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Planting a Standard: Proposing a Broad Reading of In re Elsner

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NOTE

PLANTING A STANDARD: PROPOSING A BROAD READING OF IN RE ELSNER

Alicia L. Frostick*

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Introduction

In re Elsner¹ grew out of the rejection of the plant patent applications of Mr. Elsner and Mr. Zary. Mr. Elsner is a plant breeder who resides in Germany and who maintains and "invents" new geraniums.² In 1997 he filed an

^{*} J.D. candidate, December 2005. This Note is dedicated to Dorothy "Doe" Frostick. Also, I would like to sincerely thank all of those who helped me in thinking about and writing this Note. I would specifically like to thank Professor Roberta J. Morris, Professor John F. Duffy, and Jenn Kozar for their many ideas and great advice on early drafts. Finally, while I cannot list them all, I would like to thank my Note Editors for their hard work, the *Michigan Law Review* Editorial Board for their helpful comments and tremendous patience, and the MLR Associate Editors for their citechecking and proofreading. All mistakes are my own.

 ³⁸¹ F.3d 1125 (Fed. Cir. 2004).

^{2.} Elsner, 381 F.3d at 1126-27.

application for a Plant Breeder's Rights ("PBR") certificate³ at the European Community Plant Variety Office that was subsequently published.⁴ The application was for a new type of geranium that originated as a mutation of a parent geranium named Pendec.⁵ The published application disclosed the names and addresses of the plant breeder, a statement of botanical classification, and a provisional denomination for the plant. In 1998, Mr. Elsner sold the geranium in Germany.⁶ Meanwhile, Mr. Zary filed a PBR certificate in South Africa that claimed a new variety of rose plant called the JACopper.⁷ Information about the JACopper included a published certificate that specified how to contact the JACopper breeder and his South African agent.⁸ Mr. Zary sold the JACopper in South Africa and Zambia as early as 1996.⁹ Both Mr. Elsner and Mr. Zary tried to patent their plants in the United States under the Plant Patent Act¹⁰ ("PPA") but were rejected under 35 U.S.C. § 102(b), the on-sale bar.¹¹ The patent office stated that the published PBR applications coupled with the overseas sale of the inventions sufficiently placed the public in possession of the invention to make it not novel and therefore unpatentable.¹²

Mr. Elsner and Mr. Zary appealed the rejections and the court was faced with the question of whether, for the plants of Elsner and Zary, a publication that met all of the requirements of 35 U.S.C. § 102 except enablement¹³ might be placed in the possession of the public by a related public foreign

- 3. A registered PBR certificate denotes that a limited monopoly is given to breeder of a uniform, distinct, and stable plant variety.
 - Elsner, 381 F.3d at 1126-27.
 - 5. Id.
 - 6. Id. at 1127.
 - 7. *Id*.
 - 8. *Id*.
 - 9. Id.
 - 10. 35 U.S.C. §§ 161-164 (2004).
- 11. Elsner, 381 F.3d at 1127. The patent language relating to plants is held in 35 U.S.C. §§ 161–164 and described *infra* Section I.B. The relevant novelty sections state:

A person shall be entitled to a patent unless—

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States....
- 35 U.S.C. § 102(a)-(b) (2004).
 - 12. Elsner, 381 F.3d at 1127.
- 13. A reference must be enabling in order to bar a patent. Hewlett-Packard Co. v. Mustek Sys., Inc., 340 F.3d 1314, 1324 & n.6 (Fed. Cir. 2003) ("The anticipation analysis asks solely whether the prior art reference discloses and enables the claimed invention"). As will be discussed infra Section II.B, In re LeGrice, 301 F.2d 929, 935 (C.C.P.A. 1962), changes the enablement requirements of anticipatory references slightly for plants.

sale of the invention.¹⁴ The court held that the sale could be coupled with the publication in order to create a statutory bar to a U.S. patent.¹⁵

The lack of a consistent theory among *Elsner*'s references, test, and explicit language makes the scope of *Elsner* hard to discern. For instance, the Federal Circuit first reiterated the bright-line rule that foreign sales coupled with a publication cannot be a statutory bar, ¹⁶ but then found that for plants, a foreign sale coupled with a publication serves as a statutory bar because it enables those skilled in the art to access the plant invention.¹⁷

Second, the court stated that it "disagree[d] with Appellants' contention that [its] holding will operate to create a printed publication bar whenever a non-enabling publication and a foreign sale are involved [because] . . . 'there are inherent differences between plants and manufactured articles.' "18 Specifically, the court distinguished the plants and utility inventions because the plants at issue require asexual reproduction to replicate. But the *Elsner* court relies on a case involving § 101 patentable inventions—specifically microorganisms—which, as this Note will discuss in Section II.C, states the similar predicament between asexually reproducing plants and microorganisms.

Finally, although the court stated that it only distinguished plants because it "perceive[d] a difference between plants and statutorily distinct inventions," it relied extensively on other sources that maintain that there should be no discrimination between plants and other inventions. For instance, the court quoted approvingly both the Court of Customs and Patent Appeals ("CCPA") in *In re LeGrice*²¹ and the United States Patent and Trademark Office ("USPTO")—each of which came to a broad conclusion that plants and utility patents should have the same § 102(b) bars. It also cited the CCPA, which stated that plants should be treated the same as utility inventions. By broadening the references that may be considered as a

^{14.} See Elsner, 381 F.3d at 1128 ("The particular question thus before us is whether evidence of the foreign sale of a claimed reproducible plant variety may enable an otherwise non-enabled printed publication disclosing that plant, thereby creating a § 102(b) bar.").

^{15.} *Id.* at 1126. The panel consisted of Judge Lourie, Judge Clevenger, and Judge Bryson, with Judge Lourie writing the opinion. The case was decided on August 16, 2004.

^{16.} *Id.* at 1128 ("Ordinarily, foreign sales of an invention in combination with a publication will not constitute a bar because such a result would circumvent the established rules that neither non-enabling publications nor foreign sales can bar one's right to a patent.").

^{17.} Id. at 1128-29.

^{18.} *Id.* at 1129 (quoting *In re* LeGrice, 301 F.2d 929, 935 (C.C.P.A. 1962)).

^{19.} See id. at 1129 ("In the case of plant patents, the touchstone of the statutory subject matter is asexual reproduction of a unique biological organism.").

^{20.} Id.

^{21.} In re LeGrice, 301 F. 2d 929 (C.C.P.A. 1962).

^{22.} Elsner, 381 F.3d at 1130, relying on LeGrice, 301 F.2d at 935, stated that "[i]n its decision reversing the Board, the Court of Customs and Patent Appeals discussed at length its view that § 102(b) applies to plant patents in the same way that it applies to utility patents, but acknowledged the distinction between plants and other patentable subject matter."

^{23.} The Elsner court, relying on LeGrice, 301 F.2d at 936, stated that:

bar to novelty under § 102, the court effectively made it harder to obtain a patent on a plant, thereby discriminating against them.

One reason *Elsner* may seem confusing is that it tried to balance conflicting congressional directives. On the one hand, the court considered that Congress did not want plants to be discriminated against.²⁴ On the other hand, the court had to consider that in the Patent Act, Congress had set categories of prior art, the combination of which is generally disfavored for determinations of patentability.²⁵ Finally, the court considered its gut notions of fairness: that a dirty, rotten scoundrel is printing material and selling plants abroad but still being allowed to patent them in the United States because of a technicality. *Elsner* balanced these concerns by precluding novelty for plants if the prior acts put the public in possession of the plant. This Note argues that these congressional commands *Elsner* needed to balance do not actually require different outcomes and instead indicate that courts should extend *Elsner's* "possession test"²⁶ to all utility inventions.

Some may critique reconciling the discrimination of plant patents with other utility patents by changing all of the patent laws governing utility patents to the level of the narrow category of plant patents as similar to moving a mountain to meet a stone. This critique misses the point; the *Elsner* court recognized that in a progressive world where foreign knowledge is more available to inventors, the circumstances that determine public possession will also need to regularly change. Stated in a different way, the criteria for public possession will need to change in order to maintain a continuously strict patentability regime. Courts must constantly reconsider the Patent Act in light of continuous technology changes if they intend to maintain the con-

The [CCPA] court concluded that Congress had not indicated that § 102(b) should be applied differently to plant patents than to other inventions, and the court reiterated that the clause 'described in a printed publication' has been interpreted with respect to whether the publication has in fact conveyed such knowledge of an invention to the public as to put the public in possession of the invention.

Elsner, 381 F.3d at 1130.

- 24. This concern was set out in the Committee Reports during the enactment of the Plant Patent Act when stating that: "The purpose of this bill is to afford agriculture, so far as predicable, the same opportunity to participate in the benefits of the patent system as has been given industry The bill will remove the existing discrimination between plant developers and industrial inventors." S. Rep. No. 71-315, at 1 (1930); LeGrice, 301 F.2d at 932 (stating that this report was identical to a report filed by the House Committee on Patents).
- 25. 35 U.S.C. § 102(b) (2004); Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 771 (Fed. Cir. 1983). Recently, a bill has been introduced into Congress that would explicitly change the prior art standards for plants to be stricter than those for utility inventions. But, little congressional action has been taken on this proposed legislation since it was introduced in January 2005. See infra note 86.
- 26. I will call the test for novelty used in *Elsner* the "possession test." This test, as applied in *Elsner* and *LeGrice*, asks a technology-neutral question of "whether one skilled in the art to which the invention pertains could take the description of the invention in the printed publication and combine it with his own knowledge of the particular art and from this combination be put in possession of the invention on which a patent is sought." *Elsner*, 381 F.3d at 1128 (quoting *LeGrice*, 301 F.2d at 939).
- 27. Utility patents are those inventions patented under § 101 of the Patent Act. Some examples of things that can be patented under § 101 are the steam engine or a zipper.

stant strictness of the patent standard;²⁸ Elsner merely reflects this kind of reconsideration. As technology changes, courts should be adapting outdated laws to reflect the changing world.

