled that property rights may vest in intangibles.<sup>104</sup> For example, an interest in a faculty position at a public university may be considered a property right.<sup>105</sup> And the notion of exhaustibility, albeit a distinction between land (which is exhaustible) and ideas (which are not),<sup>106</sup> merely considers a few sticks in a bundle of rights--possession and use. The grant of a patent, however, protects an idea with a right to exclude.

In this sense, it is not the idea itself, but the patent that is awarded for the disclosure of the idea, which carries a property right.<sup>107</sup> As Professor Fritz Machlup lamented, “it is almost embarrassing how often the controversial idea of a property right in an invention is confused with the noncontroversial idea of a property right in a patent.”<sup>108</sup>

These nuances attest to the need to consider property more broadly than simply a “wallet” or “land.” As Justice Rehnquist explained in *PruneYard Shopping Center v. Robins*:

The term ‘property’ as used in the Takings Clause includes the entire ‘group of rights inhering in the citizen’s [ownership].’ It is not used in the ‘vulgar and untechnical sense of the physical thing with respect to which the citizen exercises rights recognized by **\*211** law. [Instead, it] denote [s] the group of rights inhering in the citizen’s relation to the physical thing, as the right to possess, use and dispose of it.’<sup>109</sup>



Viewed from this “bundle of rights” perspective, a patent is not seen according to the thing protected (an intangible idea), but instead according to the right conveyed: the right to exclude--“one of the most treasured strands in an owner’s bundle of property rights.”<sup>110</sup> Patent rights are thus properly recognized as property rights within the purview of the Fifth Amendment.<sup>111</sup>

Once established as a Fifth Amendment property right, a patentee’s right to exclude (or inventor’s expectation interest in such a future entitlement) would be eviscerated by governmental action that expressly permits violations of that right, thereby implicating the Takings Clause. The Takings Clause thus provides a legal tool to prevent the evisceration of a patentee’s right to exclude, whether as a result of judicial action or legislative enactment. As a predicate to that discussion, however, the concept of a judicial taking should be addressed briefly.

## **B. Judicial Actions May Be Takings**

“We are under a Constitution, but the Constitution is what the judges say it is, and the judiciary is the safeguard of our liberty and of our property under the Constitution.”<sup>112</sup>

Although the Takings Clause has not been applied to the judiciary with any frequency or consistency, there is no reason why it should not apply to judicial actors. Unlike the First Amendment, which is explicitly directed to actions by Congress,<sup>113</sup> the Fifth Amendment does not specify any particular governmental actor.<sup>114</sup> Recognizing this breadth, the Supreme Court has stated on several **\*212** occasions that a taking may be effected by any governmental actor. For example, in *Brinkerhoff-Faris Trust & Savings Co. v. Hill*, Justice Brandeis explained:

If the result above stated were attained by an exercise of the state’s legislative power, the transgression of the due process clause of the Fourteenth Amendment would be obvious. The violation is none the less clear when that result is accomplished by the state judiciary in the course of construing an otherwise valid state statute. The federal guaranty of due process extends to state action through its judicial as well as through its legislative, executive, or administrative branch of government.<sup>115</sup>

Justice Stewart reiterated this sentiment in his concurrence in *Hughes v. State of Washington*, in which he stated that “the Due Process Clause of the Fourteenth Amendment forbids such confiscation by a State, no less through its courts than through its legislature . . . .”<sup>116</sup> Although the *Hughes* decision and Justice Stewart’s concurrence make reference to the Due Process Clause, the real issue at hand was a judicial taking, with the Takings Clause being incorporated into the Fourteenth Amendment through the Due Process Clause.<sup>117</sup> In particular, Mrs. Hughes, the owner of oceanfront property along the Washington coast, asserted her common-law right to include within her property land deposited by the ocean, called “accretion.”<sup>118</sup> Because Mrs. Hughes could trace title in her property to a private owner prior to 1889, the year in which Washington was granted statehood, the trial court held that Mrs. Hughes’ property rights remained subject to federal law.<sup>119</sup> But the Supreme Court of the State of Washington reversed, interpreting the State’s constitution as abolishing the right to any accretion that occurred after 1889.<sup>120</sup> On appeal to the U.S. Supreme Court, a seven-justice majority reversed the Washington Supreme Court on the basis that the “question is governed by federal, not state, law and that under federal law Mrs. Hughes, who traces her title to a federal grant prior to statehood, is the owner of these accretions.”<sup>121</sup>

Justice Stewart identified a separate reason for reversal: the Washington Supreme Court’s decision was a judicial taking. Specifically, in Justice Stewart’s **\*213** view, the state court acted unpredictably and in a manner contrary to reasonable expectations. Justice Stewart explained:

To the extent that the decision of the Supreme Court of Washington on that issue arguably conforms to reasonable expectations, we must of course accept it as conclusive. But to the extent that it constitutes a sudden change in state law, unpredictable in terms of the relevant precedents, no such deference would be appropriate. For a State cannot be permitted to defeat the constitutional prohibition against taking property without due process of law by the simple device of asserting retroactively that the property it has taken never existed at all. Whether the decision here worked an unpredictable change in state law thus inevitably presents a federal question for the determination of this Court.<sup>122</sup>

More recently, the Supreme Court’s 2002 decision in *Festo Corp. v. Shoketsu Kogyo Kabushiki Co.* counseled strongly

against judicial disruption or destruction of “settled expectations” in patent rights,<sup>123</sup> in language that is strikingly similar to the well-known Penn Central regulatory takings test.<sup>124</sup>

Picking up on the Supreme Court’s hints, legal scholars have given increasing credence to the notion of judicial takings in recent years. At least three recent articles have proclaimed the viability of a Judicial Takings Doctrine.<sup>125</sup>

Judicial actors, as much as legislative and executive actors, bear responsibility for the effects they may have on private property rights. Of particular importance here, the removal of injunctive relief as a remedy for patent infringement is a taking, no less when it is accomplished by a denial of injunctive relief by a court than when it is accomplished by a broader removal of the availability of injunctive relief by a legislature.

### C. The Takings Analysis

The federal government unquestionably has the power to “take” private property.<sup>126</sup> Traditionally, the Fifth Amendment was invoked to provide compensation for property appropriated through condemnation using the power of eminent domain. As the regulatory arm of the government expanded both its reach **\*214** and its grasp, the Takings Doctrine expanded to address diminishment or deprivation of private property rights resulting from exercise of the police power.<sup>127</sup>

The current state of so-called “regulatory takings” jurisprudence was summarized in 2005 by the Supreme Court in *Lingle v. Chevron*,<sup>128</sup> which identified three basic categories of regulatory action.<sup>129</sup> If a governmental action fits into any of the three categories, then a taking may be found. In the following sections, the denial of--or imposition of limitations on the availability of--injunctive relief will be analyzed under each of these standards.<sup>130</sup> This Part argues that the removal of injunctive relief would be a taking under both the *Loretto* and *Penn Central* tests, but concedes that the *Lucas* test is not an appropriate fit.

#### **\*215** 1. Physical/*Loretto*-style takings

First, the denial of injunctive relief may be seen as a physical (or *Loretto*-style) taking.

In the classic case, *Jean Loretto*, a New York City landlord, filed a class-action suit against a cable television company, arguing that the company’s placement of cables on her apartment building pursuant to state law constituted a taking.<sup>131</sup> Her claim was dismissed on summary judgment, a decision that was affirmed through multiple layers of appeal.<sup>132</sup> But the Supreme Court reversed.<sup>133</sup>

Writing for a 6-3 majority, Justice Marshall argued that “[t]he power to exclude has traditionally been considered one of the most treasured strands in an owner’s bundle of property rights.”<sup>134</sup> On this basis, the Court concluded that “a permanent physical occupation authorized by government is a taking without regard to the public interests that it may serve. Our constitutional history confirms the rule, recent cases do not question it, and the purposes of the Takings Clause compel its retention.”<sup>135</sup>

Judicial or legislative action affecting the availability of injunctive relief to patent holders fits squarely into this category of takings jurisprudence.<sup>136</sup> Much like the New York statute allowing third-party cable providers to permanently invade the property of Ms. *Loretto*, the denial of injunctive relief allows the third- **\*216** party infringer to invade the patent owner’s property permanently (i.e., for the duration of the patent’s life). Indeed, the patent owner’s right to exclude may be said to have been appropriated by the governmental actor who prevents enforcement of that right. Alternately, the appropriation may be said to be an ongoing appropriation by the infringer that is government-authorized from the time the judicial or legislative actor sanctions the ongoing invasion by removing injunctive relief from the table.

That such an appropriation of the right to exclude in patent law fits into the *Loretto* context is supported by court decisions in the government infringement context. In such cases, the *Loretto*-styled takings argument has typically been upheld, as the government is seen to have acquired private property interests for its own use.<sup>137</sup>

To some, this argument is not so cut-and-dried. For example, a standard counter-argument to a *Loretto*-style taking argument in the context of intangible property is that the invasion is not “physical.” This imposition of such a requirement would be a hyper-literal view of the *Loretto* category of regulation. Just as “property” need not be physical,<sup>138</sup> an appropriation of that

property also need not be physical. Rather, the inquiry is into whether the government action effects an appropriation--a violation of the owner's right to exclude.<sup>139</sup> As the Loretto court explained: "an owner suffers a special kind of injury when a stranger directly invades and occupies the owner's property. . . . To require, as well, that the owner permit another to exercise complete dominion literally adds insult to \*217 injury."<sup>140</sup> Indeed, many jurists and commentators do not cast the Loretto test in physical terms at all.<sup>141</sup>

It is true that, unlike a physical appropriation of real property, which deprives the owner of the use of a portion of his property,<sup>142</sup> an ongoing act of infringement by a third party has no effect on the patent owner's ability to practice the patent.<sup>143</sup> But the deprivation of use is similarly not an appropriate test for whether a "physical" taking has occurred. For example, in the real property scenario, the property owner may not have had any right to use the taken property. After all, the Loretto Court explicitly stated: "[w]e do not, however, question the equally substantial authority upholding a State's broad power to impose appropriate restrictions upon an owner's use of his property."<sup>144</sup> For this reason, some commentators have referred to "use" as "a privilege rather than a right."<sup>145</sup>

To others, a taking of patent rights by an act of infringement is not "physical," asserting that infringement of an intellectual property right does not diminish the remainder.<sup>146</sup> But such an assertion is incorrect. A patent owner's right--the right to exclude -- is diminished by the ongoing infringement of another. Even if that right is diminished only minimally as against one small infringer, the patent owner is nonetheless forced to bear an ongoing infringement.<sup>147</sup>

\*218 Although the scenario at issue here is the denial of injunctive relief as against private third parties, not an act of infringement by the government (or its contractors), these scenarios have the same effect. In both instances, the government (either through the judiciary or the legislature) is approving the use of a patented technology by another.<sup>148</sup> The approval may be in advance, as in the case of an infringing government contractor, or a third party who will not be enjoined from infringement of an issued or yet-to-be issued patent because of legislative enactment. The approval may also be mid-stream, as in the case of a specific third party who is not enjoined by a court of law. In either case, the result is consistently the permissive violation of a right (or an expectation of a right) to exclude.

What if, as in *eBay v. MercExchange*, the patentee does not exhibit a desire to exclude others? An answer might be suggested by *PruneYard Shopping Center v. Robins*,<sup>149</sup> in which the Supreme Court did not find a taking, at least in part because the property owner had not tried to exclude everyone.<sup>150</sup> A strong distinction may be noted, however, between the *PruneYard* situation and the *eBay* situation. Whereas the property owner in *PruneYard* had extended a general, non-specific invitation to the public, *MercExchange* had sought out prospective licensees on an individual basis subject to tailored sets of license terms. Such an individually- and specifically-expressed desire to license (even a large number of) others should not constitute a waiver of a property owner's right to exclude.<sup>151</sup>

During oral argument in *eBay v. MercExchange*, Justice Breyer struggled to identify an analogy to the situation in which such a patentee seeks to enforce his rights:

[Y]ou might find some analogy in the public utilities field, the--or a ferris wheel or something. What you want is a person who uses his property not at all himself, but licensed the public generally. And now would a-- would a court issue an injunction there? And as I think about that, I don't realize I don't know the answer.<sup>152</sup>\*219 This analogy touches on a common concern over so-called patent "trolling,"<sup>153</sup> but it proves too much. Even large-scale licensing programs do not convert patentees to public utilities.<sup>154</sup>

Simply put, the removal of injunctive relief appropriates a portion of a patentee's right to exclude (or of the expectancy to which an inventor is entitled). Under *Loretto*, judicial or legislative action of this type is a per se taking.

## 2. Lucas-style takings

The second category of regulatory action is illustrated by the facts of *Lucas v. South Carolina Coastal Council*.<sup>155</sup> In 1988, South Carolina enacted legislation that prevented oceanfront landowner David Lucas from developing his property. Although none of his property was physically appropriated, the legislation rendered the property "valueless."<sup>156</sup> As a result, the Supreme Court held that a taking should be found unless South Carolina could support its prohibition on the basis of nuisance law.<sup>157</sup> Writing for the Court, Justice Scalia explained: "The second situation in which we have found categorical treatment appropriate is where regulation denies all economically beneficial or productive use of land."<sup>158</sup>

Although application of the Lucas test--whether the governmental action “denies all economically beneficial or productive use”--to the denial of injunctive relief in the patent context raises a number of interesting issues, it is unlikely that a court will find the removal of injunctive relief to be a Lucas-style taking.

**\*220** First, Justice Scalia, always careful with words, concluded the statement quoted above with “of land.” This limitation may be of particular importance, as the Supreme Court has held elsewhere that personal property may be deprived of all economically beneficial use without rising to the level of a compensable regulatory taking.<sup>159</sup> Although the Loretto test is directed generally towards violations of the right to exclude, the Lucas test appears to be directed towards limitations to the economic use of real property. But according to the Patent Act, patents “shall have the attributes of personal property.”<sup>160</sup> As a result, the Lucas takings argument would appear not to apply to patent rights at all.

But if patent rights are more akin to rights in real property, as the Supreme Court has suggested,<sup>161</sup> the Lucas argument deserves further consideration. The question is then: does failure to restrain infringement by means of an injunction deprive the patent owner of all economically beneficial use? This in turn yields the predicate question: what are the economically beneficial uses of a patent right?