This Note will show that one can read *Elsner* broadly to encompass both plant-type and widget-type inventions, and that applying Elsner to both plants and widgets is within the current statutory framework and case law. Such a reading would change the § 102 bar for inventions patentable under § 101²⁹ (hereinafter referred to as "widgets") as well as for plants. Part I of this Note argues that congressional sources require a flexible test—one that does not prejudice any objects under the Patent Act. Part II discusses the judicial interpretation of the Patent Act prior to Elsner in order to argue first, that past cases disfavor discrimination based on invention type and second, that courts have already applied a broad reading of Elsner to non-plant inventions. Part III shows that the move toward harmonization of U.S. laws with international standards is especially strong in intellectual property. As a result, Part III argues that courts should pay attention to international sources and harmonize U.S. laws with international standards. Such harmonization requires considering foreign sales as prior art for all inventions. Thus, courts should apply the Elsner court's "possession test" to plants and § 101 inventions, effectively removing the territorial boundary for sales that make inventions accessible to the U.S. public.

I. CONGRESSIONAL ACTIONS

This Part will argue that the language and amendments of the governing statutes, the Patent Act and the Plant Patent Act ("PPA"), support a broad reading of Elsner that expands its "possession test" to widgets. Section I.A will first discuss the historical roots of the Patent Act and conclude that the framers of the Patent Act envisioned that the novelty requirement would be based on community knowledge similar to Elsner's possession test. Section I.B will then look to the language of the Plant Patent Act and its amendments to show that the statute's goal was to treat plant inventions the same as utility inventions. It then argues that congressional acts targeted changing the status of the utility inventions rather than that of plant inventions in order to maintain such nondiscrimination. Finally, Section I.C will explore the Plant Variety Protection Act ("PVPA"), a distinct statute that Congress used to set up a separate regime for objects that require disparate treatment. Part I.C argues that since Congress did not set up a similarly distinct statutory regime for asexually reproducing plants, courts should treat these plants the same as utility inventions.

^{28.} See *infra* text accompanying notes 44–56 for an example of how courts have adapted laws in response to changing technology.

^{29. 35} U.S.C. § 101 (2000). For the statutory text, see *infra* note 33.

A. Historical Roots

Even the earliest tests for novelty have their roots in a test of public accessibility, meaning that a novelty determination should change with the varying level of community knowledge. Historic cases show that varying levels of community knowledge correspond with changes in the novelty requirement such that as information becomes more accessible to the community, the conditions for patentability change. In 1615, the King's Bench explained the need for the novelty requirement in *Clothworkers of Ipswitch*:

[I]f a man hath brought in a new invention and a new trade within the kingdom, in peril of his life, and consumption of his estate or stock or if a man hath made a new discovery of any thing, in such cases the King... in recompense of his costs and travail, may grant by charter unto him, that he only shall use such a trade or trafique for a certain time, because at first the people of the kingdom are ignorant, and have not the knowledge or skill to use it... 30

This rationale resulted in the traditional finding that someone could obtain a patent for novel inventions, that is, inventions brought into a state where the people did not otherwise have possession. Later, in 1850, *Gayler v. Wilder* based novelty on community possession, stating:

If the foreign invention had been printed or patented, it was already given to the world and open to the people of this country, as well as of others, upon reasonable inquiry. They would therefore derive no advantage from the invention here. It would confer no benefit upon the community, and the inventor therefore is not considered to be entitled to the reward. But, if the foreign discovery is not patented, nor described in a printed publication, it might be known and used in remote places for ages, and the people of this country be unable to profit by it. The means of obtaining knowledge would not be within their reach; and as far as their interest is concerned, it would be the same thing as if the improvement had never been discovered.³¹

Both Clothworkers of Ipswitch and Gayler v. Wilder propose basing the novelty of an invention on whether the community could access the invention before the time of "reward."

The Patent Act embodies the concern for community access to information espoused in *Clothworkers of Ipswitch* and *Gayler v. Wilder*. The Framers of the Constitution granted Congress the right to protect inventions in Article I, Section 8, Clause 8.³² In 1870, Congress acted pursuant to this

^{30.} The Clothworkers of Ipswitch Case, (1615) 78 Eng. Rep. 147, 148 (K.B.).

^{31.} Gayler v. Wilder, 51 U.S. 477, 497 (1850).

^{32.} U.S. CONST. art. I, § 8, cl. 8 ("To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries").

power, followed the *Gayer v. Wilder* rationale, and inserted a novelty limitation into the Patent Act. ³³

Section 102 of the Patent Act lays out the type and time limitations for actions and publications that may bar a patent from issuing.³⁴ The most frequently employed of these bars is § 102(b), the "on-sale bar."³⁵ Section 102(b) says that the inventor may not obtain a patent on an invention if "the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States."³⁶ Thus, U.S. publications, patents, sales, and uses of the invention will prevent a finding of novelty under § 102(a) and (b), while the only foreign actions that will prevent such a finding are foreign publications and foreign patents.³⁷ Similar to Clothworkers of Ipswitch and Gayler v. Wilder,³⁸ where novelty hinged on the community's access to information, § 102(a) and (b) made a territorial distinction between the actions that would preclude a finding of novelty at a time when access to overseas information was difficult.³⁹

Elsner is a correct application of the historical Clothworkers of Ipswitch and Gayler v. Wilder rationale even though such a broad test would arguably undermine the language of § 102.⁴⁰ Recall that Elsner's references consisted of a short foreign publication generally describing a plant and the foreign sale of that plant.⁴¹ In such a case, if one looked only to the § 102 categories—contrary to the Elsner holding—one would find the invention novel because the foreign publication insufficiently described the plant and the foreign sale is not covered by § 102(b).⁴² But, by instead looking to the flexible approach of Gayler and Clothworkers of Ipswitch, the court can find the invention is not new because the § 102 categories are not strict; they merely represent a tilt of the law in favor of precluding novelty based on a community's ability to access domestic versus foreign inventions. Based on

^{33.} This requirement is expressed in § 101 of the Patent Act, which states that anyone who "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" 35 U.S.C. § 101 (2001) (emphasis added). The procedure for determining novelty involves examining each pertinent publication or activity (known as prior art) reference to determine if it anticipates the claimed invention. CRAIG HOVEY, THE PATENT PROCESS: A GUIDE TO INTELLECTUAL PROPERTY FOR THE INFORMATION AGE 138–39 (2002).

^{34. 35} U.S.C. § 102 (2004).

^{35.} Roger E. Schechter & John R. Thomas, Intellectual Property: The Law of Copyrights, Patents and Trademarks 325 (2003).

^{36. 35} U.S.C. § 102(b) (emphasis added).

^{37. 35} U.S.C. §§ 102(a)–(b).

^{38.} The Clothworkers of Ipswitch Case, (1615) 78 Eng. Rep. 147, 148 (K.B.); Gayler v. Wilder, 51 U.S. 477, 497 (1850).

^{39. 35} U.S.C. § 102(b) is based on an 1870 statute.

^{40.} See The Clothworkers of Ipswitch Case, 78 Eng. Rep. at 148; see also Gayler, 51 U.S. at 497.

^{41.} In re Elsner, 381 F.3d 1125 (Fed. Cir. 2004).

^{42.} Id.

this understanding, just as was done in *Elsner*, a court would preclude a finding of novelty if it found the U.S. public could reasonably access the plant in order to sufficiently make and use the invention. Using such a flexible test, courts should reinterpret the Patent Act in light of technology that makes information more accessible to the public. This is consistent with *Elsner* where the court found the plant in possession of the public and did not allow the inventor to obtain a patent.⁴³ Under the historical rationale and *Elsner*, a court should ask whether the U.S. public is in possession of the invention. The rationale of this test applies regardless of invention type.

The continuous reinterpretation of the "printed publication" clause also bolsters the argument that courts should dynamically interpret the Patent Act novelty requirement based on an assessment of community access.44 The dynamic, technology-based interpretation of the "printed publication" clause of the Patent Act began as early as 1937 when Gulliksen v. Halberg 45 stated that the § 102 printed publication bar could no longer be restricted to its outdated interpretation that only things printed with movable type 46 could be a "printed publication." Instead, Gulliksen found that "the art of printing has undergone many radical changes so that at present day it would be almost impossible to have any printing done with the process in use in 1870" and the printed limitation was merely to ensure "a wider spread of the information."47 Thus, the court determined that methods of printing which provide "distribution and accessibility" of the work to the public, and that provide works that are permanent and legible, 48 are within the § 102 language. 49 Thus, in *Gulliksen*, the court reinterpreted the language of the Patent Act in light of the changing technology scene to comply with the spirit of the statute.

Courts now interpret the printed publication bar based on the purpose of the statute even if this requires loosely interpreting the statutory language. For instance, when analyzing whether microfilm would be a printed publica-

^{43.} *Elsner* specifically used this public possession inquiry: "Because the published applications, combined with the foreign sales of the plants, placed the claimed inventions in the possession of the public, we therefore hold that they are proper § 102(b) anticipatory references that may bar patentability." *Elsner*, 381 F.3d at 1129.

^{44.} See 35 U.S.C. § 102(a) (2000).

^{45. 75} U.S.P.Q. 252 (C.C.P.A. 1937).

^{46.} Id. at 253 ("[The printed publication clause] appeared for the first time in the Act of 1870, and at that time, a printed publication could be produced in only one way, i.e., pieces of individual type were set by hand and after an amount equivalent to a page had been composed, the type were locked in a frame, the face of the type treated with a coating of ink and the paper was then pressed on the type to produce an imprint."); Wesley Kobylak, Annotation, Meaning of Term "Printed Publication" Under 35 U.S.C.A. § 102(a) and (b), Denying Patentability to Invention Described in Printed Publication Before Invention by Application More Than One Year Prior to Date of Patent Application, 70 A.L.R. FED. 796, § 6 (1984).

^{47.} Gulliksen, 75 U.S.P.Q. at 253.

^{48.} Note that the court not only considered that the printing methods had improved since 1870 but also that the library systems had improved in order to make even a single copy of a work more accessible. *Gulliksen*, 75 U.S.P.Q. 252 (C.C.P.A. 1937).

tion bar under § 102, the CCPA took the view that "the 'probability of dissemination' of an item very often has little to do with whether or not it is 'printed' in the sense of that word when it was introduced into the patent statutes in 1836." Further, the Federal Circuit often reads "printed publication" as a unitary concept even though this reading does not give meaning to both of the words "printed" and "publication" from the 1836 Patent Act language. The Federal Circuit has traced the patent statute back to its roots to find that the printed publication bar of § 102 was designed to prevent an inventor from taking material that was already in the possession of the public. In re Wyer, citing this history, stated that when this purpose of § 102 is met, the public dissemination reading is valid even if meaning was not given to both of the words "printed" and "publication."

Congress has not amended the language of the Patent Act in response to *Gulliksen* and many subsequent reinterpretations of the Patent Act.⁵⁵ This silence offers at least some evidence that the case-by-case interpretation of the Patent Act language based on the changing technology scene is a proper method to interpret the Patent Act for all types of inventions.⁵⁶ Just like *Gulliksen*, one can read *Elsner* to reinterpret the Patent Act to respond to technologies that make foreign objects more accessible to U.S. citizens.

Elsner's holding applies only to plants, leaving open a broader interpretation:

The particular question thus before us is whether evidence of the foreign sale of a claimed reproducible plant variety may enable an otherwise non-enabled printed publication disclosing that plant, thereby creating a § 102(b) bar. On that issue of first impression, we hold in the affirmative. 57

Since the holding of *Elsner* states that it decides only whether a § 102(b) bar resulting from foreign sales coupled with publications should apply to plant patents,⁵⁸ the decision leaves open the possibility for movement in favor of harmonization of U.S. law with foreign laws. Currently, foreign laws

In re Wyer, 655 F.2d 221, 226 (C.C.P.A. 1981).

^{51.} See, e.g., In re Klopfenstein, 380 F.3d 1345, 1348 n.2 (Fed. Cir. 2004) ("[O]ur precedent considers the term 'printed publication' to be a unitary concept that may not correspond exactly to what the term 'printed publication' meant when it was introduced into the patent statutes in 1836."); Browning Mfg. Co. v. Bros, Inc., 126 U.S.P.Q. (BNA) 499 (D. Minn. 1960) ("The word 'printed,' as enacted in the statute, modifies 'publication'; they must be read together.").

^{52.} Wyer, 655 F.2d at 226 (citing *In re* Bayer, 568 F.2d 1357, 1359 (C.C.P.A. 1978)).

^{53.} Id. at 221.

^{54.} *Id.* at 226 ("[I]nterpretation of the words 'printed' and 'publication' to mean 'probability of dissemination' and 'public accessibility,' respectively, now seems to render their use in the phrase 'printed publication' somewhat redundant.").

^{55.} See 35 U.S.C. § 102(a) (2005).

^{56.} Hibbs v. Winn, 124 S. Ct. 2276, 2292 (2004) (Stevens, J., concurring) ("It merits emphasis, however, that prolonged congressional silence in response to a settled interpretation of a federal statute provides powerful support for maintaining the status quo.").

^{57.} In re Elsner, 381 F.3d 1125, 1128 (Fed. Cir. 2004).

^{58.} Id.

look to sales outside their borders to determine novelty;⁵⁹ harmonization would mean that the United States looks at sales in foreign countries when deciding whether the U.S. public is in possession of the invention.

Moreover, since *Elsner*'s test is not unique to plants, courts can easily extend its test to non-plant inventions. Courts could apply the "possession test" to inventions patentable under § 101 just as it could be applied to plants because it uses a technology-neutral inquiry of:

[W]hether one skilled in the art to which the invention pertains could take the description of the invention in the printed publication and combine it with his own knowledge of the particular art and from this combination be put in possession of the invention on which a patent is sought. 60

Elsner further says the analysis should not turn on whether the prior art specifically meets § 102, but only whether it enables one to access the invention—an inquiry that would not require the judge to know the technology in question. Working through this analysis for plants, the court says:

When a publication identifies the plant that is invented or discovered and a foreign sale occurs that puts one of ordinary skill in the art in possession of the plant itself, which, based on the level of ordinary skill in the art, permits asexual reproduction without undue experimentation 62

One can easily see, however, that for any invention the "combination of facts and events [might] so directly convey the essential knowledge of the invention that the sale combines with the publication to erect a statutory bar." Therefore, even when the court applied the test to this case to determine that the public did have access, *Elsner*'s analysis never depended on anything unique to plants. 64

Since Elsner's test is not unique to plants and the holding does not speak to whether it should apply to widgets, Elsner's test can extend to non-plant inventions. Applying Elsner's "possession test" to widgets would confirm historical rationales that the Patent Act should be reinterpreted to account for technology changes that allow communities to better access information. The next Section will discuss why, in addition to following historical rationale, such an expansion would support the express goals of the Plant Patent Act.

^{59.} Id.

^{60.} Id. (quoting In re LeGrice, 301 F.2d 929, 939 (C.C.P.A. 1962)).

^{61.} *Id.* at 1129–30 ("However, the precise focus of the analysis is not whether the foreign sales are themselves § 102(b) prior art, but whether the publication has placed the claimed invention in the possession of the public before the critical date.").

^{62.} Id. at 1129.

^{63.} Id.

^{64.} *Id.* ("Because the public may have had access to the claimed inventions through the foreign sales of the plants, from which the claimed plants may be reproduced, it may fairly be said that the PBR applications are adequately enabled.").

B. The Plant Patent Act and Subsequent Amendments

Congress enacted the Townsend-Purnell Plant Patent Act⁶⁵ to give plant inventors the same rights as inventors of § 101 widgets. The PPA protected asexually reproducing plants⁶⁶ by conferring the rights of inventors to exclude others from asexually reproducing protected plants and from using, offering for sale, selling, or importing any plants so reproduced.⁶⁷

The Plant Patent Act was a practical solution to the underinvestment in plant breeding because it gave plant research all of the opportunities available to researchers in other fields.⁶⁸ It sought to promote private ventures in plant development that would enrich the public with disease- and drought-resistant varieties of plants.⁶⁹ In an attempt to meet these goals Congress stated that the Plant Patent Act:

[I]s intended not only to correct such discrimination, but in doing so it is hoped the genius of young agriculturalists of America will be enlisted in a profitable work of invention and discovery of new plants that will revolutionize agriculture as inventions in steam, electricity, and chemistry have revolutionized those fields and advanced our civilization.⁷⁰

This language suggests that the PPA would use the already organized utility patent system to promote private research and development into new plant varieties.⁷¹

66. 35 U.S.C. § 161 (2004):

Whoever invents or discovers and asexually reproduces any distinct and new variety of plant, including cultivated sports, mutants, hybrids, and newly found seedlings, other than a tuber propagated plant or a plant found in an uncultivated state, may obtain a patent therefore, subject to the conditions and requirements of this title.

The provisions of this title relating to patents for inventions shall apply to patents for plants, except as otherwise provided.

This is distinct from the Plant Variety Protection Act (PVPA), 7 U.S.C. § 2402(a) (2000), where the Department of Agriculture issues certificates to new sexually produced plant varieties as discussed *infra* Section I.C.