Because a patentee is not granted a right of possession or use, the uses of a patent right are more limited than the uses of a real property right. Specifically, a patentee does not have a right to use her invention. But this does not mean that a patent right does not have any economically beneficial use. To the contrary, the uses of a patent are to exclude all, to exclude some, and to license all under threat of exclusion; else, the patent is unused. The economic benefit of the exclusion of all comes in the form of monopolistic rents that may be reaped by a practicing patentee. The economic benefit of the exclusion of some comes in the form of licensing revenues accruing from the rents reaped by the practicing licensee(s) and, in the case of a practicing patentee, the oligopolistic rents the patentee may reap. The economic benefit of the licensing of all comes in the form of rents paid under licenses.

A court’s failure to enjoin the infringement of one party only eviscerates the first economic use--exclusion of all in order to reap monopolistic rents. Alternately, a legislature’s removal of injunctive relief eviscerates the first two economic uses--the exclusion of all and the exclusion of some. But the patentee **\*221** could still use his patent to secure royalties from all--an economic use. The denial or removal of injunctive relief would thus appear not to constitute a deprivation of all economically beneficial use.

This calculus, however, assumes that a patent holder’s property right is properly viewed as a single right to exclude, such that the infringer has taken only a small portion of the patent owner’s property as a whole. Alternately, the infringer may be said to have taken the entirety of a discrete portion of the patent owner’s property (tautologically defined as the portion taken by the infringer).

As Justice Kennedy explained in *Palazzolo v. Rhode Island*:

This contention asks us to examine the difficult, persisting question of what is the proper denominator in the takings fraction. Some of our cases indicate that the extent of deprivation effected by a regulatory action is measured against the value of the parcel as a whole; but we have at times expressed discomfort with the logic of this rule . . . .<sup>162</sup> Or, as Justice Scalia lamented in *Lucas*:

Regrettably, the rhetorical force of our “deprivation of all economically feasible use” rule is greater than its precision, since the rule does not make clear the “property interest” against which the loss of value is to be measured. When, for example, a regulation requires a developer to leave 90% of a rural tract in its natural state, it is unclear whether we would analyze the situation as one in which the owner has been deprived of all economically beneficial use of the burdened portion of the tract, or as one in which the owner has suffered a mere diminution in value of the tract as a whole.<sup>163</sup>

The conceptual division in a patent holder’s right to exclude into separate rights to exclude each would-be infringer has some intuitive appeal. In particular, a patent holder’s waiver of the right to exclude with respect to one party (by, for example, a license agreement) does not constitute a waiver of the right to exclude with respect to all. But taken from the perspective of economic valuation, it does not make sense to divide a patent right in this manner.<sup>164</sup>

**\*222** In the end, although the removal of injunctive relief by a court or legislature would limit the economic utility of a patent right, the patentee is unlikely to be deprived of all economically beneficial use. The Lucas-style takings argument is unlikely

to prevail.

### 3. Penn Central-style takings

The third category of regulation is a catch-all, the analysis of which consists of “essentially ad hoc, factual inquiries,”<sup>165</sup> conducted on a case-by-case basis. In 1965, New York City adopted a Landmarks Preservation Law.<sup>166</sup> A special agency, the Landmarks Preservation Commission, was endowed with the power to identify existing structures as “landmarks” and then to limit the ability of property owners to modify or add onto those structures.<sup>167</sup> Under this regime, the Grand Central Terminal was declared a “landmark,” and various proposals by the property owner, Penn Central, to construct additional office space above the Terminal were rejected by the Commission.<sup>168</sup>

Writing for a 6-3 Supreme Court majority, Justice Brennan stated that “the submission that appellants may establish a ‘taking’ simply by showing that they have been denied the ability to exploit a property interest that they heretofore had believed was available for development is quite simply untenable.”<sup>169</sup> Responding to Penn Central’s claim that their property was unfairly singled out, he continued: “Legislation designed to promote the general welfare commonly burdens some \*223 more than others.”<sup>170</sup> The Court then proceeded to address the severity of the impact of the law, concluding that Penn Central would still be able to profit from the Terminal and that the regulation “does not interfere with what must be regarded as Penn Central’s primary expectation concerning the use of the parcel”—to use it as a terminal.<sup>171</sup>

Following Justice Brennan’s analysis, courts will typically consider three Penn Central factors: (a) the character of the government action; (b) the diminution in value of the property; and (c) the extent of interference with reasonable, investment-backed expectations,<sup>172</sup> none of which is independently dispositive.<sup>173</sup> Lacking the benefit of per se rules, the Penn Central analysis is thus the fallback position for any regulatory takings argument.

Turning, then, to the removal of injunctive relief as a remedy to ongoing infringement in patent cases, the three Penn Central factors are addressed in turn.

#### a) Character of the government action

Considering first the character of the government action involved, it is necessary to separately consider judicial denials of injunctive relief and broader legislative action to limit the availability of injunctive relief.

A court’s decision to deny injunctive relief in the wake of a finding of infringement is a specific action, targeted towards one particular set of parties, favoring one party over another. Unlike Penn Central, in which the Court could claim that over 400 properties were designated as “landmarks” and were subject to Commission review,<sup>174</sup> the denial of injunctive relief takes into account only the patent(s) at suit. As to the government action itself, the denial of injunctive relief is not a mere limitation on use or financial hardship; it is the permissive infringement \*224 of the patentee’s property right by a third party. And, as it is not part of a broader regulatory scheme to promote the public interest, this action is difficult to characterize as “part of the burden of common citizenship.”<sup>175</sup> The character of the government action in the context of a judicial denial of injunctive relief thus seems to tilt towards a finding of a taking.<sup>176</sup>

Legislative action, however, may be seen as directed more “to a general regulatory program affecting numerous parcels and designed to protect the public from harm by adjusting the benefits and burdens of economic life to promote the common good.”<sup>177</sup> Like in Penn Central, then, an affected patentee would have difficulty arguing that his property was singled out. But, as explained above, the government action remains the permissive infringement of the owner’s property right by third parties. Even assuming for the purposes of argument that this result would benefit the common good, such legislative action goes too far and should be analyzed as a taking.<sup>178</sup>

Legislative action also has the ability to be prospective or retrospective. As a result, any legislative enactment drafted in such a prospective manner as to have no impact on existing property rights could not possibly be a taking. But again, an enactment affecting existing rights should be viewed as a taking.

#### b) Diminution in value of property

Turning next to the diminution in value of the property, there are presently only limited empirical data on the monetary value of an injunction.<sup>179</sup> A number of \*225 economic analyses of the patent system, however, have intuitively considered the value

of permanent injunctive relief. From this perspective, permanent injunctions are viewed as forcing current or potential infringers to take patent rights seriously. Indeed, a permanent injunction may be the only remedy that can dissuade many infringers,<sup>180</sup> as additional profits accrue to the infringer coincidentally to the infringement profits. Specifically, if a patented invention is only a small component in a larger product, the infringer will likely be able to obtain profits from the product beyond any royalties established to compensate the patentee.

Although other policy arguments militate in favor of injunctive relief,<sup>181</sup> the diminution in property value must be considered on a case-by-case basis, as the relevant diminution caused by a single denial of injunctive relief is only the loss of injunction profits as against the infringer and any incidental losses caused by failure to enjoin that party.<sup>182</sup>

### c) Interference with Reasonable Investment-Backed Expectations

Finally, the removal of injunctive relief is directly contrary to patentees' reasonable expectations that a permanent injunction will issue in almost all cases, **\*226** pending a finding of infringement. This factor thus tips strongly in favor of finding a taking.<sup>183</sup>

Considering first the expectations of a patentee, the issuance of an injunction upon a finding of infringement is the "norm,"<sup>184</sup> and thus, the expectation. During oral argument in *eBay*, Carter Phillips commented extensively on this expectation:

The rule in the Federal Circuit for at least 20 years has been that if you have validity and infringement decided by the jury, that then there is irrefutable finding of--of irreparable injury, of inadequate remedy at law, and that the balance of harms decidedly favors the plaintiff, and that the only issue that remains available to the defendant in that circumstance is a heightened scrutiny on the standard of whether or not the--the public interest commands that an injunction be denied in a particular case. And even in that context, the Federal Circuit's rule is extraordinarily stringent because not just any public interest can--will satisfy, but instead, it has to be a public interest that endangers the public health.<sup>185</sup>

Indeed, permanent injunctive relief has been denied in the rare instances when, for example, a significant public safety or medical interest was affected,<sup>186</sup> or when damages were calculated on the basis of a hypothetical paid-up royalty, such that any future activity would not be an act of infringement.<sup>187</sup> In all other cases, the expectation is an injunction.

Considering, then, the patentee's investment, it is often assumed that, given the high costs of research and development,<sup>188</sup> investments in invention and innovation are predicated on the expectation that injunctive relief will be available to maximize the inventors' and innovators' abilities to recoup costs and conduct a **\*227** profitable enterprise.<sup>189</sup> Or, considered from another angle, the removal of injunctive relief as a remedy to patent infringement may result in a precipitous decline in the investment of large industry and small inventors in invention and innovation,<sup>190</sup> thus suggesting that the current level of investment is strongly tied to the availability of injunctive relief.

Whether investment based on an expectation of an injunction is reasonable would have been an easy question to answer two years ago. Going forward, however, this portion of the inquiry becomes increasingly difficult. The Supreme Court considered such an issue recently in *Palazzolo v. Rhode Island*.<sup>191</sup> Specifically, the Court responded to the question of whether "by prospective legislation the State can shape and define property rights and reasonable investment-backed expectations, and subsequent owners cannot claim any injury from lost value. After all, they purchased or took title with notice of the limitation."<sup>192</sup> The Court went on to hold, however, that "[a] blanket rule that purchasers with notice have no compensation right when a claim becomes ripe is too blunt an instrument to accord with the duty to compensate for what is taken."<sup>193</sup> But the lack of a blanket rule against the reasonableness of investment is not a ringing endorsement in favor of investment. Rather, as one commentator explains: "A regulation is more likely to be held a taking if it interferes with an existing use of property or with vested rights. In contrast, however, a regulation is less likely a taking if it merely imposes an opportunity loss, or if the property owner's reliance on the continuation of prior law was unreasonable."<sup>194</sup>

**\*228** For those with patent property rights vested prior to the Supreme Court's *eBay* decision, few would argue that it was unreasonable to invest with the expectation of injunctive relief. Indeed, even for those without vested property interests prior to *eBay*, investments made prior to the decision would likely be considered reasonable.<sup>195</sup> Inventors in the post-*eBay* world, however, will be acting based on notice that the law has and may continue to change, such that an expectation of injunctive relief may no longer be reasonable.<sup>196</sup>

Under the case-by-case Penn Central test, it thus appears that judicial denials of injunctive relief and legislation affecting those with rights vested prior to the Supreme Court's decision in *eBay v. MercExchange* would be found to be takings. If the trend towards denying injunctive relief continues, however, the balance will tip increasingly in favor of the government.

Therefore, of the three regulatory takings categories, the removal of injunctive relief, be it by judicial or legislative action, appears to fit most readily into the Loretto category. Under the Loretto test, any action that allows one or more third parties to permanently infringe upon a right to exclude (or that would in the future allow such an infringement of a presently expected right to exclude) constitutes a physical taking. At least in the short term, the Penn Central test will also likely yield a finding of a taking, at least with respect to judicial denials of injunctive relief, but legislative action is unlikely to be found a taking under Penn Central. Analysis under the Lucas "deprivation of all economically beneficial use" test is unlikely to find a taking either by the judiciary or the legislature. Because the three regulatory takings tests are exclusive,<sup>197</sup> however, a finding of a taking under Loretto is sufficient to move onto an analysis of whether such a taking is constitutionally permissible.

Even if a taking is found, the Takings Clause explicitly allows for the conversion of property rules to liability rules. Property, it is said, may be taken, provided just compensation is returned.<sup>198</sup> But even governmental power is constrained by the requirement of "public use."

#### **\*229 D. The Limits of "Public Use"**

Returning to the language of the Takings Clause, recall that private property may only be taken "for public use."<sup>199</sup> Any taking that fails to meet this requirement is deemed to be constitutionally impermissible. It is thus logical to assume that, while patent infringement by governmental actors (though a taking) may be remedied by liability rules (i.e., "just compensation"), the taking of patent rights for the use of an entirely private party will be governed by property rules (i.e., permanent injunctive relief). In the latter context, the denial of permanent injunctive relief would be impermissible, as the patentee's right to exclude would not have been taken "for public use." Conversely, legislative action broadly affecting the availability of permanent injunctive relief would open patented inventions to public use and would thus be permissible. Absent an evolved Public Use Doctrine, the inquiry would end there.