- 67. 35 U.S.C. § 163 (2000); see Yoder Bros., Inc. v. Cal.-Fla. Plant Corp., 537 F.2d 1347, 1383 (5th Cir. 1976).
- 68. OFFICE OF TECH. ASSESSMENT, U.S. CONGRESS, NEW DEVELOPMENTS IN BIOTECHNOLOGY: PATENTING LIFE-SPECIAL REPORT, OAT-BA-370, at 71 (1989).
 - 69. Id.
- 70. In re LeGrice, 301 F.2d 929, 935 (C.C.P.A. 1962) (quoting H.R. REP. No. 71-1129 (1930)). The Plant Patent Act (35 U.S.C. § 161) was passed as House Bill 11372 of the Second Session of the 71st Congress. Prior to 1930, there existed a common belief that plants, even those bred by man, were products of nature and therefore not subject matter for patent protection. Wooster, supra note 65 at 2, citing Diamond v. Chakrabarty, 447 U.S. 303, 311 (1980). With the passage of the Plant Patent Act of 1930, Congress attempted to dispel those widely held beliefs to show that the work of the plant breeder "in aid of nature" should be able to obtain protection. Id. at 312 (quoting S. REP. No. 71-315, at 6-8 (1930); H.R. REP. No. 71-1129, at 7-9 (1930)).
 - 71. Office of Tech. Assessment, supra note 68, at 71; Diamond, 447 U.S. at 311–13.

^{65.} The PPA was codified in Title 35 §§ 161–164, was passed on May 13, 1930, and signed by President Hoover on May 23, 1930. Ann K. Wooster, Annotation, Construction and Application of Plant Patent Act (35 U.S.C.S. §§ 161 et seq.), 135 A.L.R. FED. 273 (1996).

But since its enactment, plant breeders have had an uneasy relationship with the utility patent statute's enablement and novelty requirements. Section I.B.1 and Section I.B.2 will describe the problems plant inventors face for meeting the enablement and novelty requirements under the traditional Patent Act. They will describe the congressional amendments that remedy the enablement problem but do not touch the novelty issues. Finally, Section I.B.3 will conclude that the necessary implication gleaned from the congressional amendments is that plants should have the same novelty requirements as widgets.

1. The Enablement Problem

Congress has amended the Patent Act to solve enablement problems. Plant inventors have a problem with the enablement requirement because a specification for a plant application cannot be written that meets the disclosure requirements of § 112.73 Enablement is important because it represents the inventor's side of the social contract in exchange for patent rights. 74 To be sufficiently enabling under § 112, an application must disclose to a person of ordinary skill in the art how to make and use the patented invention.⁷⁵ But, for plants, genes are too complex to write on paper, so there is no way to document and fully describe a plant invention within the four corners of a page. Even if an inventor knew the entire genetic lineage of her plant, the genes may combine in a new way on a subsequent sexual reproduction and. similar to the differences between siblings, two different plants with the same lineage would thereby result. Practically, the only way to enable a subsequent inventor to make the invention is to "clone" the plant through asexual reproduction such as a cutting or a grafting.⁷⁶ In other words, a subsequent inventor would need to take a cutting of the plant and grow that

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Section 112 thus requires that the patent specification describe the invention in sufficient detail to: (1) enable a subsequent inventor to make the invention, (2) provide the best mode of making and using the invention, and (3) provide a written description that shows the invention was in possession of the inventor at the time of filing the patent.

^{72.} See Peter J. Goss, Comment, Guiding the Hand That Feeds: Toward Socially Optimal Appropriability in Agricultural Biotechnology Innovation, 84 Cal. L. Rev. 1395 (1996).

^{73. 35} U.S.C § 112 (2004):

^{74.} MARTIN J. ADELMAN ET AL., CASES AND MATERIALS ON PATENT LAW 33-45 (1984 & Supp. 2001) (citing Rebecca S. Eisenberg, Patents and the Progress of Science: Exclusive Rights and Experimental Use, 56 U. Chi. L. R. 1017 (1989)); see also Suzanne Scotchmer & Jerry Green, Novelty and Disclosure in Patent Law, 21 RAND J. Econ. 131 (1990).

^{75. 35} U.S.C. § 112 (2004).

^{76.} COOPERATIVE EXTENSION, COLLEGE OF AGRICULTURE, UNIV. OF ARIZONA, ARIZONA MASTER GARDENER MANUAL 17–23 (1998), available at http://ag.arizona.edu/pubs/garden/mg/propagation/asexual.html.

cutting into a mature plant in order to fully make and use the patented invention.⁷⁷ Therefore, a specification for a plant application can *never* meet the enablement requirement of § 112.

Congress amended the PPA to correct for problems of enablement. The requirements of a utility patent were amended to add the express provision that botanical descriptions are enabling if they are "as complete as reasonably possible" and in accordance with traditional botanical descriptions. But, Congress made no accommodations for plants that struggled with the novelty requirement. These novelty problems are exactly those at issue in Elsner. These novelty problems are exactly those at issue in Elsner.

2. The Novelty Problem

The novelty problem for plants means that even the best plant disclosure will not be sufficiently enabling to preclude novelty for a subsequent invention; Congress has failed to correct this problem. Looking to the patent application process best explains this difficulty. To determine novelty, the patent examiner compares a piece of prior art that fits within the time and type limitations to the disclosures in the patent application. He determines whether the prior art is enabling, meaning it sufficiently describes the invention as to preclude a finding of novelty. Generally, a prior publication is not enabling unless it contains and exhibits:

a substantial representation of the patented improvement, in such full, clear, and exact terms as to enable any person skilled in the art or science to which it appertains, to make, construct, and practice the invention to the same practical extent as they would be enabled to do if the information was derived from a prior patent. 82

Similar to the enablement problem, plant references cannot meet this novelty model because one cannot sufficiently disclose all of the genetic limitations on paper in order to preclude novelty for a subsequent invention. As was the issue in *Elsner*, this problem is most prevalent with inventions that are used and described abroad because the territorial distinctions on § 102 restrict the patent office to only looking at foreign printed material. This novelty disclosure problem is a mirror image of the aforementioned enablement disclosure problem.

^{77.} Id

^{78. 35} U.S.C. § 162 (2004); S. Rep. No. 71-315 (1930).

^{79.} In re Elsner, 381 F.3d 1125 (Fed. Cir. 2004).

^{80.} Hovey, supra note 33, at 138-39.

^{81.} Id.

^{82.} Seymour v. Osborne, 78 U.S. 516, 555 (1870). Note that while a reference must be enabled to anticipate a patent and this analysis of this enablement is similar to that required in § 112, § 112 only codifies the enablement requirements for patent applications, not the enablement requirements for anticipatory references.

^{83.} See supra Section I.A; supra notes 34-37.

Even though the novelty and enablement ideas go hand in hand, when adding language to the PPA to correct the enablement problem at the disclosure stage, ⁸⁴ Congress failed to correct at the novelty stage. ⁸⁵ Moreover, a bill proposed in Congress after *Elsner* that would alter the prior art standards for plants has failed to get much attention. ⁸⁶

3. The Necessary Implication

It is unlikely that the lack of disclosure amendment at the novelty stage was congressional oversight because the ideas of enablement and novelty are so interwoven. From a policy standpoint, the disclosure requirement ensures that each patent application is enabling for future inventors, ⁸⁷ the effect of this requirement is to put the public on notice of the invention such that it is no longer novel. For instance, one can imagine how under a system with a less strict § 112 enablement requirement, one could patent a widget and subsequent "inventors" could also patent the same widget because the first patent, by it terms, did not fully disclose the invention as to bar novelty for the subsequent "inventors." Thus, courts should interpret congressional silence for novelty when these ideas are so closely related to mean that Congress did not haphazardly miss this change, but instead intended for the enablement-novelty requirement to stay the same for plants and utility patents.

Further, Congress has amended the Plant Patent Act many times without addressing the enablement problem of § 102.88 Even after *Elsner* the most recent proposal to amend § 162 has attracted little attention.89 Therefore, since Congress makes an exception in § 162 for treating plants differently

- 84. See supra text accompanying notes 73-78.
- 85. Compare 35 U.S.C. § 162 (amending 35 U.S.C. § 112), with 35 U.S.C. § 102.
- 86. Plant Breeder's Equity Act of 2005, H.R. 121, 109th Cong. (2005). Representative Darrell E. Issa introduced this bill on Jan. 4, 2005. As of September 18, 2005, this bill had attracted no major congressional action and no co-sponsors. *See* Thomas: Legislative Information on the Internet, http://thomas.loc.gov/cgi-bin/bdquery/z?d109:h.r.00121: (last visited Sep. 18, 2005).
- 87. Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 736 (2002) ("[P]atent rights are given in exchange for disclosing the invention to the public."); J.E.M. AG Supply, Inc. v. Pioneer Hi-Bred Int'l, 534 U.S. 124, 142 (2001) ("The disclosure required by the Patent Act is the quid pro quo of the right to exclude.") (citations omitted); Mark A. Lemley & Ragesh K. Tangri, Ending Patent Law's Willfulness Game, 18 BERKELEY TECH. L.J. 1085, 1101 (2003); see, e.g., Donald S. Chisum, Anticipation, Enablement, Obviousness: An Eternal Golden Braid, 15 AIPLA Q.J. 57 (1987) (disclosure is "a primary purpose" of the enablement requirement).
- 88. As originally enacted, the Plant Patent Act of 1930 was a series of amendments to the general utility patent law. Most prominently, section 4886 of the Revised Statutes was amended to read that "[a]ny person who has invented or discovered any new and useful art, machine . . . or who has invented or discovered and asexually reproduced any distinct and new variety of plant . . . may . . . obtain a patent therefore." Rev. Stat. § 4886 (19988), amended by Act of May 23, 1930, ch. 312, § 1,46 Stat. 376 (current version split at 35 U.S.C. §§ 101, 161). In 1954 the Plant Patent Act was amended to preclude patent protection for plants in an uncultivated state again without mentioning the special plant novelty issues. Act of Sept. 3, 1954, Pub. L. No. 83-775, 68 Stat. 1190.
 - 89. See supra note 86.

with regard to the written description requirement of § 112⁹⁰ but makes no mention of the comparable § 102, the same law should be used for utility patents as those for plants.⁹¹ This is especially true in light of the affirmations that § 161 "engrafts the Plant Patent Act onto the basic patent law."⁹² Further evidence that Congress intended § 102 to apply indiscriminately to plants as well as widgets is found by looking to the Plant Variety Protection Act.

C. The Plant Variety Protection Act

Congress says explicitly when to apply disparate treatment to different inventions; since Congress did not explicitly categorize asexually reproducing plants, then no disparate treatment should apply. An example of a statutorily created disparate treatment regime is the 1970 Plant Variety Protection Act ("PVPA"). With the PVPA, Congress distinguished sexually reproducing plants from asexually reproducing ones and placed each in different categories. The PVPA then set forth specific rules for sexually reproducing plants and did not allow them to be patentable under the PPA. This disparate treatment was necessary because the only inventions patentable under Plant Patent Act were ones where the inventor met the social contract for full patent protection—sexually reproducing plants could not meet it. The producing plants could not meet it.

The creation of the discriminatory scheme for sexually reproducing plants illustrates that when Congress intends discrimination against certain inventions, it speaks explicitly to the type of invention and to the different

^{90.} In re LeGrice, 301 F.2d 929 (C.C.P.A. 1962) (noting that § 162 allows a plant patent owner to have an insufficient written description and still fulfill the enablement requirement).

^{91.} This idea has also caught the courts and is developed further in *LeGrice*, 301 F.2d 929 (C.C.P.A. 1962).

^{92.} Le Grice, 301 F.2d at 933. In 1952, Congress created a separate chapter of law, chapter 162, to address plant patent law but affirmed that plants be treated under the utility patent statute. Wooster, supra note 65 at § 2. Although the 1952 amendment placed Plant Patents in a separate chapter from utility patents, § 161 maintained that "provisions of this title relating to patent for inventions shall apply to patents for plants, except as otherwise provided." Wooster, supra note 65 at 2; 35 U.S.C. § 161 (2004) (emphasis added).

^{93.} The Plant Variety Protection Act of 1970 42, 84 Stat. 1542, *amended by* 1994 Amendments, Pub. L. No. 103-349, 3, 108 Stat. 3138, 7 U.S.C. 2402(a) (2002).

^{94.} Elisa Rives, Comment, Mother Nature and the Courts: Are Sexually Reproducing Plants and their Progeny Patentable under the Utility Patent Act of 1952?, 32 CUMB. L. REV. 187, 222–23 (2001–02).

^{95.} The Plant Variety Protection Act of 1970 42, 84 Stat. 1542, *amended by* 1994 Amendments, Pub. L. No. 103-349, 3, 108 Stat. 3138, 7 U.S.C. 2402(a) (2002).

^{96.} Sexually reproducing plants are unable to meet the enablement requirements under the general Patent Act. Rives, *supra* note 94, at 222–23. Unlike microorganisms or asexually reproducing plants, sexually reproducing plants cannot meet the enablement requirement even with a deposit of the organism because sexually reproduced plants cannot be reproduced from the deposit beyond one generation. *Id*.

methods of treatment.⁹⁷ As such, the PVPA is a scheme for treating these plant inventions differently because they provide different public benefits.⁹⁸ Since Congress did not set up any similar intellectual property scheme for asexually reproducing plants but instead engrafted it onto the existing patent law,⁹⁹ there should be no discrimination between these plants and other patentable inventions.

II. JUDICIAL ACTIONS

This Part argues that judicial interpretation of the Patent Act favors a "possession test" interpretation over an interpretation that limits Elsner to plants. Section II.A will show that prior interpretations of the Patent Act's "printed publication" clause sought to avoid different standards for different technology. Interpretations of the "printed publication" clause instead adopted a flexible test similar to Elsner's "possession test." Section II.A discusses how courts have anticipated patents by combining pieces of prior art; it shows that Elsner's combination of a publication and sale to preclude novelty is not a groundbreaking approach. Section II.B will show that courts have interpreted the goals of the Plant Patent Act in a way that rejects any readings that require different standards for plants. Section II.C will then argue that the parallels between plants and microorganisms necessarily imply that creating a standard unique to plants would be illogical. Finally, Section II.C argues that earlier judicial decisions have favored modifying a general rule to fit the new inventions over applying differing standards to the new inventions.

A. Prior Interpretations of the Patent Act Are Flexible

The courts have interpreted other sections of the Patent Act to apply a "possession test" similar to that of *Elsner*. Section II.A.1 will show that the meaning of "printed publication" has changed to one that considers the degree of accessibility to and dissemination of an invention instead of delineating certain categories of technologies that create printed publica-

^{97.} Under the PVPA, plant breeders are issued a certificate of protection for novel and distinct varieties that breed "true-to-type" through sexual reproduction—a requirement that is more restrictive than the PPA's novelty requirement. Jeremy P. Oczek, Note, In the Aftermath of the "Terminator" Technology Controversy: Intellectual Property Protections for Genetically Engineered Seeds and the Right to Save and Replant Seed, 41 B.C. L. Rev. 627, 637-38 (2000). Also, certificates under PVPA are not administered under the United States Patent and Trademark Office, but are issued under the Department of Agriculture. The Plant Variety Protection Act of 1970 42, 84 Stat. 1542, amended by 1994 Amendments, Pub. L. No. 103-349, 3, 108 Stat. 3138, 7 U.S.C. 2321 (2000).

^{98.} For instance, Oczek notes that "[t]he original rationale for restricting patent protection to asexually reproduced plants under the PPA was the belief that new plant varieties could not be reproduced reliably by seed." Oczek, *supra* note 97, at 537. The PVPA further has two significant limitations: the 'research exemption' and the 'crop exemption.'" *Id.* at 638.

^{99. 35} U.S.C. § 161 (2000) ("The provisions of [Title 35] relating to patents for inventions shall apply to patents for plants, except as otherwise provided."); *In re* LeGrice, 301 F.2d 929, 933 (C.C.P.A. 1962).

tions from those that do not.¹⁰⁰ Section II.A.2 will discuss how the preemptive categories of § 102 are not always interpreted as independent, and instead courts have combined the categories, making the category combination in *Elsner* unoriginal in this sense.

1. Printed Publication Interpretation

Courts no longer interpret the language of the Patent Act according to the framers' narrow definition. For instance, the meaning of "printed publication" under §§ 102(a) and (b)¹⁰¹ has branched out to include acts that the 1952 Congress never could have contemplated: soft copy documents, for example.¹⁰² Similar to *Elsner*, this expansion has taken place because the courts have needed to adapt the "printed publication" bar to the changing methods of printing or copying. In fact, parallel to the *Elsner* test, the meaning of printed publication in § 102(b) is now based on a test of public accessibility instead of adhering to the historic language from 1623.¹⁰³

Although courts originally found their description of "printed publication" broad, those definitions would be considered very narrow when compared to today's interpretation of the statutory language. For instance, courts originally restricted the meaning of "printed publication" in § 102 to the products of outdated movable type processes. In 1971, Phillips Electronic & Pharmaceutical Industries Corp. v. Thermal & Electronics Industries, Inc. 105 applied this same language to invalidate a patent for electrical tubes in light of a microfilmed copy of an anticipatory patent application. The court stated that a restriction of the interpretation of the "printed" requirement of § 102 solely to the products of a traditional printing press would "ignore the realities of the scientific and technological period in which we live and the underlying rationale of Section 102." In direct conflict with the age-old movable-type definition, the court ruled that

^{100.} This argument about printed publications is separate from the argument that the Congress intended reinterpretation of the Patent Act because the judicial reinterpretation of "printed publication" has not spurred congressional action. See supra Section I.A.

^{101. 35} U.S.C. §§ 102 (a)–(b) (2000) deny a patent to any or part of any invention described in a printed publication before the invention or more than one year prior to the date of the patent application.

^{102.} For instance, although it did not invalidate the patent, the Northern District of Illinois recently considered the "Newspace Electronic Newspaper" as prior art for Amazon's U.S. Patent No. 5,754,939 (filed Oct. 31, 1995). See Pinpoint Inc. v. Amazon.com, Inc., No. 03 C 4954, 2004 WL 2033059, at *6 (N.D. Ill. 2004).

^{103. &}quot;The phrase 'described in a printed publication' dates at least to the Patent Act of 1623, Statute 21 Jac. I, Ch 3, § 6 which used the phrase 'described in some public work.' "Kobylak, supra note 46, at § 2, citing Evans v. Eaton, 16 U.S. 454 (1818). The term "public work" was dropped in favor of "printed publication" in the Patent Act of 1870; this wording has been retained through the present Patent Act of 1952, 35 U.S.C. § 102. Kobylak, supra note 46, at § 2.

^{104.} See Gulliksen v. Halburg, 75 U.S.P.Q. 252 (C.C.P.A. 1937).

^{105. 450} F.2d 1164 (3d Cir. 1971).

^{106.} Phillips Elec., 450 F.2d 1 164 (3d Cir. 1971).