For much of this nation's history, "public use" actually meant, of all things, "public use." Over time, however, the strict notion of public use shifted to a broader concept of "public purpose."<sup>200</sup> For example, in *Thompson v. Consolidated Gas Corp.*, Justice Brandeis wrote that "one person's property may not be taken for the benefit of another private person without a justifying public purpose, even though compensation be paid."<sup>201</sup>

In the latter half of the twentieth century, this liberalization of the Public Use limitation was repeatedly tested. In *Berman v. Parker*, the Supreme Court considered the Public Use Clause in the context of a revitalization effort in the District of Columbia.<sup>202</sup> Pursuant to a 1950 comprehensive plan developed by the National Capital Planning Commission, the District of Columbia Redevelopment Agency planned to take a number of properties by eminent domain for purposes of private redevelopment. Owners of property in the designated area filed suit, asserting that the planned taking was in violation of the Public Use Clause.<sup>203</sup> The district court sympathized with the property owners' argument but upheld the plan.<sup>204</sup> A unanimous Supreme Court, however, voicing strong support for the power of Congress, affirmed.<sup>205</sup> Writing for the Court, Justice Douglas stated: **\*230** "Subject to specific constitutional limitations, when the legislature has spoken, the public interest has been declared in terms well-nigh conclusive. In such cases, the legislature, not the judiciary, is the main guardian of the public needs to be served by social legislation . . . ."<sup>206</sup> Turning to the Agency's plan to engage private developers for the revitalization effort, Justice Douglas continued: "[T]he means of executing the project are for Congress and Congress alone to determine, once the public purpose has been established. The public end may be as well or better served through an agency of private enterprise than through a department of government--or so the Congress might conclude."<sup>207</sup>

The Supreme Court's interpretation of the Public Use Clause was later extended in *Hawaii Housing Authority v. Midkiff*, in which the Court supported a large-scale private-to-private transfer under the auspices of the Takings Clause.<sup>208</sup> Finding that the ownership of property on the Hawaiian islands was highly concentrated,<sup>209</sup> the Hawaii Legislature enacted the Land Reform Act of 1967, "which created a mechanism for condemning residential tracts and for transferring ownership of the condemned fees simple to existing lessees."<sup>210</sup> Unlike the situation in *Berman*, in which property redevelopment and neighborhood revitalization were declared as the public purposes behind the government's exercise of eminent domain, acts of condemnation in *Midkiff* were based simply on the lessees' desire to acquire fee-simple title to the land on which they lived. Nonetheless, the Supreme Court lent its approval. Writing for a unanimous court,<sup>211</sup> Justice O'Connor concluded that

“where the exercise of the eminent domain power is rationally related to a conceivable public purpose, the Court has never held a compensated taking to be proscribed by the Public Use Clause.”<sup>2212</sup> She continued: “The mere fact that property taken outright by eminent domain is transferred in the first instance to private beneficiaries does not condemn that taking as having only a private purpose.”<sup>2213</sup>

\***231** Most recently, in *Kelo v. City of New London, Connecticut*, the Supreme Court returned once again to Public Use Doctrine.<sup>2214</sup> The City of New London, condemned a stretch of homes in the Fort Trumbull area along the Thames River. The homes were scheduled to be demolished and privately redeveloped, as part of a planned corporate research facility for pharmaceutical giant Pfizer Inc., a waterfront conference hotel, and various residential and commercial uses.<sup>2215</sup> Unlike the situation in *Berman*, there was “no allegation that any of these properties is blighted or otherwise in poor condition; rather, they were condemned only because they happen to be located in the development area.”<sup>2216</sup> Nor was there any large-scale government involvement. Nonetheless, a strongly-divided Supreme Court decided by a 5-4 split that the City of New London had engaged in a permissible taking.<sup>2217</sup>

As the *Berman-Midkiff-Kelo* line of cases demonstrate, not all private transfers violate the Public Use Clause. Instead, the notion of public purpose permits takings of a broader class of private-to-private transfers. In response, Justice O’Connor warned in her *Kelo* dissent: “The beneficiaries are likely to be those citizens with disproportionate influence and power in the political process, including large corporations and development firms. As for the victims, the government now has license to transfer property from those with fewer resources to those with more.”<sup>2218</sup>

Consider, for example, the denial of injunctive relief in *z4 Technologies, Inc. v. Microsoft Corp.*<sup>2219</sup> *z4 Technologies*, a small Michigan company dedicated to research and development of anti-piracy software, filed suit against Microsoft, alleging infringement of two patents covering technologies invented by *z4*’s founder David Colvin. At trial, Microsoft was found to willfully infringe each of the three claims asserted by *z4*, and the claims were held not invalid.<sup>2220</sup> Thereafter, *z4* filed a motion with the court for entry of a permanent injunction. Denying *z4*’s motion, Judge Davis found that the public interest was aligned with Microsoft’s interest. Judge Davis explained:

Microsoft’s Windows and Office software products are likely the most popular software products in the world. The vast majority of computers sold, whether to individuals, \***232** businesses, governments, or educational institutions, run on the Microsoft Windows operating system and employ the Microsoft Office suite of software.

....

[I]t is likely that any minor disruption to the distribution of the products in question could occur and would have an effect on the public due to the public’s undisputed and enormous reliance on these products.

....

Although these negative effects are somewhat speculative, such potential negative effects on the public weigh, even if only slightly, against granting an injunction. Accordingly, the public interest is likely to be disserved if a permanent injunction were entered against Microsoft.<sup>2221</sup>

Judge Davis’s opinion, however, begs the question: Why is Microsoft any more “the public” than *z4 Technologies*?<sup>2222</sup> Indeed, this statement of the public interest merely voices a preference for one private party over another.<sup>2223</sup> Such a view was clearly proscribed by the *Kelo* majority: “[I]t has long been accepted that the sovereign may not take the property of A for the sole purpose of transferring it to another private party B, even though A is paid just compensation.”<sup>2224</sup>

Additionally, it is difficult to find that the public interest ever lies with a willful infringer. As the Federal Circuit has reiterated, “One who elects to build a \***233** business on a product found to infringe cannot be heard to complain if an injunction against continuing infringement destroys the business so elected.”<sup>2225</sup>

Moreover, unlike Congress, whose actions are assumed to be rooted in a public purpose,<sup>2226</sup> the courts are not similarly equipped to declare the public interest.<sup>2227</sup> As a result, even viewed from a public purpose or public interest perspective, it is difficult to conclude that judicial denial of injunctive relief would be permissible under the Public Use limitation.

Is that to say that all denials of injunctive relief are impermissible? Not necessarily. This article does not argue, for example,



that the denial of injunctive relief against governmental actors is impermissible. The actions of governmental actors may be assumed, for the purpose of this article, to be imbued with a public purpose.

Consider the government's involvement in the Blackberry case.<sup>228</sup> Fearful that an injunction would be entered, thus shutting down Blackberry service, the Department of Justice argued that such a shutdown would severely hamper the government's ability to continue its business and may even threaten national security.<sup>229</sup> As a possible compromise, the DOJ suggested that provision of Blackberry service to the government be exempted from any injunction that would issue.<sup>230</sup> Such a limitation on an injunction clearly would be permissible, because it would be directed to a governmental (read "public") use.

As mentioned earlier in this article, legislative action limiting the availability of injunctive relief may also be permissible.<sup>231</sup> The Supreme Court's holdings that a legislature's actions are assumed to align with the public interest leave little room to argue otherwise.<sup>232</sup> Unless Congress chooses to enact legislation targeting a few \*234 specific patentees,<sup>233</sup> then the legislative action may be seen as part of a larger plan to redistribute the benefits and burdens of the United States' patent system--a legitimate public purpose.

Therefore, in most cases, judicial action denying entry of a permanent injunction against an adjudged infringer should be held to be an impermissible, Loretto-style taking that violates the Public Use limitation of the Fifth Amendment. Legislative action, while also a taking, would likely be constitutionally permissible. Recall, however, that to avoid the takings argument entirely, legislative action may be drafted to account for the timing of the vesting of patent property interests.

## V. Conclusions

If arguments about the efficiencies of permanent injunctive relief, however, are rooted in a fear of abusive patent enforcement by patent trolls, then the appropriate target for reform is not the relief available to patent property holders, but instead the roots of patent trolling.<sup>234</sup> For example, one common "trolling" complaint concerns the enforcement of expired, near-expiration, or "submarine" patents. To a large extent, this issue has already been resolved by the United States' shift to a patent lifetime calculated from the date a patent application is filed.<sup>235</sup> Within the next decade, the final patents issued under the old regime should reach their expirations, at which point the ability to sue for infringement of thirty-, forty-, or fifty-year-old inventions should disappear. Additionally, to avoid innovation bottlenecks and extended industry capture, further efforts may be used to limit the effective life of patent rights. The obligation of patentees to police their rights may also be strengthened. And stricter analysis of patent validity may be necessary.

On some level we must accept that abuses of the patent system do now and always will exist.<sup>236</sup> Perhaps this conclusion favors the elimination of a patent \*235 system,<sup>237</sup> but such a radical conclusion would improperly disregard the many efficiencies a patent system creates. In dealing with arguments about patent trolls and the efficiencies of injunctive relief, it is thus necessary to recall where we started.

The grant of a patent carries with it solely the right to exclude. This right has traditionally been protected under a property regime, and rightly so. The protection of patent rights by property rules incentivizes the efficient allocation of resources in favor of both inventive and innovative activity. Permanent injunctions avoid judicial approximations of market decisions, in favor of actual market valuation in the private sector. And the vitality of the patent property regime reinforces the United States' position of leadership with its trading partners. It is thus important that the extant patent property regime be bolstered and maintained.

The Takings Clause may provide such a framework for protecting the status quo. The evisceration of the right to exclude by denying--or limiting the availability of--permanent injunctive relief may be characterized as a taking. Considering denials of injunctive relief by the courts, such takings are impermissible for failure to comply with the Public Use limitation. Legislative action, however, affecting the availability of injunctive relief, although still a taking, may be permissible. Nonetheless, permanent injunctive relief remains the only efficient remedy to ongoing patent infringement. A patentee's right to exclude is rendered meaningless without an exclusionary enforcement mechanism.

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1 Nat'l Intell. Prop. Law Enforcement Coordination Council, Report to the President and Congress on Coordination of Intell. Prop. Enforcement and Protection 1 (2006) [hereinafter NIPLECC Report].

2 Except with passing reference to a few cases discussing the appropriateness of preliminary injunctive relief, this article addresses only the availability of permanent injunctive relief.

3 eBay, Inc. v. MercExchange, L.L.C. (eBay III), 126 S. Ct. 1837 (2006).

4 Id. at 1839 (“(1) that [the plaintiff] has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.”).

5 Although the four-part test has undergirded traditional patent practice, the Federal Circuit accurately reflected the traditional holding that “courts will issue permanent injunctions against patent infringement absent exceptional circumstances.” MercExchange, L.L.C. v. eBay, Inc. (eBay II), 401 F.3d 1323, 1339 (Fed. Cir. 2005), vacated, eBay III, 126 S. Ct. 1837 (2006). See also eBay III, 126 S. Ct. at 1841 (Roberts, C.J., concurring) (“From at least the early 19th century, courts have granted injunctive relief upon a finding of infringement in the vast majority of patent cases. This ‘long tradition of equity practice’ is not surprising, given the difficulty of protecting a right to exclude through monetary remedies that allow an infringer to use an invention against the patentee’s wishes ....”).

6 eBay III, 126 S. Ct. at 1842 (Kennedy, J., concurring). A permanent injunction may issue, however, upon a finding that a valid patent claim is infringed. See Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1246-47 (Fed. Cir. 1989). Justice Kennedy’s discussion of the “suspect validity” of business method patents in the context of the four-factor test for injunctive relief in eBay III, 126 S. Ct. at 1842 (Kennedy, J., concurring), is thus misplaced, and dangerously so. Indeed, Justice Kennedy apparently would encourage judges to question the validity of patents for which the issue of validity is settled. But raising validity issues outside the context of a proper validity inquiry would deprive patentees of the power to address or appeal those issues.

7 eBay III, 126 S. Ct. at 1842 (Kennedy, J., concurring).

8 See, e.g., z4 Techs., Inc. v. Microsoft Corp., 434 F. Supp. 2d 437, 444 (E.D. Tex. 2006) (denying z4’s motion for entry of a permanent injunction and ordering z4 to file a separate complaint for monetary damages due to Microsoft’s post-verdict infringement); Finisar Corp. v. DirecTV Group, Inc., No. 1:05-CV-264, 2006 WL 2709206, at \*1 (E.D. Tex. Sept. 1, 2006) (money damages awarded, outstanding motions already denied); Press Release, Finisar, Finisar Awarded Additional Damages in Patent Infringement Case Against DIRECTV (July 7, 2006), <http://investor.finisar.com/ReleaseDetail.cfm?ReleaseID=203133> (denying Finisar’s motion for entry of a permanent injunction and granting a compulsory license to DirecTV with an ongoing royalty of \$1.60 per unit sold).

When this article went to press, permanent injunctive relief had been denied in at least five other district court cases. See Praxair, Inc. v. ATMI, Inc., 479 F. Supp. 2d 440 (D. Del. 2007); IMX, Inc. v. LendingTree, LLC, 469 F. Supp. 2d 203 (D. Del. 2007); Sundance, Inc. v. DeMonte Fabricating Ltd., No. 02-73543, 2007 WL 37742 (E.D. Mich. Jan. 4, 2007); Voda v. Cordis Corp., No. CIV-03-1512-L, 2006 WL 2570614 (W.D. Okla. Sept. 5, 2006); Paice LLC v. Toyota Motor Corp., No. 2:04-CV-211-DF, 2006 WL 2385139 (E.D. Tex. Aug. 16, 2006).

This does not mean that all requests for permanent injunctions have been denied in the wake of the Supreme Court’s eBay decision. In other cases, district courts have continued to provide injunctive relief. See, e.g., Verizon Servs. Corp. v. Vonage Holdings Corp., Nos. 2007-1240, 2007-1251, 2007-1274, 2007 WL 2781869, at \*1 (Fed. Cir. Sept. 26, 2007) (affirming the district court’s issuance of a permanent injunction with respect to two of the patents in issue, but vacating the permanent injunction with respect to a third patent); Sanofi-Synthelabo v. Apotex Inc., 492 F. Supp. 2d 353 (S.D.N.Y. 2007); Brooktrout, Inc. v. Eicon

Networks Corp., No. 2:03-CV-59, 2007 WL 1730112 (E.D. Tex. June 14, 2007); MGM Well Servs., Inc. v. Mega Lift Sys., LLC, No. H-05-1634, 2007 WL 1231682 (S.D. Tex. Apr. 25, 2007); 800 Adept, Inc. v. Murex Sec., Ltd., No. 6:02-cv-1354-Orl-28DAB, 2007 WL 1101238 (M.D. Fla. Apr. 12, 2007); O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., No. 2-04-CV-32, 2007 WL 869576 (E.D. Tex. Mar. 21, 2007); Ortho-McNeil Pharm., Inc. v. Mylan Labs. Inc., Nos. 04-1689, 06-757, 06-5166, 2007 WL 869545 (D.N.J. Mar. 20, 2007); Novozymes A/S v. Genencor Int'l, Inc., 474 F. Supp. 2d 592 (D. Del. 2007); MPT, Inc. v. Marathon Labels, Inc., No. 1:04-cv-2357, 2007 WL 184747 (N.D. Ohio Jan. 19, 2007); Transocean Offshore Deepwater Drilling, Inc. v. GlobalSantaFe Corp., No. H-03-2910, 2006 WL 3813778 (S.D. Tex. Dec. 27, 2006); Visto Corp. v. Seven Networks, Inc., No. 2:03-CV-333-TJW, 2006 WL 3741891 (E.D. Tex. Dec. 19, 2006); Rosco, Inc. v. Mirror Lite Co., No. CV-96-5658, 2006 WL 2844400 (E.D.N.Y. Sep. 29, 2006); Smith & Nephew, Inc. v. Synthes, 466 F. Supp. 2d 978 (W.D. Tenn. 2006); 3M Innovative Proprs. Co. v. Avery Dennison Corp., No. 01-1781, 2006 WL 2735499 (D. Minn. Sep. 25, 2006); FLOE Int'l, Inc. v. Newmans' Mfg. Inc., No. 04-5120, 2006 WL 2472112 (D. Minn. Aug. 23, 2006); Tivo Inc. v. EchoStar Commc'ns Corp., 466 F. Supp. 2d 664 (E.D. Tex. 2006).