^{107.} Id. at 1170.

the term "printed" can include documents duplicated by modern methods and techniques as long as the documents are rendered available to the public. 108

One can imagine these cases taking a different route where only "printed publications" created by a specific technology, for instance a printing press, would be barring under § 102. This route would be comparable to a reading of *Elsner* that varies novelty for certain technologies—such as, in this case, plants. But instead, similar to the "public accessibility" reading of *Elsner*, the printed publication decisions dealt with changing technology by finding that the publication bar relates broadly to public accessibility and degree of dissemination regardless of the technology in question.

2. Single Prior Art Reference Rule

Not only have the courts failed to adhere to the framers' narrow definitions of the § 102 language, but they have also failed to adhere to the "single prior art reference" rule for prior art. Generally, finding an invention invalid for lack of novelty under § 102 requires that all elements of the invention be disclosed in some other single prior art reference or device. But, the Federal Circuit has allowed the use of extrinsic evidence to enable a prior art reference and therefore has combined two references to anticipate a patent. For example, in *In re Samour*¹¹⁰ the court used two references to hold the patent invalid. The court held a patent invalid for lack of novelty in light of an original reference which disclosed the name and structural formula for a chemical and a second reference that showed a method of preparing the compound. Many cases then followed the *In re Samour* approach of combining references to enable a primary disclosure.

^{108.} Phillips Elec., 450 F.2d 1164 (3d Cir. 1971).

^{109.} For instance, if you claim A, B, and C in your patent, then the only document or widget that can bar your novelty would be one that contains all of the elements: A, B and C. Kenneth R. Walton, The Use of Evidence Extrinsic to a Single Source to Support Anticipation, 20 RUTGERS COMPUTER & TECH. L.J. 339 (1994); see Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 771 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

In re Samour, 571 F.2d 559 (C.C.P.A. 1978).

^{111.} The mere publication of the chemical name and formula did not show that the compound was in the possession of the public before the § 102(b) one year bar. Thus, to enable the compound, the court used a second reference that showed a method of preparing the compound for a chemist of ordinary skill. Walton, *supra* note 109 at 361-62; *see Samour*, 571 F.2d 559.

^{112.} Walton, supra note 109; see Samour, 571 F.2d 559.

^{113.} In re Sasse followed this approach and invalidated a patent, in facts similar to Samour, by using a secondary reference that taught how to make the chemical compound to enable the primary reference that gave only the name and elements of the compound. In re Sasse, 629 F.2d 675 (C.C.P.A. 1980); Walton, supra note 109 at 362-63. In Donohue the printed publication contained an abstract disclosing the chemical compound but the text did not disclose any preparative details, properties, or other test data. The court nonetheless found that the printed publication taken together with references that taught general preparatory methods, taught a person of ordinary skill in the art to make and use the invention and thus put the public in possession of the invention. Donohue, 632 F.2d 123 (C.C.P.A. 1980); Walton, supra note 109, at 363-64.

Reference combination is also not limited to domestic sources. *Abbott Labs v. Geneva Pharma, Inc.*¹¹⁴ used a reference combination to meet the § 102(b) *Pfaff v. Wells Electronics*¹¹⁵ test. The court determined that the invention met the *Pfaff* test and was ready for patenting by considering whether foreign manufacturers had reduced the subject matter to practice—material not even within the § 102(b) domestic bar.¹¹⁶

Elsner's possession test follows this lineage of cases by stating that a novelty analysis should not turn on whether the prior art specifically meets the § 102 categories, but only on whether it enables one to access the invention. The court stated that "the precise focus of the analysis is not whether the foreign sales are themselves § 102(b) prior art, but whether the publication has placed the claimed invention in the possession of the public before the critical date." Elsner specifically relies upon In re Donohue and Samour to support its expanded test even though neither case involved plants. One can conclude from these cases that, analogous to a reading of Elsner as a possession test, following the single reference rule is not necessary so long as a combination puts the public in possession of the invention and one reference contains all of the elements.

B. Nondiscrimination Is a Paramount Concern: In re LeGrice

The Court of Appeals for the Federal Circuit has previously read the Plant Patent Act to mean that plant nondiscrimination is more important than maintaining the current state of the Patent Act. Similar to Elsner, In re LeGrice interpreted the Patent Act and its unique application to plants. The issue on appeal was whether publications that disclosed as much about plants as possible but did not describe the entire invention would preempt a patent. In deciding that they did not preempt, the Court of Appeals found many persuasive reasons in the legislative history to maintain that non-discrimination for plants was important.

^{114.} The court rejected a drug patent to Abbott Labs because it was the subject matter of at least three commercial sales in the United States before the critical date. The court stated that "it is also clear that the invention was 'ready for patenting' because at least two foreign manufacturers had already reduced it to practice." Abbott Labs. v. Geneva Pharm., Inc., 182 F.3d 1315, 1318 (Fed. Cir. 1999).

^{115.} *Pfaff v. Wells Elec., Inc.*, 525 U.S. 55 (1998) (creating a two-part test for the on-sale bar that the invention be (1) subject to a commercial offer for sale before the critical date and (2) ready for patenting before the critical date).

^{116. 35} U.S.C. § 102(b) ("in this country").

^{117.} In re Elsner, 381 F.3d 1125, 1129-30 (Fed. Cir. 2004).

^{118.} Elsner, 381 F.3d at 1129, cites Donohue, 766 F.2d 559 (C.C.P.A. 1978), and Samour, 571 F.2d 559 (C.C.P.A. 1978), to show that combining references is not unique. For a discussion of Donohue reference combination, see supra note 113.

^{119.} In re LeGrice, 301 F.2d 929 (C.C.P.A. 1962).

^{120.} Id.

^{121.} See the discussion of enablement problems, supra Section I.B.1.

First, as *LeGrice* found, the legislative history of the Plant Patent Act was very explicit that plant nondiscrimination is more important than maintaining the current state of the Patent Act. As the legislative history revealed, the purpose of the PPA was to

afford agriculture, so far as practicable, the same opportunity to participate in the benefits of the patent system as has been given industry and thus assist in placing agriculture on a basis of economic equality with industry. The bill will remove the existing discrimination between plant developers and industrial inventors¹²²

Even beyond providing equal opportunity, Congress enacted the PPA to motivate young horticulturalists. ¹²³ Thus, Congress stated that the PPA

will afford a sound basis for investing capital in plant breeding and consequently stimulate plant development through private funds [Because] [n]o one has advanced a just and logical reason why reward for service to the public should be extended to the inventor of a mechanical toy and denied to the genius whose patience, foresight, and effort have given a valuable new variety of fruit or other plant to mankind. 124

Then, speaking to the language of the PPA, *LeGrice* concluded that "Congress did not provide any exception thereto, so it should be presumed that Congress intended that it should be applied to patents for plants as it had been previously applied to patents for other inventions." ¹²⁵

Applying *Elsner* narrowly to plants alone undermines the *LeGrice* requirement that prior art for plants patents meet the same requirements as any other printed publications. The *Elsner* court found that a foreign sale coupled with a foreign disclosure puts the public in possession of the invention for plants even though it would not preclude novelty for widget inventions. The *LeGrice* court held that "plant descriptions in printed publications of new plant varieties, before they may be used as statutory bars under 35 U.S.C. § 102(b), must meet the same standards which must be met before a description in a printed publication becomes a bar in non-plant patent cases." In support of this holding, *LeGrice* went back to the idea of

^{122.} LeGrice, 301 F.2d at 932 ("35 U.S.C. § 161 is based on an amendment, effective May 23, 1930, to R.S. 4886, (Sec. 31 of former title 35 U.S.C.), which originated in House Bill 11372 of the Second Session of the 71st Congress."). The Committee on Patents filed a report with the language quoted supra, text accompanying notes 122 and 124. Identical language was filed in a report by the Senate Committee of Patents. LeGrice, 301 F.2d at 932.

^{123.} LeGrice, 301 F.2d at 932.

^{124.} *Id*.

^{125.} Id. at 933.

^{126.} The test in *LeGrice* merely "require[d] that the facts of each case be carefully considered to determine whether the description in the printed publication in question [did] *in fact* place the invention in the possession of the public." *Id.* at 939.

^{127.} In re Elsner, 381 F.3d 1125 (Fed. Cir. 2004).

^{128.} LeGrice, 301 F.2d at 944.

public possession as the basis for novelty.¹²⁹ Thus, as *LeGrice* noted, a public possession-based test would have the same requirements for plants as widgets. A narrow reading of *Elsner* that only applies it to plants would thus undermine the controlling *LeGrice*.

C. Plants Are Not Especially Unique: In re Argoudelis

Elsner cannot easily be restricted to plants because the disclosure difficulties of plants are also present in microorganisms, thus fracturing any distinction that one can hope to draw between plants and other patentable inventions. In re Argoudelis involved a patent for a microorganism that was rejected for § 112 enablement problems despite being deposited in a public deposit. The court was asked how microorganism inventors could meet the § 112 enablement requirement. Two interesting things can be gleaned from the Argoudelis decision. First, Argoudelis shows the similarities between asexual plants and microorganisms make the treatment of plants as unique illogical. Second, the Argoudelis court faced the choice between creating an exception to the Patent Act or adapting the statutory requirements; they chose the latter. This is the same decision the Elsner court was faced with, though the Elsner court chose to create a novelty exception unique to plants.