9 See Monsanto Co. v. Scruggs, 459 F.3d 1328 (Fed. Cir. 2006) (reversing and remanding grant of permanent injunction); Int'l Rectifier Corp. v. IXYS Corp., 188 F. App'x (Fed. Cir. 2006) (reversing and remanding grant of permanent injunction).

10 See Paice LLC v. Toyota Motor Corp., Nos. 2006-1610, 2006-1631, 2007 WL 3024994 (Fed. Cir. Oct. 18, 2007).

11 See, e.g., Staff of H. Subcomm. on Courts, the Internet, and Intellectual Property, 109th Cong., Patent Act of 2005, § 7 (“A court shall not grant an injunction under this section unless it finds that the patentee is likely to suffer irreparable harm that cannot be remedied by the payment of money damages.”).

12 Open Letter from Rep. Adam Smith et al. to Rep. Lamar Smith and Rep. Howard Berman (May 19, 2005), <http://www.house.gov/tauscher/ndc/Letters%20on%20Site/Patent%20Letter.pdf>.

13 In a recent hearing, ranking committee member Rep. Howard L. Berman complained: “As we have tried to move forward with patent reform, our efforts have been stymied by the many groups clinging to the notion that there was an entitlement to an automatic injunction upon a finding of infringement.” Patent Trolls: Fact or Fiction?: Hearing Before the Subcomm. on Courts, the Internet, and Intellectual Property of the Comm. on the Judiciary, 109th Cong. 2 (2006) [hereinafter Troll Hearing]. Rep. Darrell Issa, however, cautioned: “I hope that we will look at injunctive relief also and look at it in terms of mend it, don't end it.” *Id.* at 4.

14 Some commentators have suggested that the momentum has dwindled for such reform in the Legislative Branch in light of the Supreme Court's eBay decision. See Keith E. Broyles & William Hubbard, Repelling Patent Trolls After eBay, 18 *Intell. Prop. & Tech. L.J.* 5, 6 (2006) (“In light of eBay, however, reform to § 283 is currently unlikely, at least regarding permanent injunctions.”). This view only reinforces the position that patentees' exclusionary rights are threatened in the post-eBay world.

15 This clause is alternately referred to as the “IP Clause” or the “Patent and Copyright Clause” to reflect the full breadth of its scope.

16 U.S. Const. art. I, § 8, cl. 8.

17 35 U.S.C. § 101 (2006). The vesting of property rights at the time of invention would no longer be an issue if the U.S. comes into line with other nations by changing its posture to “first to file.” But such a change would bring with it its own constitutional issues. Specifically, such a change itself may raise Fifth Amendment takings concerns, as first inventors may lose the entirety of their patent rights currently guaranteed by 35 U.S.C. § 101. Such a change may also exceed Congress's constitutional authority, which is limited to grants to “inventors,” not first-filers. U.S. Const. art. I, § 8, cl. 8.

18 35 U.S.C. § 102 (2006). This entitlement has been used as the basis for arguing that the Patent and Trademark Office violated the Due Process Clause by applying a supplemental review procedure to patent applications in specified technology areas. See Brief on Appeal for Appellant (Scott C. Harris) Corrected at 10-11, *In re Harris*, No. 05-1247, 2005 WL 2598147 (Fed. Cir. May 31, 2005). The PTO's rejection of appellant's application was affirmed without opinion.

- 19 Mark A. Lemley & Colleen V. Chien, *Are the U.S. Patent Priority Rules Really Necessary?*, 54 *Hastings L.J.* 1299, 1299 (2003). Query, then, when patent rights vest. For example, patent rights may be said to vest as of the time a patent issues, before which time no cause of action for patent infringement may be brought. Patent rights may also be said to vest as of the time a patent application publishes, from which time damages for infringement may accrue. Patent rights may be said to vest as of the time a patent application is filed. And patent rights may be said to vest as of the time an invention is made, at which time an initial entitlement is assigned on which basis, for example, attorney liability may be found for failure to perfect an inventor's rights through the patent system. As the United States contemplates a shift towards a first-to-file regime, considerable thought should be devoted to this question of when patent rights vest.
- 20 35 U.S.C. § 102(g) (2006); see *Lutzker v. Plet*, 843 F.2d 1364, 1366 (Fed. Cir. 1988) (stating that a second inventor will be awarded priority of invention if he can show that the first inventor abandoned, suppressed, or concealed the invention).
- 21 Patent Act of 1793, ch. 11, § 1, 1 Stat. 318, 318-21 (1793)(repealed 1836).
- 22 See Michael A. Carrier, *Cabining Intellectual Property Through a Property Paradigm*, 54 *Duke L.J.* 1, 6-7 (2004) (“[F]ee simple ownership of a plot of land lasts forever and grants unlimited rights, including the rights to exclude, use, and transfer.”); see also *United States v. Gen. Motors Corp.*, 323 U.S. 373, 378 (1945) (describing property rights vis-à-vis the Takings Clause as “the group of rights inhering in the citizen’s relation to the physical thing, as the right to possess, use and dispose of it”); Carrier, *supra*, at 52 (“The foundational rights of property law are widely recognized to consist of the right to exclude, the right to transfer, and the right to use.”).
- 23 On the difference between rights and privileges, see generally Wesley Newcomb Hohfeld, *Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 26 *Yale L.J.* 710 (1917) and Wesley Newcomb Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 *Yale L.J.* 16 (1913).
- 24 35 U.S.C. § 154(a)(1) (2006) (emphasis added).
- 25 Donald S. Chisum et al., *Principles of Patent Law* 5 (3d ed. 2004) (“The right to exclude, without the right to use, is somewhat peculiar to patent law (as well as the law of copyright and negative easements).”).
- 26 *Consol. Fruit-Jar Co. v. Wright*, 94 U.S. 92, 96 (1877); see also *James v. Campbell*, 104 U.S. 356, 357-58 (1881) (“That the government of the United States when it grants letters-patent for a new invention or discovery in the arts, confers upon the patentee an exclusive property in the patented invention which 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, we have no doubt.”).
- 27 *Hartford-Empire Co. v. United States*, 323 U.S. 386, 415 (1945); see also *Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank*, 527 U.S. 627, 642 (1999) (finding 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”).
- 28 District court appeals in patent cases are heard by the U.S. Court of Appeals for the Federal Circuit. See *infra* note 35 and accompanying text.
- 29 The Federal Circuit’s recent panel opinion in *Zoltek Corp. v. United States*, 442 F.3d 1345 (Fed. Cir. 2006) (*per curiam*) has cast a shadow over this history of property protection for patent rights. See *infra* note 103.
- 30 *Hughes Aircraft Co. v. United States*, 86 F.3d 1566, 1571 (Fed. Cir. 1996), vacated, 520 U.S. 1183 (1997), *aff’d*, 140 F.3d 1470 (Fed. Cir. 1998).
- 31 *Patlex Corp. v. Mossinghoff*, 758 F.2d 594, 599 (Fed. Cir. 1985); see also John C. O’Quinn, *Protecting Private Intellectual*

Property from Government Intrusion: Revisiting *SmithKline* and the Case for Just Compensation, 29 *Pepp. L. Rev.* 435, 501-07 (2002) (discussing whether intellectual property is Fifth Amendment “property”). See generally Thomas F. Cotter, *Do Federal Uses of Intellectual Property Implicate the Fifth Amendment?*, 50 *Fla. L. Rev.* 529 (1998).

32 H.R. Rep. No. 98-857, pt. 2 at 30 n.19 (1984), reprinted in 1984 *U.S.C.C.A.N.* 2686, 2714.

33 See *id.* at 27-30, 27 n.18. Despite this long and colorful tradition, however, some commentators have bucked against the so-called “proPERTIZATION” of patent rights. For example, Professor Lemley has argued against comparisons of patent rights to real property rights and even the term “intellectual property” (in his view a misnomer). Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 *Tex. L. Rev.* 1031, 1033-36 (2005).

34 28 U.S.C. § 1338(a) (2006) (“The district courts shall have original jurisdiction of any civil action arising under any Act of Congress relating to patents, plant variety protection, copyrights and trademarks. Such jurisdiction shall be exclusive of the courts of the states in patent, plant variety protection and copyright cases.”).

35 28 U.S.C. § 1295 (2006). The Federal Circuit does not, however, have jurisdiction over cases in which the patent claim is merely a counterclaim. See *Holmes Group, Inc. v. Vornado Air Circulation Sys., Inc.*, 535 U.S. 826, 831 (2002) (“[T]he Federal Circuit’s jurisdiction is fixed with reference to that of the district court, and turns on whether the action arises under federal patent law.”).

36 35 U.S.C. § 284 (2006). Damages are measured by either (1) the patent owner’s actual damages (e.g., lost profits), see *BIC Leisure Prods., Inc. v. Windsurfing Int’l, Inc.*, 1 F.3d 1214, 1218 (1993), or (2) a so-called “reasonable royalty.” See *Rite-Hite Corp. v. Kelley Co., Inc.*, 56 F.3d 1538, 1554 (Fed. Cir. 1995).

37 35 U.S.C. § 283 (2006).

38 *eBay III*, 126 S. Ct. 1837, 1841 (2006) (Roberts, C.J., concurring) (“From at least the early 19th century, courts have granted injunctive relief upon a finding of infringement in the vast majority of patent cases. This ‘long tradition of equity practice’ is not surprising, given the difficulty of protecting a right to exclude through monetary remedies that allow an infringer to use an invention against the patentee’s wishes ....”); *eBay II*, 401 F.3d 1323, 1339 (Fed. Cir. 2005), vacated, 126 S. Ct. 1837 (2006) (“[C]ourts will issue permanent injunctions against patent infringement absent exceptional circumstances.”).

39 *eBay III*, 126 S. Ct. at 1839 (“(1) that [the plaintiff] has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.”).

40 Transcript of Oral Argument at 3-4, *eBay III*, 126 S. Ct. 1837 (2006) (No. 05-130) (argument by Carter Phillips) (“The rule in the Federal Circuit for at least 20 years has been that if you have validity and infringement decided by the jury, that then there is irrebuttable finding of-- of irreparable injury, of inadequate remedy at law, and that the balance of harms decidedly favors the plaintiff, and that the only issue that remains available to the defendant in that circumstance is a heightened scrutiny on the standard of whether or not the--the public interest commands that an injunction be denied in a particular case. And even in that context, the Federal Circuit’s rule is extraordinarily stringent because not just any public interest can--will satisfy, but instead, it has to be a public interest that endangers the public health.”).

41 *KSM Fastening Sys., Inc. v. H.A. Jones Co.*, 776 F.2d 1522, 1524 (Fed. Cir. 1985).

42 Fritz Machlup, *An Economic Review of the Patent System*, in *An Economic Review of the Patent System: Study of the Subcomm. on Patents, Trademarks, and Copyrights, of the Comm. on the Judiciary, 85th Cong. 1, 1* (1958); see also *id.* at 6 (reiterating the right to exclude). Similar sentiments may be found throughout the history of patent jurisprudence. See, e.g., *Int’l News Serv. v. Assoc. Press*, 248 U.S. 215, 250 (1918) (Brandeis, J., dissenting) (“An essential element of individual property is the legal right to exclude others from enjoying it.”); *Mallinckrodt, Inc. v. Masimo Corp.*, 147 F. App’x 158, 178 (Fed. Cir. 2005) (unpublished

decision) (“[I]t is contrary to the laws of property to deny a patentee the right to exclude others from the use of his property, except in rare and unusual circumstances ....”) (reversing denial of permanent injunction as abuse of discretion, where insufficient facts to prove public interest weighed against injunction); *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1246-47 (Fed. Cir. 1989) (reversing denial of permanent injunction) (“Infringement having been established, it is contrary to the laws of property, of which the patent law partakes, to deny the patentee’s right to exclude others from use of his property.”) (“[T]he right to exclude recognized in a patent is but the essence of the concept of property.” (quoting *Connell v. Sears Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983))); *Isaacs v. Cooper*, 13 F.Cas. 153, 154 (C.C.D. Pa. 1821) (“possession of the patentee against all mankind”); Transcript of Oral Argument at 6, *eBay III*, 126 S. Ct. 1837 (2006) (No. 05-130) (Scalia, J.) (“But ordinarily we’re talking about a property right here, and--and the property right is--is explicitly the right to exclude others from--from use of that.”).

43 See supra note 16 and accompanying text.

44 Whether rights lesser than the “right to exclude” may fit within the constitutional language is a question worthy of treatment elsewhere.

45 The additional remedy of disgorgement is already available to redress infringement of design patents. See 35 U.S.C. § 289 (2006) (“Whoever during the term of a patent for design, ...shall be liable to the owner to the extent of his total profit, but not less than \$250, recoverable in any United States district court having jurisdiction of the parties.”).

46 Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 *Harv. L. Rev.* 1089, 1092 (1972) (“It lets each of the parties say how much the entitlement is worth to him, and gives the seller a veto if the buyer does not offer enough. Property rules involve a collective decision as to who is to be given an initial entitlement but not as to the value of the entitlement.”).

47 *Id.* (“[L]iability rules involve an additional stage of state intervention: not only are entitlements protected, but their transfer or destruction is allowed on the basis of a value determined by some organ of the state rather than by the parties themselves.”).

48 See *id.* at 1093 (exploring the primary question of: “In what circumstances should we grant a particular entitlement?”); R. H. Coase, *The Problem of Social Cost*, 3 *J.L. & Econ.* 1, 8 (1960) (“It is necessary to know whether the damaging business is liable or not for damage caused since without the establishment of this initial delimitation of rights there can be no market transactions to transfer and recombine them.”); *id.* at 15 (“But it has to be remembered that the immediate question faced by the courts is not what shall be done by whom but who has the legal right to do what.”).

49 See supra notes 17-20 and accompanying text.

50 See Coase, supra note 48, at 43 (“But the whole discussion is largely irrelevant for questions of economic policy since whatever we may have in mind as our ideal world, it is clear that we have not yet discovered how to get to it from where we are. A better approach would seem to be to start our analysis with a situation approximating that which actually exists, to examine the effects of a proposed policy change and to attempt to decide whether the new situation would be, in total, better or worse than the original one. In this way, conclusions for policy would have some relevance to the actual situation.”).

51 This is generally a non-controversial issue, as all industrialized nations have recognized the value of both invention and innovation by working systems of patent rights into their laws. And certainly invention was viewed as a social good by the Framers of our Constitution.