First, Argoudelis shows that a problem with the application of the Elsner test strictly to plants is that the enablement problem of plants patentable under § 161 extends to things that can be patented under § 101. Noting the similarities between plants and other organisms, Elsner related its reasoning to Argoudelis. The court in Argoudelis rejected the inventor's argument that because there are similar enablement problems for plants and microorganisms, microorganisms should benefit from the relaxed enablement requirement that plants have under the Plant Patent Act. While the court rejected using § 161 for enablement, they did note that similar problems for

^{129.} *Id.* at 939 ("Each case must be decided on its own particular facts in determining whether, in fact, the description in the printed publication is adequate to put the public in possession of the invention and thus bar patentability of a plant under the condition stated in section 102(b).").

^{130.} In re Argoudelis, 434 F.2d 1390 (C.C.P.A. 1970).

^{131.} Id.

^{132.} In re Elsner, 381 F.3d 1125 (Fed. Cir. 2004).

^{133.} *Id.* at 1131 ("It is important to note that it was not mere possession of the microorganism that was important in *Argoudelis*, but such possession that enabled one of ordinary skill to make the claimed invention. Similarly here. Just as the public had access to the microorganism in *Argoudelis*, so too might the public have had access through the foreign sales to the plant varieties that Elsner and Zary claim.").

^{134.} As discussed *supra* Section I.B.1, an enablement problem arises when an inventor cannot fully describe the inventions to the point that others could read the patent application and then make and use the invention. This problem arises for plants as well as organisms because scientists are currently unable to reconstruct such beings from a description, even a DNA sequence that is written on a page.

^{135.} Argoudelis, 434 F.2d at 1392.

plants and microorganisms exist, ¹³⁶ and they found that the deposit requirement ¹³⁷ was sufficient for the microorganism enablement. ¹³⁸ Since asexual reproduction occurs and no other meaningful differences exist between the plants of *Elsner* and the microorganisms of *Argoudelsis*, applying the *Elsner* decision only to plants would draw an arbitrary line. ¹³⁹ Therefore, a constrained plant-limited reading of the *Elsner* decision illogically distinguishes between plants and organisms with similar traits, while the broader "possession test" reading would apply it to all inventions based on the facts of each case.

Second, the judiciary had formerly applied the Patent Act to nontraditional inventions by adapting the statutory requirements of the general rules of the Patent Act to meet those inventions, not by creating exceptions for certain inventions under the Patent Act. ¹⁴⁰ The microorganism in Argoudelsis did not meet the statutory requirements because the public could not access the deposit until after the patent issued. 141 The organizations that filed amici urged the court to modify the Patent Act and create a second exception for microorganism-type inventions that would match that of asexual plants. 142 The court stated that its "task here is not to decide what the general rule should be or to create exceptions to the provisions of § 112, but rather to interpret and apply § 112 to the facts of the case before [it]."143 The court created deposit requirements for microorganisms that cannot be described and shown on the application and cannot otherwise meet the enablement standard. 144 Similarly, if the Elsner court wanted to avoid disparate treatment, especially since Congress did not call for it in the statute, then its § 102 modification and test of possession must be applied to all utility objects.

III. INTERNATIONAL LAW

This Part argues that, consistent with *Elsner*, U.S. courts should strive to harmonize U.S. patent standards with international intellectual property law. Section III.A will discuss the importance of international cooperation to-

^{136.} *Id.* at 1392 ("[A] unique aspect of using microorganisms as starting materials is that a sufficient description of how to obtain the microorganism from nature cannot be given.").

^{137.} The deposit requirement says that inventors must deposit some of their novel material into a public depository available to all inventors if they are otherwise unable meet the enablement requirements. Note that the PPA exempts plants from this requirement.

^{138.} Argoudelis, 434 F.2d 1390 (C.C.P.A. 1970).

^{139.} In re Elsner, 381 F.3d 1125 (Fed. Cir. 2004).

^{140.} Argoudelis, 434 F.2d at 1392.

^{141.} Id. at 1392.

^{142.} *Id.* ("It has been pointed out in the Amicus Curiae brief that the same predicament exists in the case of asexually reproduced plants. In regard to plants, a general dispensation from the requirements of § 112 has been accorded by 35 U.S.C. 162. It is urged that the same should be true here.")

^{143.} Id.

^{144.} Argoudelis, 434 F.2d 1390 (C.C.P.A. 1970).

ward the harmonization of intellectual property law and will argue that when looking for guidance on where intellectual property law is moving, courts should look to international bodies as well as Congress. Section III.B will then discuss the studies of the World Intellectual Property Organization ("WIPO") and why their research should persuade U.S. courts to harmonize treatment of international sales.

A. Harmonization Occurs in Response to Information Accessibility

Not only is harmonization of laws a common theme in intellectual property, but often what motivates such harmonization is the increased access to foreign goods and information—similar to increased access of foreign-sold goods at issue in *Elsner*. In patent law, the United States remains the only country using the outdated local novelty ¹⁴⁵ standard. ¹⁴⁶ But, the U.S. international representatives have committed to harmonizing its novelty requirements. Following the Patent Law Treaty negotiations in 2000, the U.S. representative for the WIPO Standing Committee on the Law of Patents agreed to move forward with harmonization efforts by signing an agreement to define prior art as having no geographical limitations. ¹⁴⁷ Because this recommendation comes as a response to increased access to foreign information and products, a court considering novelty should consider the WIPO representative's goals of harmonization when formulating the modern novelty standard.

Similar to how the novelty standard should change as people are increasingly able to access products sold abroad, the change for well-known trademarks was sparked as people began to move around the globe and access, and thus be confused by, well-known marks. Trademark law moved toward harmonization when transportation technology allowed people to

^{145.} Local novelty describes a scheme where distinctions are made between domestic and international prior art. STANDING COMM. ON THE LAW OF PATENTS, WORLD INTEL. PROP. ORG., INFORMATION PROVIDED BY MEMBERS OF THE STANDING COMMITTEE ON THE LAW OF PATENTS (SCP) CONCERNING THE DEFINITION OF PRIOR ART, SCP/6/INF/2, para. 6, (2001) available at http://www.wipo.int/scp/en/documents/session_6/pdf/scp6_inf2.pdf (finding summary of responses found only one country that still has a territorial distinction for prior art); see Kate H. Murashige, Harmonization of Patent Laws, 15 Hous. J. INT'L L. 591, 610 (1994).

^{146.} Paris Convention for the Protection of Industrial Property, Mar. 20, 1883, 21 U.S.T. 1583, 828 U.N.T.S. 305, amended July 14, 1967 [hereinafter "Paris Convention"], 21 U.S.T. 1583, 828 U.N.T.S. 302 [hereinafter Paris Convention]. Speaking specifically to § 102, originally Australia and the United States both had a form of local novelty. But Australia has now moved to a system without such territorial distinctions—leaving the U.S. laws as the only ones still using of this regime. Symposium, Cavalieri Hilton; 6th Open Forum; "Roundtable," 10 U. Balt. INTELL. Prop. L.J. 151, 162 (2002) (statement of Vivienne Thom).

^{147.} STANDING COMM. ON THE LAW OF PATENTS, WORLD INTEL. PROP. ORG., DRAFT SUBSTANTIVE PATENT LAW TREATY, (2004), art. 8, para. 1 ("The prior art with respect to a claimed invention shall consist of all information which has been made available to the public anywhere in the world in any form [,as prescribed in the Regulations,] before the priority date of the claimed invention."), available at http://www.wipo.int/scp/en/documents/session_10/pdf/scp10_4.pdf; Margo A. Bagley, Patently Unconstitutional: The Geographical Limitation on Prior Art in a Small World, 87 MINN. L. REV. 679 (2003).

move further and faster, and thus made the world a figuratively smaller place. Before 1883, there was a strict rule of territoriality, meaning that if a trademark was not registered in an individual nation then it was not protected in that nation. But as traveling between borders became more common, treaties began to harmonize domestic laws in order to protect marks globally. The Paris Convention maintained the same principal of territoriality, but also gave rights to "well known marks"—even over rights of domestic filers. In the mid-1990s, the Trade-Related Aspects of Intellectual Property Rights ("TRIPs") treaty further strengthened this commitment to the "well-known marks" protection. The Drafters added the "well-known marks" clause because as people were increasingly able to travel across borders, they would be confused if well-known marks were not uniform. The strengthening of protection for well-known marks shows how trademark law has changed in response to the public's ability to access international information.

Similarly, just as the accessibility of works sparked harmonization in copyright law, ¹⁵⁴ when a court recognizes that increased access to goods threatens the novelty standard, it should consider the harmonization efforts of the U.S. representatives that seek to maintain a constant level of protection. The system of copyright was harmonized in order to respond to a changed technological reality. An international system for copyright law began in 1886 with the Berne Convention for the Protection of Literary and Artistic Works. ¹⁵⁵ Although the Berne Convention set standards for interna-

^{148.} SCHECHTER & THOMAS, *supra* note 35. In 1883, the Paris Convention governed international IP rights. Paris Convention, *supra* note 146.

^{149.} Paris Convention, supra note 146, art. 6(3).

^{150.} Paris Convention, *supra* note 146, art. 6bis ("The countries of the Union undertake, ex officio if their legislation so permits, or at the request of an interested party, to refuse or to cancel the registration, and to prohibit the use, of a trademark which constitutes a reproduction, an imitation, or a translation, liable to create confusion, of a mark considered by the competent authority of the country of registration or use to be well known in that country as being already the mark of a person entitled to the benefits of this Convention and used for identical or similar goods.").