52 Because this policy argument has been covered in detail elsewhere, it will only receive brief attention here. For additional discussion, see generally Council of Economic Advisors, *Economic Report of the President* 211 (2006), available at [http://www.gpoaccess.gov/eop/2006/2006\\_erp.pdf](http://www.gpoaccess.gov/eop/2006/2006_erp.pdf) (“Intellectual property rights create incentives for individuals and firms to invest in research and development, and to commercialize inventions and other creations by allowing individuals and firms to profit from their creative activities.”); William M. Landes & Richard A. Posner, *The Economic Structure of Intellectual Property Law* (2003); Roger E. Schechter & John R. Thomas, *Intellectual Property: The Law of Copyrights, Patents and Trademarks* 288-89 (2003); Kitch, *infra* note 59; Machlup, supra note 42. Another common policy argument in support of a patent system is that the

grant of an exclusive right incentivizes public disclosure of inventions. This notion of exchange, although necessary to a functional patent system, overemphasizes the need to incentivize disclosure itself. See Easterbrook, *infra* note 67.

53 But see Economic Report of the President, *supra* note 52, at 221 (“[A] study of U.S. firms showed that the availability of patent protection in the United States was a critical factor in research and development decisions. Using a random sample of 100 U.S. manufacturing firms, 60 percent of the inventions in the pharmaceutical industry and nearly 40 percent of the inventions in the chemical industry would not have been developed.”); see also Economic Report of the President, *supra* note 52, at 218 (“Industries such as chemicals, pharmaceuticals, information technology, and transportation are highly dependent on patent protection to provide the incentives to innovate.”).

54 U.S. Const. art. I, § 8, cl. 8.

55 Following the somewhat Machiavellian approach of Haddock, McChesney, and Spiegel, one would consider first the outcomes of property and liability regimes and then assign entitlements and the overall regime structure so as to guide incentives in an effective manner. See generally David D. Haddock, Fred S. McChesney & Menahem Spiegel, *An Ordinary Economic Rationale for Extraordinary Legal Sanctions*, 78 Cal. L. Rev. 1 (1990).

56 As will be explained below, the extent of an inventor’s return on investment is highly dependent on the enforcement mechanism in place. See *infra* notes 57-59 and accompanying text.

57 Although the incentives accompanying these hypothetical systems cannot be tested empirically on a system-wide scale, corporate incentive programs provide interesting models at a micro level. Specifically, corporations in heavily patent-dependent industries (e.g., the high tech, chemical, and pharmaceutical industries) often provide financial incentives to inventor-employees. Different corporations select different incentive structures, ranging from set monetary rewards on a per-invention disclosure basis, to variable monetary rewards on the basis of the perceived value of an invention to the corporation, to quasi-royalty rewards on the basis of market success. See, e.g., Lara L. Douglass, Note, *Medical Process Patents: Can We Live Without Them? Should We?*, 3 J. Intell. Prop. L. 161, 184 n.50, 185 n.51 (1995) (describing examples of companies that awarded bonuses to inventors); Richard S. Gruner, *Corporate Patents: Optimizing Organizational Responses to Innovation Opportunities and Invention Discoveries*, 10 Marq. Intell. Prop. L. Rev. 1, 30-31, 30 n.83 (2006) (describing bonus award systems).

58 The amount of the return will depend on the inventor’s ability to produce the invention in a manner acceptable to the marketplace or on the inventor’s ability to license one or more separate innovator(s) to do so.

59 See Edmund W. Kitch, *The Nature and Function of the Patent System*, 20 J.L. & Econ. 265, 266 (1977) (“The patent is a reward that enables the inventor to capture the returns from his investment in the invention, returns that would otherwise (absent secrecy) be subject to appropriation by others. The existence of the reward tends to make the amount of private investment in invention closer to the value of its social product.”); see also *Brenner v. Manson*, 383 U.S. 519, 536 (1966) (A patent is “not a reward for the search, but compensation for its successful conclusion.”).

60 Council of Economic Advisors, *Economic Report of the President* 220 chart 10-2 (2006), available at [http://www.gpoaccess.gov/eop/2006/2006\\_erp.pdf](http://www.gpoaccess.gov/eop/2006/2006_erp.pdf).

61 NIPLECC Report, *supra* note 1, at 1; see also Office of the U.S. Trade Representative, *2006 Special 301 Report* 10 (“The United States is firmly of the conviction that intellectual property protection, including for pharmaceutical patents, is critical to the long term viability of a health care system capable of developing new and innovative lifesaving medicines. Intellectual property rights are necessary to encourage rapid innovation, development, and commercialization of effective and safe drug therapies. Financial incentives are needed to develop new medications; no one benefits if research on such products is discouraged.”).

62 Haddock et al., *supra* note 55, at 17 (“In a liability rule regime, potential traders will face a prisoner’s dilemma. Even if compensation will be required, everyone’s dominant strategy in illiquid markets will be to take the entitlements of others in order to garner more of the potential gains from exchange for oneself. But traders as a group will suffer if individuals can strategically substitute court-ordered compensation for negotiation. Liability rules make thin-market entitlements a sort of commons, so that

gains that would otherwise be available from exchange instead will be dissipated by searches for and defense of takeable assets, and resources available for investment will be diverted toward less takeable uses. Societies willingly bear such costs only when circumstances make property rules untenable. Property protection for entitlements is properly the norm; liability protection, and hence the standard liability model, should be an exceptional response to exceptional circumstances.”).

63 Cf. *E.I. du Pont de Nemours & Co. v. Polaroid Graphics Imaging, Inc.*, 706 F. Supp. 1135, 1146 (D. Del. 1989) (“The public interest does not rest with [infringers.]”), *aff’d*, 887 F.2d 1095 (Fed. Cir. 1989). In other areas of intellectual property law, some acts of infringement have been characterized as a social good. For example, a limited privilege is granted to those who use copyrighted work for the purpose of parody. See *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 574 (1994) (“Suffice it to say now that parody has an obvious claim to transformative value, as Acuff-Rose itself does not deny. Like less ostensibly humorous forms of criticism, it can provide social benefit, by shedding light on an earlier work, and, in the process, creating a new one.”).

64 Haddock et al., *supra* note 55, at 13 (“Some activities, however, have no social value at any level: their optimal level is zero. To eradicate such activities, efficient law would instead try to ‘make the defendant whole,’ that is, it would reduce to zero the expected gain available to the defendant from the injurious activity, leaving no incentive for him to attempt the activity in the first place.”); see also Haddock et al., *supra* note 55, at 20 (“When a property violation has occurred, restoring the defendant’s initial utility is desirable, since it eliminates the defendant’s incentives to ignore the property protection.”).

65 See, e.g., Lemley, *supra* note 33, at 1031 (arguing against treating intellectual property like real property).

66 See, e.g., Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), in *Basic Writings of Thomas Jefferson* 708, 712-13 (Philip S. Foner ed., 1944), quoted in *Graham v. John Deere Co.*, 383 U.S. 1, 8-9 & 8 n.2 (1966) (referring to the idea of an “exclusive patent” as an “embarrassment”).

67 See generally Frank H. Easterbrook, *Intellectual Property Is Still Property*, 13 *Harv. J.L. & Pub. Pol’y* 108 (1990) (arguing that patents are not synonymous with monopolies); Kitch, *supra* note 59.

68 See *supra* Part III.A.1.

69 See Carrier, *supra* note 22, at 26 (“The right to exclude helps create such an incentive by ensuring that ‘free riders’ cannot enjoy the fruits of laborers’ work.”); Carrier, *supra* note 22, at 29 (“Even though but-for causation is difficult to trace precisely, the right to exclude has accompanied the robust development of land. The right also has ameliorated the dangers of free riding and has offered a predictable foundation for society and the economy.”).

70 Economic Report of the President, *supra* note 52, at 213 (2006) (“Because knowledge is nonrival in consumption and nonexcludable, any person who incurs the fixed cost of developing a new or better product or process will soon find that others, including competitors, are using that knowledge. Competition could drive the price of the product down to the cost of the physical inputs used to make one unit of the product. The innovator would receive little or no financial return for paying the cost and undertaking the risk involved in developing such knowledge. Without the potential to profit from such innovation, most individuals will be unwilling to incur the fixed costs and financial risks associated with creating new knowledge.”).

71 Carrier, *supra* note 22, at 33; see also *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 167 (1989) (“patent statute’s careful balance between public right and private monopoly to promote certain creative activity”).

72 See, e.g., *E.I. du Pont de Nemours & Co. v. Polaroid Graphics Imaging, Inc.*, 706 F. Supp. 1135, 1146 (D. Del. 1989) (“[T]he public has an interest in protection of rights found in valid patents.... One of the bases of intellectual property law is to give inventors an incentive to practice their talents by allowing them to reap the benefits of their labor. One of these benefits is the right to prevent others from practicing what they have invented. Otherwise, if inventors cannot depend on their patents exclude others, we fear that research and development budgets in the science and technology based industries would shrink, resulting in the public no longer benefiting from the labors of these talented people. The public interest does not rest with [infringers.]” (citation omitted)), *aff’d*, 887 F.2d 1095 (Fed. Cir. 1989).



73 Sanofi-Synthelabo v. Apotex, Inc., 470 F.3d 1368 (Fed. Cir. 2006).

74 Id. at 1383.

75 Id. at 1383-84 (“Indeed, the ‘encouragement of investment-based risk is the fundamental purpose of the patent grant, and is based directly on the right to exclude.’ ...Importantly, the patent system provides incentive to the innovative drug companies to continue costly development efforts. We therefore find that the court did not clearly err in concluding that the significant ‘public interest in encouraging investment in drug development and protecting the exclusionary rights conveyed in valid pharmaceutical patents’ tips the scales in favor of [the patentee].”).

76 Kitch, supra note 59, at 276, 278-79; see also Machlup, supra note 42, at 51 (“If the competitors were given licenses under the patent of the firm that won the race, they would have to pay royalties but would not be compelled to ‘invent around’ it. Exclusivity, however, forces some of them to search for a ‘substitute invention.’”).

77 See, e.g., Malnar v. Whitfield, 708 P.2d 1093, 1095 (Okla. 1985) (“The rule was early recognized that where the encroachment is slight, the cost of removal will be great, and the corresponding benefit to the adjoining owner small, or adequate compensation by way of damages can be had, a court will ordinarily decline to compel removal, leaving the party to his legal remedy.”); see also Haddock et al., supra note 55, at 27, 31-32.

78 See Haddock et al., supra note 55, at 30 (“An injunction ... conserves a court’s resources and avoids counterfactual conjecture.”).

79 See, e.g., Sanofi-Synthelabo v. Apotex, Inc., 470 F.3d 1368, 1383 (Fed. Cir. 2006) (upholding a preliminary injunction that was tailored such that already manufactured infringing products could be sold to prevent waste).

80 Of course, in either regime the holder of so-called “worthless” patents may hold up a defendant, the ransom being higher under threat of injunction. This consideration, however, should not be part of the injunction calculus, as other mechanisms may be used to rid the world of worthless patents. For example, patents of questionable validity can be declared invalid.

81 See Richard A. Epstein, A Clear View of the Cathedral: The Dominance of Property Rules, 106 Yale L.J. 2091, 2093 (1997).

82 Smaller patentees may be forced out of the court system entirely due to the decrease in the expected value of litigation (or at a minimum there would be an increase in contingency-fee patent litigation). It could be argued that the potential reduction in the number of lawsuits brought would balance out the increase in the percentage of cases taken to trial under a liability regime. Although there may be some truth to this argument, the increased barrier to entry that would be faced by plaintiffs would disserve the distributional goals discussed above in Part III.A.2.

83 See, e.g., eBay III, 126 S. Ct. 1837, 1841 (2006) (Roberts, C.J., concurring) (recognizing “the difficulty of protecting a right to exclude through monetary remedies”); Bank of Am. Nat’l Trust & Sav. Ass’n. v. 203 N. LaSalle St. P’ship, 526 U.S. 434, 457 (1999) (“[T]he best way to determine value is exposure to a market”); Haddock et al., supra note 55, at 21-22 (“Determining a bargaining outcome requires ascertaining all conceivable bargains that might have been reached, then guessing which particular bargain the parties would have struck. From the court’s perspective, Plaintiff’s precise loss is already ambiguous in theory and costly to measure in practice. The court’s task would be several orders of magnitude more difficult if, in addition, the court were required to estimate counterfactual market outcomes.”).

84 See Mark A. Lemley & Philip J. Weiser, Should Property or Liability Rules Govern Information?, 85 Tex. L. Rev. 783, 814 (2007) (“If a copyright owner sells a particular work to all comers at a set price, a court should be reasonably comfortable in estimating the level of damages from an unauthorized use, just as courts in contract cases are willing to imply a price term where there is a thick market for a particular good. By contrast, where the good is one that has never been the subject of a market transaction, courts are flying blind in trying to set a price that adequately compensates the IP owner.”).

- 85 See *supra* Part III.A.1.
- 86 Haddock et al., *supra* note 55, at 21 (“The standard liability model mimics missing market transactions. But imitating a market is appropriate only when circumstances make it unreasonable or unnecessary for the parties to rely on a market. In a property violation case, efficient law would not help mimic a missing exchange, but instead would encourage the principals facing other potential exchanges to bargain. It is of little importance whether violators of property rules can predict their liabilities--prediction is important only for takings properly governed by liability rules. Rather, the important expectation focuses on an investor’s ability to reap the maximum future benefit from socially useful present investment. In thin markets, such expectation interests are left unprotected by liability rules.”).
- 87 *In re Mahurkar Double Lumen Hemodialysis Catheter Patent Litig.*, 831 F. Supp. 1354, 1397 (N.D. Ill. 1993), *aff’d*, 71 F.3d 1573 (Fed. Cir. 1995).
- 88 Lemley & Weiser, *supra* note 84, at 785.
- 89 Lemley & Weiser, *supra* note 84, at 797-800, 791 & n.45 (citing *Woods v. Universal City Studios, Inc.*, 920 F. Supp. 62, 65 (S.D.N.Y. 1996) and Jeff Leeds, Judge Freezes Notorious B.I.G. Album, *N.Y. Times*, Mar. 21, 2006, at B2). Consider also the limitations on importation liability under 35 U.S.C. § 271(g): “A product which is made by a patented process will, for purposes of this title, not be considered to be so made after ...it becomes a trivial and non-essential component of another product.” 35 U.S.C. § 271(g)(2) (2006).
- 90 The ITC decides whether to exclude downstream products using the so-called EPROM factors. See, e.g., *In re Certain Voltage Regulators, Components Thereof and Products*, USITC Inv. No. 337-TA-564, 2007 WL 1794681 (May 20, 2007) (citing *Erasable Programmable Read-Only Memories, Components Thereof, Products Containing Such Memories, and Process for Making Such Memories*, USITC Pub. 2196, Inv. No. 337-TA-276, Comm’n Op. at 125-26 (1989), *aff’d sub nom. Hyundai Elecs. Indus. Co., Ltd. v. U.S. Int’l Trade Comm’n*, 899 F.2d 1204, 1209-10 (Fed. Cir. 1990)).
- 91 See, e.g., Thomas Cottier, Mini-Symposium: The Future Geometry of WTO Law: Introduction, 9 *J. Int’l Econ. L.* 775, 775 (2006) (“[T]he TRIPS Agreement provides for minimal and uniform legal rules. It responds to the philosophy of harmonization and standardization (although these terms are carefully omitted in official terminology.)”); Brent Savoie, Note, Thailand’s Test: Compulsory Licensing in an Era of Epidemiologic Transition, 48 *Va. J. Int’l L.* 211, 213 (2007).
- 92 Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the WTO, Annex 1C, Legal Instruments--Results of the Uruguay Round, 33 *I.L.M.* 1125, art. 31 (1994) [hereinafter TRIPS Agreement].
- 93 See *id.* art. 31(c) (“[T]he scope and duration of such use shall be limited to the purpose for which it was authorized ....”); *Id.* art. 31(d) (“[A]uthorization for such use shall be liable, ...to be terminated if and when the circumstances which led to it cease to exist and are unlikely to recur.”). Additionally, member nations’ ability to grant compulsory licenses under Article 31 is further limited by Article 30 of the TRIPS Agreement. See *id.* art.30 (“Members may provide limited exceptions to the exclusive rights conferred by a patent....”) (emphasis added). Much like the “just compensation” limitation of the Takings Clause, Article 31 requires: “[T]he right holder shall be paid adequate remuneration in the circumstances of each case, taking into account the economic value of the authorization ....” *Id.* art. 31(h).
- 94 *Id.* art. 28 (“A patent shall confer on its owner the following exclusive rights: ...to prevent third parties ...[from] making, using, offering for sale, selling, or importing for these purposes that product [or the product of the patented process].”). Other multinational trade agreements include similar provisions. See, e.g., North American Free Trade Agreement, art. 1715 § 2(c), U.S.-Can.-Mex., Dec. 17, 1992, 32 *I.L.M.* 289 (1993) (“Each Party shall provide that its judicial authorities shall have the authority ...to order a party in a proceeding to desist from an infringement, including to prevent the entry into the channels of commerce in their jurisdiction of imported goods that involve the infringement of an intellectual property right, which order shall be enforceable at least immediately after customs clearance of such goods.”).
- 95 The Office of the U.S. Trade Representative, for example, issues an annual report identifying international failures to protect

intellectual property. See, e.g., Office of the United States Trade Representative, 2007 Special 301 Report 27 (2007) (elevating Thailand to the USTR's priority watch in part because of Thailand's decisions to force compulsory licensing of several pharmaceutical patents held by U.S. corporations); Lily Lim, Trends in Compulsory Licenses in Greater China, IP Law 360, Aug. 16, 2006 (on file with Journal).

96 See 19 U.S.C. §§ 1337(a)(1)(B), -(b)(1) (2006). This is commonly called a "337 action."

97 19 U.S.C. § 1337(d)-(i) (2006). Note that the ITC is not authorized under § 1337 to award damages, see *id.*, unlike a federal district court in a patent case. See 35 U.S.C. § 284 (2006) ("When the damages are not found by a jury, the court shall assess them.").

98 See, e.g., North American Free Trade Agreement, art. 1703 § 1, U.S.-Can.-Mex., Dec. 17, 1992, 32 I.L.M. 289 (1993) ("Each Party shall accord to nationals of another Party treatment no less favorable than that it accords to its own nationals with regard to the protection and enforcement of all intellectual property rights.").

99 U.S. Const. amend. V ("[N]or shall private property be taken for public use, without just compensation.").

100 *Id.*

101 See *Penn Cent. Transp. Co. v. City of New York*, 438 U.S. 104, 124-25 (1978) ("[T]his Court has dismissed 'taking' challenges on the ground that, while the challenged government action caused economic harm, it did not interfere with interests that were sufficiently bound up with the reasonable expectations of the claimant to constitute 'property' for Fifth Amendment purposes."); *United States v. Gen. Motors Corp.*, 323 U.S. 373, 377 (1945) ("The critical terms are 'property,' 'taken' and 'just compensation.'"); *Foggy Bottom Ass'n. v. D.C. Office of Planning*, 441 F. Supp. 2d 84, 89 (D.D.C. 2006) ("In order to prevail under any type of takings claim, plaintiff must first establish that it had a protectable property interest cognizable under the Fifth Amendment.").

102 See *supra* notes 26-33 and accompanying text.

103 For example, in *Zoltek Corp. v. United States*, 442 F.3d 1345 (Fed. Cir. 2006) (*per curiam*), a split three-judge panel of the Federal Circuit held that the Court of Federal Claims lacked jurisdiction under the Tucker Act to hear a takings claim arising out of patent infringement authorized by the federal government. 442 F.3d at 1353. Although the panel's *per curiam* opinion is agnostic on the question of whether patent rights are Fifth Amendment property rights, in his concurrence, Judge Dyk argues that "taking of a property right could [not] possibly have occurred here. Patent rights are creatures of federal statute. They do not exist in the abstract." *Id.* at 1370 (Dyk, J., concurring) (footnote omitted). Judge Dyk's premise is flawed-- all forms of property are said to derive from the state. See, e.g., *Phillips v. Washington Legal Found.*, 524 U.S. 156, 163 (1998) (finding that property rights are created by the State).

The *Zoltek* panel relied heavily on the Supreme Court's 1894 decision in *Schillinger v. United States*, 155 U.S. 163 (1894). See *Zoltek*, 442 F.3d at 1350-53. In *Schillinger*, the Court addressed a takings claim brought in the Court of Claims, arising out of a government contractor's use of a patented method. *Schillinger*, 155 U.S. at 163-65. But the *Schillinger* court did not consider either (1) whether a patentee has property rights cognizable by the Fifth Amendment; or (2) whether the United States may be held liable for a taking of patent property rights. Rather, the Court held that the Court of Claims did not have jurisdiction over claims sounding in tort (as would a claim for infringement). *Id.* at 169 ("[C]ases sounding in tort are not cognizable in the court of claims."). The Court also held that the use of a patented method by a third party without the government's knowledge or consent could not be considered a violation of an implied contract (over which the Court of Claims would otherwise have jurisdiction). *Id.* at 170 ("There was no recognition by the government or any of its officers of the fact that in the construction of the pavement there was any use of the patent, or that any appropriation was being made of claimants' property. The government proceeded as though it were acting only in the management of its own property and the exercise of its own rights, and without any trespass upon the rights of claimants."). Justice Harlan expressed his disagreement in a strongly worded dissent: "I am of opinion that when the government, by its agent, knowingly uses or permits to be used for its benefit a valid patented invention, it is liable to suit in the court of claims for the value of such use, and that its liability arises out of contract based upon the constitutional requirement that private property shall not be taken for public use without just compensation." *Id.* at 178-79 (Harlan, J., dissenting).

- <sup>104</sup> See, e.g., Edward C. Walterscheid, *The Early Evolution of the United States Patent Law: Antecedents (Part 1)*, 76 *J. Pat. & Trademark Off. Soc'y* 697, 701-02 (1994) (“The idea of property, i.e., some form of ownership of or control over an object or thing which gave the right to exclude others from using or having access to or control over the object or thing, originated in antiquity and may well have antedated organized society. A major impetus toward the development of concepts of laws involved the perceived need to create and protect rights in property. As systems of law developed, the property rights sought to be protected were rights in tangible things. It was only with the greatest difficulty that property rights in intangible things came slowly to be recognized and then only relatively late in the development of legal systems.”).
- <sup>105</sup> See *Perry v. Sindermann*, 408 U.S. 593, 601 (1972) (“A person’s interest in a benefit is a ‘property’ interest for due process purposes if there are such rules or mutually explicit understandings that support his claim of entitlement to the benefit and that he may invoke a hearing.”). But cf. *Bd. of Regents v. Roth*, 408 U.S. 564, 578 (1972) (acknowledging a property interest in employment but finding that the action in question was outside the scope of the property interest).
- <sup>106</sup> After all, one person’s use of an idea does not deprive any other of the same use. See, e.g., Machlup, *supra* note 42, at 22-23 (“[A]n idea can belong to an unlimited number of persons’ and its use by some does not prevent its use by others.” (footnote omitted)).
- <sup>107</sup> See, e.g., Machlup, *supra* note 42, at 22 (“He who complains about the ‘theft’ of his idea--‘complains that something has been stolen which he still possesses, and he wants back something which, if given to him a thousand times, would add nothing to his possession.’” (footnote omitted)); Machlup, *supra* note 42, at 26 (“While the idea of property in an invention is not taken seriously by modern economists, a ‘property right’ in a patent and in the limited monopoly which it grants is of course an accepted legal institution.”). As will be discussed below, however, property rights may vest in an expectation of future patent rights at a time prior to the disclosure of an idea. See *infra* Part IV.C.
- <sup>108</sup> Machlup, *supra* note 42, at 53.
- <sup>109</sup> *PruneYard Shopping Ctr. v. Robins*, 447 U.S. 74, 83 n.6 (1980) (citations omitted).
- <sup>110</sup> *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 435-36 (1982) (citing *Kaiser Aetna v. United States*, 444 U.S. 164, 179-80 (1979); *Restatement (First) of Property* § 7 (1936)); see also *Kaiser Aetna v. United States*, 444 U.S. 164, 176 (1979) (characterizing the right to exclude as “one of the most essential sticks in the bundle of rights that are commonly characterized as property”); *Carl Schenck, A.G. 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.’”).
- <sup>111</sup> The contract theory of patent rights--that a patent is granted as an incentive for and in exchange for disclosure--lends further support to the applicability of the Fifth Amendment to patent rights. Under this theory, patent rights may be viewed as rights arising in contract--rights that traditionally have received Fifth Amendment protection. See, e.g., *Lynch v. United States*, 292 U.S. 571, 579 (1934) (“Rights against the United States arising out of a contract with it are protected by the Fifth Amendment.”).
- <sup>112</sup> Governor of New York Charles Evans Hughes, *Speech Before the Chamber of Commerce, Elvira, New York* (May 3, 1907).
- <sup>113</sup> U.S. Const. amend. I (“Congress shall make no law ....”).
- <sup>114</sup> U.S. Const. amend. V.
- <sup>115</sup> *Brinkerhoff-Faris Trust & Sav. Co. v. Hill*, 281 U.S. 673, 679-80 (1930) (citations omitted).
- <sup>116</sup> *Hughes v. Washington*, 389 U.S. 290, 298 (1967) (Stewart, J., concurring) (emphasis added).

117 See *Chicago B. & Q. R. Co. v. Chicago*, 166 U.S. 226, 239 (1897) (“The conclusion of the court on this question is that, since the adoption of the fourteenth amendment, compensation for private property taken for public uses constitutes an essential element in ‘due process of law,’ and that without such compensation the appropriation of private property to public uses, no matter under what form of procedure it is taken, would violate the provisions of the federal constitution.”); Jesse Dukeminier & James E. Krier, *Property* 1101 n.2 (4th ed. 1998) (“[T]he Fifth Amendment applies to the states through the due process clause of the Fourteenth Amendment.”)

118 *Hughes*, 389 U.S. at 291.

119 *Id.*

120 *Id.*

121 *Id.*

122 *Id.* at 296-97 (Stewart, J., concurring).

123 *Festo Corp. v. Shoketsu Kogyo Kabushiki Co.*, 535 U.S. 722, 739 (2002).

124 See *infra* notes 165-173 and accompanying text.

125 Barton H. Thompson, Jr., *Judicial Takings*, 76 *Va. L. Rev.* 1449 (1990); W. David Sarratt, Note, *Judicial Takings and the Course Pursued*, 90 *Va. L. Rev.* 1487 (2004); J. Nicholas Bunch, Note, *Takings, Judicial Takings, and Patent Law*, 83 *Tex. L. Rev.* 1747 (2005).

126 See, e.g., *Zoltek Corp. v. United States*, 442 F.3d 1345, 1373 (Fed. Cir. 2006) (per curiam) (Plager, J., dissenting) (“It is well understood that [the Fifth Amendment] does not preclude the Government from taking private property for public use. Rather, the Constitution guarantees that the citizen will be fully compensated for such a taking.”).

127 See *Pa. Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922) (“The 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.”). Before the Supreme Court’s *Mahon* decision, “it was generally thought that the Takings Clause reached only a ‘direct appropriation’ of property, or the functional equivalent of a ‘practical ouster of [the owner’s] possession.’” *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1014 (1992) (citing *Legal Tender Cases*, 12 U.S. 457, 551, 12 Wall. 457, 551 (1871), abrogation recognized by *Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg’l Planning Agency*, 535 U.S. 302 (2002); *N. Transp. Co. v. City of Chicago*, 99 U.S. 635, 642 (1878), abrogation recognized by *Tahoe-Sierra*, 535 U.S. 302 (2002); *Gibson v. United States*, 166 U.S. 269, 275-76 (1897)).

128 *Lingle v. Chevron U.S.A., Inc.*, 544 U.S. 528 (2005).

129 Writing for a unanimous court, Justice O’Connor explained:  
Our precedents stake out two categories of regulatory action that generally will be deemed per se takings for Fifth Amendment purposes. First, where government requires an owner to suffer a permanent physical invasion of her property--however minor--it must provide just compensation. A second categorical rule applies to regulations that completely deprive an owner of “all economically beneficial us[e]” of her property.  
....  
Outside these two relatively narrow categories ...regulatory takings challenges are governed by the standards set forth in *Penn Central Transp. Co. v. City of New York*, 438 U.S. 104 (1978).... The Court in *Penn Central* acknowledged that it had hitherto been “unable to develop any ‘set formula’” for evaluating regulatory takings claims, but identified “several factors that have particular significance.” Primary among those factors are “[t]he economic impact of the regulation on the claimant and, particularly, the

extent to which the regulation has interfered with distinct investment-backed expectations.” In addition, the “character of the governmental action”--for instance whether it amounts to a physical invasion or instead merely affects property interests through “some public program adjusting the benefits and burdens of economic life to promote the common good”--may be relevant in discerning whether a taking has occurred. The Penn Central factors--though each has given rise to vexing subsidiary questions--have served as the principal guidelines for resolving regulatory takings claims that do not fall within the physical takings or Lucas rules.

Id. at 538-39 (citations omitted). See also id. at 548 (“[A] plaintiff seeking to challenge a government regulation as an uncompensated taking of private property may proceed under one of the other theories discussed above-- by alleging a ‘physical’ taking, a Lucas-type ‘total regulatory taking,’ a Penn Central taking, or a land-use exaction violating the standards set forth in *Nollan and Dolan*.”).

130 Id. at 538-39.

131 *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 424 (1982).

132 Id. at 424-26 (rev’g 423 N.E.2d 320 (1981), aff’g 73 A.D.2d 849 (1979), aff’g 415 N.Y.S.2d 180 (1979)).

133 Id. at 442.

134 Id. at 435-36 (citing *Kaiser Aetna v. United States*, 444 U.S. 164, 179-80 (1979); Restatement (First) of Property § 7 (1936)).

135 Id. at 426; see also id. at 432 (“[A] permanent physical occupation is a government action of such a unique character that it is a taking without regard to other factors that a court might ordinarily examine.”); Id. at 434-35 (“In short, when the ‘character of the governmental action’ is a permanent physical occupation of property, our cases uniformly have found a taking to the extent of the occupation, without regard to whether the action achieves an important public benefit or has only minimal economic impact on the owner.” (citation omitted)).

136 As one wrinkle in the analysis of legislative action, the recent D.C. Circuit decision in *Eldred v. Reno*, 239 F.3d 372 (D.C. Cir. 2001), cert. granted sub nom. *Eldred v. Ashcroft*, 534 U.S. 1126 (2002), stresses the “plenary” power of Congress to redefine patent rights without “taking” rights. Id. at 380 (“[T]he powers of Congress to legislate upon the subject of patents is plenary by the terms of the Constitution, and as there are no restraints on its exercise, there can be no limitation of their right to modify them at their pleasure, so that they do not take away the rights of property in existing patents.”). This statement, however, runs contrary to the general rule expressed by the Supreme Court that “a State, by ipse dixit, may not transform private property into public property without compensation.” *Webb’s Fabulous Pharmacies, Inc. v. Beckwith*, 449 U.S. 155, 164 (1980); see also *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1014 (1992) (“Justice Holmes recognized in *Mahon*, however, that if the protection against physical appropriations of private property was to be meaningfully enforced, the government’s power to redefine the range of interests included in the ownership of property was necessarily constrained by constitutional limits.”) (citing *Pa. Coal Co. v. Mahon*, 260 U.S. 393, 414-15 (1922)).

137 See, e.g., *Hughes Aircraft Co. v. United States*, 86 F.3d 1566, 1571 (Fed. Cir. 1996), vacated, 520 U.S. 1183 (1997), aff’d, 140 F.3d 1470 (Fed. Cir. 1998) (“The government’s unlicensed use of a patented invention is properly viewed as a taking of property under the Fifth Amendment through the government’s exercise of its power of eminent domain ....”); *Leesona Corp. v. United States*, 599 F.2d 958, 964 (Ct. Cl. 1979) (“When the government has infringed, it is deemed to have ‘taken’ the patent license under an eminent domain theory, and compensation is the just compensation required by the fifth amendment.”); see also *Zoltek v. United States*, 442 F.3d 1345, 1373-74 (Fed Cir. 2006) (Plager, J., dissenting) (explaining that government infringement falls into “the traditional takings area in which the government actually acquires private property interests for its own use--the ‘physical taking’ issue. In the case before us, the matter falls into the traditional acquisition area. Plaintiff alleges that the Government took its property--its government-granted patent right--when the Government’s subcontractors used the patented method in the production of certain products employed in the F-22 production.” (footnotes omitted)).

138 See supra notes 104-105 and accompanying text.

- 139 Kaiser Aetna v. United States, 444 U.S. 164, 179-80 (1979) (“In this case, we hold that the ‘right to exclude,’ so universally held to be a fundamental element of the property right, falls within this category of interests that the Government cannot take without compensation.”).
- 140 Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 436 (1982).
- 141 See, e.g., Pinewood Estates of Mich. v. Barnegat Township Leveling Bd., 898 F.2d 347, 351 (3d Cir. 1990) (“[W]here it has found that the government has permanently occupied, or authorized a third party to occupy permanently, the private property of another, the Court has consistently held that a physical taking has occurred and that there has thus been a per se taking under the Fifth Amendment.”), abrogated by Yee v. City of Escondido, Cal., 503 U.S. 519 (1992); Frank I. Michelman, Property, Utility, and Fairness: Comments on the Ethical Foundations of “Just Compensation” Law, 80 Harv. L. Rev. 1165, 1184 (1967) (“The one incontestable case for compensation (short of formal expropriation) seems to occur when the government deliberately brings it about that its agents, or the public at large, ‘regularly’ use, or ‘permanently’ occupy, space or a thing which theretofore was understood to be under private ownership.”).
- 142 See, e.g., Nat’l Bd. of Young Men’s Christian Ass’ns v. United States, 395 U.S. 85, 92 (1969) (“Ordinarily, of course, government occupation of private property deprives the private owner of his use of the property, and it is this deprivation for which the Constitution requires compensation.” (emphasis added)).
- 143 A patent owner’s financial ability, however, may be severely impacted. But financial considerations are appropriately saved for the Lucas and Penn Central analyses. See *infra* Parts IV.C.2, IV.C.3.
- 144 Loretto, 458 U.S. at 441.
- 145 Carrier, *supra* note 22, at 52 n.218.
- 146 See *supra* note 106 and accompanying text (discussing exhaustibility).
- 147 See Lingle v. Chevron U.S.A., Inc., 544 U.S. 528, 539 (2005) (stating that such an invasion, “however minimal the economic cost it entails, eviscerates the owner’s right to exclude others from entering and using her property--perhaps the most fundamental of all property interests”); see also Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1015 (1992) (“In general (at least with regard to permanent invasions), no matter how minute the intrusion, and no matter how weighty the public purpose behind it, we have required compensation.”); Loretto, 458 U.S. at 436-37 (“But constitutional protection for the rights of private property cannot be made to depend on the size of the area permanently occupied.”); Loretto, 458 U.S. at 438 n.16 (“[W]hether the installation is a taking does not depend on whether the volume of space it occupies is bigger than a breadbox.”).
- 148 Cf. Nollan v. Ca. Coastal Comm’n, 483 U.S. 825, 832 (1987) (“We think a ‘permanent physical occupation’ has occurred, for purposes of [the Loretto] rule, where individuals are given a permanent and continuous right to pass to and fro, so that the real property may continuously be traversed ....”).
- 149 PruneYard Shopping Ctr. v. Robins, 447 U.S. 74 (1980).
- 150 *Id.* at 84; see also Nollan, 483 U.S. at 825, 832 n.1 (explaining that in PruneYard “the owner had already opened his property to the general public, and in addition permanent access was not required”).
- 151 If MercExchange had instead advertised a uniform set of license terms available to all interested parties, MercExchange would clearly fit more squarely into the PruneYard mold.

152 Transcript of Oral Argument at 7, eBay III, 126 S. Ct. 1837 (2006) (No. 05-130).

153 Although the term is used to cover a spectrum of behavior, “trolling” may broadly be described as when a non-practicing patentee seeks infringers to license for substantial royalties. See, e.g., Lisa Lerer, Meet the Original Patent Troll, IP L. & Bus., July 20, 2006, available at <http://www.law.com/jsp/article.jsp?id=1153299926232>.

154 Although the judiciary has refused to apply a single definition or test to determinations of when a private actor becomes a public utility, the basic premises are well-summarized in Black’s Law Dictionary, which defines “public utility” to mean “[a] company that provides necessary services to the public, such as telephone lines and service, electricity, and water” or, alternately, “[a] person, corporation, or other association that carries on an enterprise for the accommodation of the public, the members of which are entitled as a matter of right to use its facilities.” Black’s Law Dictionary 1582 (8th ed. 2004). Alternately, the Supreme Court of Colorado explains: “Analysis of whether an entity is a ‘public utility’ has traditionally centered around whether or not the public has a right to demand service.” Powell v. Colo. Pub. Utils. Comm’n, 956 P.2d 608, 614 (Colo. 1998). See also City of Des Moines v. City of W. Des Moines, 30 N.W.2d 500, 504 (Iowa 1948) (“But even though the service be impressed with a public interest the question arises, what public?”).

155 Lucas v. S. C. Coastal Council, 505 U.S. 1003 (1992).

156 Id. at 1006-07.

157 Id. at 1031-32.

158 Id. at 1015 (citing Agins v. City of Tiburon, 447 U.S. 255, 260 (1980), abrogated by Lingle v. Chevron U.S.A., Inc., 544 U.S. 528, 539 (2005); Nollan v. Ca. Coastal Comm’n, 483 U.S. 825, 834 (1987); Keystone Bituminous Coal Ass’n v. DeBenedictis, 480 U.S. 470, 495 (1987); Hodel v. Va. Surface Mining & Reclamation Ass’n, Inc., 452 U.S. 264, 295-96 (1981)).

159 See, e.g., Andrus v. Allard, 444 U.S. 51, 66-67 (1979) (no taking found as a result of prohibition on the sale of eagle feathers), cited in Lucas, 505 U.S. at 1027-28 (“And in the case of personal property, by reason of the State’s traditionally high degree of control over commercial dealings, he ought to be aware of the possibility that new regulation might even render his property economically worthless (at least if the property’s only economically productive use is sale or manufacture for sale).”).

160 35 U.S.C. § 261 (2006). This distinction was latched onto by Carter Phillips, arguing on behalf of eBay in eBay v. MercExchange, L.L.C.: “Congress does not declare that the property interest here is a real property interest, which traditionally has been protected differently. It’s a personal property interest, which is traditionally given--accorded less protection under this kind of scheme.” Transcript of Oral Argument at 8, eBay III, 126 S. Ct. 1837 (2006) (No. 05-130).

161 See supra note 22 and accompanying text.

162 Palazzolo v. Rhode Island, 533 U.S. 606, 631 (2001) (citations omitted).

163 Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1016 n.7 (1992). This situation was also present in Keystone Bituminous Coal Ass’n v. DeBenedictis, 480 U.S. 470 (1987). The dissent in Lucas characterized the situation: “In Keystone, the Court determined that the ‘support estate’ was ‘merely a part of the entire bundle of rights possessed by the owner.’ Thus, the Court concluded that the support estate’s destruction merely eliminated one segment of the total property. The dissent, however, characterized the support estate as a distinct property interest that was wholly destroyed.” Lucas, 505 U.S. at 1054 (Blackmun, J., dissenting) (citing Keystone, 480 U.S. at 501, 519).

164 As the Court explained in Andrus v. Allard: “[W]here an owner possesses a full ‘bundle’ of property rights, the destruction of one ‘strand’ of the bundle is not a taking, because the aggregate must be viewed in its entirety.” 444 U.S. at 65-66. See also Penn Cent.



Transp. Co. v. City of New York, 438 U.S. 104, 130-31 (1978) (“‘Taking’ jurisprudence does not divide a single parcel into discrete segments and attempt to determine whether rights in a particular segment have been entirely abrogated. In deciding whether a particular governmental action has effected a taking, this Court focuses rather both on the character of the action and on the nature and extent of the interference with rights in the parcel as a whole--here the city tax block designated as the ‘landmark site.’”).

At least one other commentator has addressed this “denominator” issue in the context of judicial takings of patent rights. He suggests that a patent may be considered on a claim-by-claim basis, such that a judicial action eliminating all economically beneficial use of any one claim (by substantively changing the law of, for example, obviousness) may be considered a judicial taking. Bunch, *supra* note 125, at 1791 (“Patents are made of claims that define the ‘metes and bounds’ of the property right. Each individual claim is an invention in and of itself. If one claim is held invalid, then the patentee may still assert the other claims against an accused infringer. Does each claim in a patent have its own economic value? Or, is each claim merely a piece of the entire patent right? If the former, then the invalidation of a single claim would be a 100% diminution in economic value. If the latter, then the invalidation of a single claim would only be a percentage of the entire patent right.”). Bunch, however, acknowledges that “[d]etermining that the denominator of a patent is the entire patent is most consistent with the Supreme Court’s Takings Clause jurisprudence.” Bunch, *supra* note 125, at 1793.

165 Penn Central, 438 U.S. at 124.

166 *Id.* at 108-09.

167 *Id.* at 110-12.

168 *Id.* at 115-18.

169 *Id.* at 130.

170 Penn Cent. Transp. Co. v. City of New York, 438 U.S. 104, 133 (1978)

171 *Id.* at 136.

172 *Id.* at 124 (“the Court’s decisions have identified several factors that have particular significance. The economic impact of the regulation on the claimant and, particularly, the extent to which the regulation has interfered with distinct investment-backed expectations are, of course relevant considerations. So, too, is the character of the governmental action. A ‘taking’ may more readily be found when the interference with property can be characterized as a physical invasion by government, than when interference arises from some public program adjusting the benefits and burdens of economic life to promote the common good.”) (citations omitted).

173 See, e.g., *Palazzolo v. Rhode Island*, 533 U.S. 606, 633 (2001) (O’Connor, J., concurring) (“[I]nterference with investment-backed expectations is one of a number of factors that a court must examine.”); *id.* at 636 (O’Connor, J., concurring) (“The temptation to adopt what amount to per se rules in either direction must be resisted. The Takings Clause requires careful examination and weighing of all the relevant circumstances in this context. The court below therefore must consider on remand the array of relevant factors under Penn Central before deciding whether any compensation is due.”).

174 See Penn Central, 438 U.S. at 132 (stating that 400 landmarks were designated pursuant to a plan to preserve structures of historic or aesthetic interest).

175 Cf. *Kimball Laundry Co. v. United States*, 338 U.S. 1, 5 (1949) (implying that regulations are less likely to be a taking if “part of the burden of common citizenship”).

- 176 Where patent rights are seen to be abused by a “patent troll,” the argument can be made that such use falls within the category of “harmful or noxious uses,” which may typically be proscribed without raising taking concerns. See, e.g., *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1022 (1992) (“[H]armful or noxious uses’ of property may be proscribed by government regulation without the requirement of compensation.”). Targeting of patent trolls in this manner, however, is itself subject to abuse. Courts are seldom equipped with full information and what may be perceived as “trolling” behavior may, in many cases, simply be efforts by small inventors to maintain their roles as just that--inventors. See *supra* Part IV.B.
- 177 Joseph William Singer, *Property Law: Rules, Policies, and Practices* § 12.2, at 1258 (2d ed. 1997). See also *Kimball Laundry*, 338 U.S. at 5 (discussing loss of property as “part of the burden of common citizenship”); *Penn Central*, 438 U.S. at 124 (stating that physical invasion by the government is more likely to be a taking than interference with property to promote the common good).
- 178 *Penn. Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922) (“The 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.”).
- 179 The author notes that this is an area ripe for empirical research, especially as the courts and Congress continue to question the social and economic value of permanent injunctive relief as a remedy to patent infringement. By way of anecdotal evidence, consider the highly-publicized settlement negotiations in *NTP Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282 (Fed. Cir. 2005). After an initial jury award of \$23.1 million in November 2002, the District Court judge awarded enhanced damages to raise the total to \$53.7 million in August 2003, with a permanent injunction stayed pending appeal. *NTP*, 418 F.3d at 1292. Thereafter, the parties arrived at a disclosed settlement figure of \$450 million settlement, but the settlement fell through in March 2005. At that time, RIM filed a motion to enforce the settlement agreement, thus indicating that the \$450 million figure was not too high. See Order, *NTP Inc. v. Research in Motion, Ltd.*, No. 3:01CV767 (E.D. Va. Nov. 30, 2005) (denying enforcement of settlement agreement) (on file with Journal). Finally, acting under threat of an imminent permanent injunction hearing, NTP and RIM settled for a disclosed \$612.5 million on March 3, 2006. See Paul M. Schoenhard, *No Trespassing: The Supreme Court Should Buttress Patent Owners’ Right to Refuse*, *Legal Times*, May 8, 2006, at 43. If all things were assumed to be equal, the difference between the \$612.5 million settlement and the \$53.7 million damages award could be interpreted as the market value of an injunction in that case. But such a calculation would mistakenly fail to account for accrued damages accompanying the precipitous growth of RIM’s Blackberry service over the two-and-a-half year span between August 2003 and March 2006, as well as so many years of additional attorney fees and associated costs.
- 180 See, e.g., Nina Medlock et al., *The Non-Practicing Patentee’s Right to a Permanent Injunction Restraining Patent Infringement: Going Once, Going Twice, Gone?*, *Intell. Prop. & Tech. L.J.*, Sept. 2006, at 1, 3 (“[W]ithout the guarantee of an injunction, the non-practicing patentee’s ability to recover reasonable license fees from other companies for use of its patents may be significantly reduced as alleged infringers may be more willing to take their chances in court.”)
- 181 See *supra* Part III.B.
- 182 This is not to say that the denial of injunctive relief does not result in additional costs. For example, the refusal by a court to grant injunctive relief against one party may result in other infringers entering the marketplace, thereby increasing costs for the patentee. Such externalities, however, are not properly part of the diminution-in-value calculus.
- 183 See Singer, *supra* note 177, § 12.2, at 1259 (“A regulation is more likely to be held a taking if a citizen has already invested substantially in reasonable reliance on an existing statutory or regulatory scheme; it is less likely to be ruled a taking if the regulation prevents the owner from realizing an expected benefit in the future.”).
- 184 *KSM Fastening Sys., Inc. v. H.A. Jones Co., Inc.*, 776 F.2d 1522, 1524 (Fed. Cir. 1985) (citing *Smith Int’l, Inc. v. Hughes Tool Co.*, 718 F.2d 1573 (Fed. Cir. 1983), appeal after remand, 759 F.2d 1572 (Fed. Cir. 1985)); see also *supra* note 38 and accompanying text.
- 185 Transcript of Oral Argument at 3, *eBay III*, 126 S. Ct. 1837 (2006) (No. 05-130).
- 186 See, e.g., *Rite-Hite Corp. v. Kelley Co., Inc.*, 56 F.3d 1538, 1547 (Fed. Cir. 1995) (citing cases where injunctive relief was denied

to protect the public interest).

187 See *Odetics, Inc. v. Storage Tech. Corp.*, 14 F. Supp. 2d 785, 788 (E.D. Va. 1998), *aff'd*, 185 F.3d 1259 (Fed. Cir. 1999); *Stickle v. Heublein Inc.*, 716 F.2d 1550, 1563 (Fed. Cir. 1983); *Amstar Corp. v. Envirotech Corp.*, 823 F.2d 1538, 1549 (Fed. Cir. 1987).

188 See, e.g., *Sanofi-Synthelabo v. Apotex, Inc.*, 470 F.3d 1368, 1383 (Fed. Cir. 2006) (“We have long acknowledged the importance of the patent system in encouraging innovation. Indeed, the ‘encouragement of investment-based risk is the fundamental purpose of the patent grant, and is based directly on the right to exclude.’ The district court relied on the testimony of Dr. Hausman in finding that the average cost of developing a blockbuster drug is \$800 million.”) (citation omitted).

189 See *Bunch*, *supra* note 125, at 1794 (“The patent holder invested in the research and design necessary to obtain the patent, the patent prosecution costs necessary to obtain the patent, and the litigation costs necessary to enforce those rights granted by the patent. Similarly, the patent holder may have invested in a new plant in order to produce the product, or the patent holder may have license the technology to a business partner. All of these actions--these investments--were made on the basis of the law in existence at the time of the action. A judicial decision that changes the result of those actions interferes with the patent holder’s expectations, which creates concerns under the Takings Clause.”).

190 See *Machlup*, *supra* note 42, at 13 (“The proposal to make all patents licensable under the law, not conditional upon judicial or administrative findings of ‘abuse’ or ‘public interest,’ has been resisted almost everywhere, ...partly because of a fear that the incentive for innovative enterprise would be unduly weakened.”); *Machlup*, *supra* note 42, at 14 (In such a system “the hopes for the highest prizes to be won in the ‘patent lottery’ would be dashed, and the anticipated returns from investment in innovations based on patented inventions would be reduced.”).

191 *Palazzolo v. Rhode Island*, 533 U.S. 606 (2001).

192 *Id.* at 626.

193 *Id.* at 628; see also *id.* at 629-30 (“We have no occasion to consider the precise circumstances when a legislative enactment can be deemed a background principle of state law or whether those circumstances are present here. It suffices to say that a regulation that otherwise would be unconstitutional absent compensation is not transformed into a background principle of the State’s law by mere virtue of the passage of title.”).

194 *O’Quinn*, *supra* note 31, at 500 (citing *Singer*, *supra* note 177, § 12.2, at 1260).

195 See *Singer*, *supra* note 177, § 12.2, at 1260 (“If, however, a developer spends substantial amounts of money on architectural and construction work for a particular project in reliance on existing zoning regulations and issuance of a building permit, courts are likely to hold retroactive application of changes in the zoning law invalid.” (citing *Stone v. City of Wilton*, 331 N.W.2d 398 (Iowa 1983))).

196 See *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1005 (1984) (“[T]he force of this factor is so overwhelming ... that it disposes of the taking question ....”); *Nollan v. Ca. Coastal Comm’n*, 483 U.S. 825, 860 (1987) (Brennan, J., dissenting) (finding that appellants “could have no reasonable expectation of, and had no entitlement to, approval of their permit application without any deed restriction”).

197 See *Lingle v. Chevron U.S.A., Inc.*, 544 U.S. 528, 538-39, 548 (2005)

198 U.S. Const. amend. V.

199 *Id.*

200 See *Kelo v. City of New London, Conn.*, 545 U.S. 469, 479-80 (“[W]hile many state courts in the mid-19th century endorsed ‘use by the public’ as the proper definition of public use, that narrow view steadily eroded over time.... Accordingly, when this Court began applying the Fifth Amendment to the States at the close of the 19th century, it embraced the broader and more natural interpretation of public use as ‘public purpose.’”) (footnotes omitted).

201 *Thompson v. Consol. Gas Utils. Corp.*, 300 U.S. 55, 80 (1937).

202 *Berman v. Parker*, 348 U.S. 26, 29-32 (1954).

203 *Id.* at 29-31.

204 See *id.* at 31, 36.

205 See *id.* at 31-36.

206 *Id.* at 32.

207 *Id.* at 33-34 (citations omitted).

208 *Haw. Hous. Auth. v. Midkiff*, 467 U.S. 229 (1984).

209 *Id.* at 232 (“[W]hile the State and Federal Governments owned almost 49% of the State’s land, another 47% was in the hands of only 72 private landowners. The legislature further found that 18 landholders, with tracts of 21,000 acres or more, owned more than 40% of this land and that on Oahu, the most urbanized of the islands, 22 landowners owned 72.5% of the fee simple titles.”) (citation omitted).

210 *Id.* at 233.

211 Justice Marshall did not participate in the consideration or decision of the case. *Id.* at 245.

212 *Id.* at 241.

213 *Id.* at 243-44.

214 *Kelo v. City of New London, Conn.*, 545 U.S. 469 (2005).

215 *Id.* at 473-74.

216 *Id.* at 475; see also *id.* at 483 (“Those who govern the City were not confronted with the need to remove blight in the Fort Trumbull area ....”).

217 Id. at 484.

218 Id. at 505 (O'Connor, J., dissenting).

219 *z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437 (E.D. Tex. 2006).

220 Id. at 438.

221 Id. at 443-44.

222 A similar question was asked by philosopher-novelist Ayn Rand in *Atlas Shrugged*:

“I don’t see why pumping my earnings into Orren Boyle’s pocket is going to save the country.”

“You have to make certain sacrifices to the public welfare!”

“I don’t see why Orren Boyle is more ‘the public’ than I am.”

“Oh, it’s not a question of Mr. Boyle at all! It’s much wider than any one person. It’s a matter of preserving the country’s natural resources--such as factories--and saving the whole of the nation’s industrial plant. We cannot permit the ruin of an establishment as vast as Mr. Boyle’s. The country needs it.”

Ayn Rand, *Atlas Shrugged* 898 (Signet 1996).

223 Beyond simply a preference for one party over another, the *z4* decision voices a disturbing preference for Goliath over David, for the established corporation over the start-up. As Calabresi and Melamed suggested in the context of bodily integrity: “consider the plight of the unwilling ninety-eight-pound weakling in a state which nominally entitles him to bodily integrity but will not intervene to enforce the entitlement against a lustful Juno.” Calabresi & Melamed, *supra* note 46, at 1091.

224 *Kelo v. City of New London, Conn.*, 545 U.S. 469, 477 (2005); see also *Haw. Hous. Auth. v. Midkiff*, 467 U.S. 229, 245 (1984) (“A purely private taking could not withstand the scrutiny of the public use requirement; it would serve no legitimate purpose of government and would thus be void.”). But see *Penn. Coal Co. v. Mahon*, 260 U.S. 393, 413 (1922) (“This is the case of a single private house. No doubt there is a public interest even in this, as there is in every purchase and sale and in all that happens within the commonwealth.”); see also *id.* at 415 (“The protection of private property in the Fifth Amendment presupposes that it is wanted for public use ....”).

225 *Windsurfing Int’l, Inc. v. AMF, Inc.*, 782 F.2d 995, 1003 n.12 (Fed. Cir. 1986).

226 See *Berman v. Parker*, 348 U.S. 26, 32 (1954) (“[W]hen the legislature has spoken, the public interest has been declared in terms well-nigh conclusive.”).

227 *Id.* (“In such cases, the legislature, not the judiciary, is the main guardian of the public needs to be served by social legislation ....”) (emphasis added).

228 See generally *NTP Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282 (Fed. Cir. 2005).

229 Brief for U.S. Dep’t of Justice, *NTP Inc. v. Research in Motion, Ltd.*, No. 3:01CV767 (E.D. Va. Feb. 1, 2006) (on file with Journal); Brief for U.S. Dep’t of Justice, *NTP Inc. v. Research in Motion, Ltd.*, No. 3:01CV767 (E.D. Va. Nov. 8, 2005) (on file with Journal); see also Teresa Riordan, *A Canadian Company Appeals in Court for the Right to Keep Selling Blackberries in the U.S.*, *N.Y. Times*, June 7, 2004, at C2 (“Last year, RIM also tried to enlist the help of Congress to stave off NTP’s infringement claims, contending that keeping BlackBerry in operation was in the interest of national security.”).

- <sup>230</sup> Brief for U.S. Dep't of Justice, *NTP Inc. v. Research in Motion, Ltd.*, No. 3:01CV767 (E.D. Va. Feb. 1, 2006) (on file with Journal); Brief for U.S. Dep't of Justice, *NTP Inc. v. Research in Motion, Ltd.*, No. 3:01CV767 (E.D. Va. Nov. 8, 2005) (on file with Journal).
- <sup>231</sup> See *supra* notes 177-178 and accompanying text.
- <sup>232</sup> See *Berman v. Parker*, 348 U.S. 26, 32 (1954) (“Subject to specific constitutional limitations, when the legislature has spoken, the public interest has been declared in terms well-nigh conclusive.”); see also *Haw. Hous. Auth. v. Midkiff*, 467 U.S. 229, 244 (1984) (“Thus, if a legislature, state or federal, determines there are substantial reasons for an exercise of the taking power, courts must defer to its determination that the taking will serve a public use.”).
- <sup>233</sup> See *Kelo v. City of New London, Conn.*, 545 U.S. 469, 487 (2005) (distinguishing what was held to be a permissible taking from “a one-to-one transfer of property, executed outside the confines of an integrated development plan.”).
- <sup>234</sup> See Troll Hearing, *supra* note 13, at 56 (testimony of Dean Kamen, President, DEKA Research & Development Corp.) (“If people can’t count on owning intellectual property, the investment by all sorts of individuals, large corporations, the willingness for people to go forward and take risk will be, I think, so dramatically hindered--maybe not by intent--that when we look back at trying to go after trolls, which you might successfully do in some way, I think it would be like you flooded the building to put out a fire in a wastepaper basket.”).
- <sup>235</sup> See John F. Duffy, *Rethinking the Prospect Theory of Patents*, 71 U. Chi. L. Rev. 439, 491-93 (2004) (discussing how the adoption of the twenty-year lifespan has eliminated the “submarine” patent problem except for those patents filed prior to 1995).
- <sup>236</sup> As the old maxim goes: “When Congress closes a door, it opens a window.”
- <sup>237</sup> But see Machlup, *supra* note 42, at 80 (“If one does not know whether a system ‘as a whole’ (in contrast to certain features of it) is good or bad, the safest ‘policy conclusion’ is to ‘muddle through’--either with it, if one has long lived with it, or without it, if one has lived without it. If we did not have a patent system, it would be irresponsible, on the basis of our present knowledge of its economic consequences, to recommend instituting one. But since we have had a patent system for a long time, it would be irresponsible, on the basis of our present knowledge, to recommend abolishing it.”).