^{151.} General Agreement on Tariffs and Trade—Multilateral Trade Negotiations (The Uruguay Round): Agreement on Trade-Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, 33 L.L.M. 81 (1994) [hereinafter TRIPs Agreement].

^{152.} See TRIPs Agreement, supra note 156, art. 16, available at http://www.wto.org/english/docs_e/legal_e/27-trips.pdf.

^{153.} Paris Convention, supra note 146, art. 6bis; see TRIPs Agreement supra note 151.

^{154.} See Steven Chase, Napster Clone May Set Up Shop Offshore, TORONTO GLOBE & MAIL, Mar. 5, 2001, at A1 (showing the risk of copyright violations when different countries have different copyright standards and information is easily accessed).

^{155.} See Berne Convention for the Protection of Literary and Artistic Works, July 24, 1971 1161 U.N.T.S. 3. [hereinafter Berne Convention]. When the Berne Convention was developed, several European countries had significant differences in their laws. Graeme B. Dinwoodie, The Development and Incorporation of International Norms in the Formation of Copyright Law, 62 Ohio St. L.J. 733, 737 (2001) (citing Sam Ricketson, The Berne Convention for the Protection of Literary and Artistic Works: 1886–1986, at 8–17 (1987)). The Berne Convention required nations to treat foreign applicants the same as their own nationals and set a series of minimum standards of protection. See Berne Convention, supra. Members agree to a nation's addition to

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tional law, it was relatively lax about allowing member states to retain different copyright regimes. Moreover, despite the relaxed standards, the United States did not harmonize its standards with many of the international copyright law standards until computers posed threats to copyright law. Suddenly, "the ease with which works [could] be digitally reproduced, and digitally delivered to any location in the world, [meant] that international protection [was] required by producers merely to sustain their domestic market." When the threat of access to digitized works became realistic, the United States used the trade mechanisms of the GATT Uruguay Round to harmonize both the copyright rules 159 and enforcement mechanisms.

In light of the harmonization efforts that take place when global information becomes more accessible, a court should look to international sources as a basis for informing decisions in areas where Congress is silent. Not only is the novelty standard threatened by the increased access to foreign sales, but the U.S. WIPO representative has spoken about the intent of the United States to harmonize U.S. with foreign laws. Thus, a broad interpretation of *Elsner* is consistent with international trends in intellectual property and follows the recommendations of the U.S. WIPO representative.

B. WIPO Is Uniquely Situated to Make Good Decisions

In a recent proposal to WIPO from the United States, Japan, and the European Patent Office, the benefits of prior art were discussed and the report stated that not only is harmonization on novelty issues on the horizon but it offers "consistent examination standards throughout the world, improve[d] patent quality, and reduce[d] the duplication of work performed by

Berne once domestic practices are sufficiently harmonized; the Convention also provides a floor of minimum compliance for the member states. See id.

- 156. While copyright law harmonization did occur under the Berne Convention, it is important to note that member countries still have substantial freedom to tailor the minimum standards to meet their culture. Dinwoodie, *supra* note 155, at 740–41. This means that as long as each of the members is offered similar treatment, countries are free to offer those rights in ways sensitive to their individual cultures. *Id*.
- 157. This is not to say the United States did not make *any* changes in order to accede to the Berne Convention. The 1976 Copyright Act, for instance, eliminated the copyright term based on date of publication, moving the United States toward harmonization. William Belanger, *U.S. Compliance with the Berne Convention*, 3 GEO. MASON INDEP. L. REV. 373 (1995). The United States then adopted the Berne Convention Implementation Act ("BCIA") to harmonize U.S. formalities such as registration and deposit requirements. Berne Convention Implementation Act of 1988, Pub. L. No. 100-568, 102 Stat. 2853. The BCIA was an attempt to meet only the minimum standards for Berne.
 - 158. Dinwoodie, *supra* note 155, at 745.
- 159. The tightening of the standards occurred in many stages. See, e.g., Visual Artists Rights Act of 1990, Pub. L. No. 101-650, 104 Stat. 5089, 5128-33 (codified as amended in scattered sections of 17 U.S.C.); Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified in scattered sections of 17 U.S.C.); TRIPs Agreement, supra note 151; Dinwoodie, supra note 155, at 744-45 (providing an account of the changes to international copyright law).
- 160. International copyright standards were placed within the purview of the WTO Dispute settlement system for enforcement. TRIPs Agreement, *supra* note 151, annex 2, *available at* http://www.wto.org/english/docs_e/legal_e/28-dsu.pdf; Dinwoodie, *supra* note 155, at 746.

patent offices."¹⁶¹ Courts should consider this statement because, while WIPO's recommendations are not binding on the United States, its unique position as a research organization means first that its representatives are in a good position to determine when U.S. patent law is ripe for change, and second that its efforts are predisposed to well-considered advice.¹⁶²

WIPO meets its goal of promotion of global intellectual property ¹⁶³ by using expert committees to research various intellectual property issues and inform debate. ¹⁶⁴ Additionally, since WIPO administers patent, trademark and copyright treaties, ¹⁶⁵ it has the ability to look across these related fields and find best-practices. Speaking specifically to patent prior art, WIPO and its U.S. representative are not alone in their prior art recommendations—many U.S. commentators have found the geographic limitation on § 102(b) unwise. ¹⁶⁶

WIPO also has incentives to continue carrying out high-quality studies. While the new World Trade Organization ("WTO") TRIPs agreement incorporated much of the existing WIPO regime, changes in the WIPO system did not automatically apply to WTO members. ¹⁶⁷ Nonetheless, the WIPO interpretations of incorporated norms work to sway the WTO's decisions. ¹⁶⁸ To be influential, WIPO will have incentives to carry out thorough studies and research on intellectual property topics to reach well-informed recommendations. Because of these efforts, even when WIPO's policies are not expressly accepted, they still influence changes in local law. ¹⁶⁹ Therefore, WIPO has been a very active organization in influencing U.S. domestic policy through the courts ¹⁷⁰ and has incentives to maintain this status through well-considered and mutually beneficial research findings.

While one might argue that a U.S. court would not want to change domestic laws because this may result in the loss of a bargaining chip in

^{161.} STANDING COMM. ON THE LAW OF PATENTS, WORLD. INT'L PROPERTY ORG., PROPOSAL FROM THE UNITED STATES OF AMERICA, JAPAN AND THE EUROPEAN PATENT OFFICE REGARDING THE SUBSTANTIVE PATENT LAW TREATY (SPLT), SCP/10/9, at 2 (2004), available at http://www.wipo.int/meetings/en/doc_details.jsp?doc_id=23766.

^{162.} See WIPO's current research efforts at World Intellectual Property Organization, www.wipo.int (last visited Jul. 27, 2005).

^{163.} Laurence R. Helfer, Regime Shifting: The TRIPs Agreement and New Dynamics of International Intellectual Property Lawmaking, 29 YALE J. INT'L L. 1, 12 (2004) (citing Convention Establishing the World Intellectual Property Organization, July 14, 1967, 21 U.S.T. 1749, 848 U.N.T.S. (as amended on Sept. 28, 1979), art. 3i).

^{164.} Helfer, supra note 163, at 12.

^{165.} World Intellectual Property Organization, www.wipo.int (last visited Jul. 27, 2005).

^{166.} See, e.g., Bagley, supra note 147; 2 DONALD S. CHISUM, CHISUM ON PATENTS § 6.02[5], at 6-54 (1996); see Daniel H. Bliss, Comment, Bridge Over Troubled Water: Extending the Public Use Bar to Foreign Countries, 1987 Det. C.L. Rev. 65, 74-78 (1987).

^{167.} David W. Leebron, The Boundaries of the WTO: Linkages, 96 A.J.I.L. 5, 19 (2002).

^{168.} Leebron, supra note 167, at 19.

^{169.} See Graeme B. Dinwoodie, The Role of National Courts: The Architecture of The International Intellectual Property System, 77 CHI-KENT L. REV. 993, 996 (2002).

^{170.} See Dinwoodie, supra note 169, at 1005 nn.58-60 (noting the recent conclusion of treaties in copyright, patent and trademark law at WIPO).

international negotiations, 171 this statement does not apply well to WIPO recommendations. Such bargaining-chip style negotiations may not be appropriate for refuting WIPO-based recommendations because, as mentioned. WIPO is more than a forum for haggling outcomes—it investigates best practices to recommend them for legislation. ¹⁷² Moreover, when laws need to adapt to a changed technology scene, instead of trying to maintain theoretical bargaining advantages, courts should rely on the recommendations of U.S. WIPO representatives because they have taken into account the best interests of the United States in making their recommendation. The acting Director of the U.S. Patent and Trademark Office has stated many of these domestic benefits: "Harmonization promises to bring substantial benefits, including uniform patent examination, reduced patent office workloads, and enhanced patent quality. The sooner we can agree on a basic framework, the sooner we can begin providing these benefits to patent applicants, patent offices and the public alike." Because WIPO acts as more than a bargaining forum, applying a bargaining-chip mindset to WIPO decisions means courts will miss the benefits of tailoring domestic laws to changing technology.

Because WIPO's recommendations are well-researched, WIPO works to benefit member countries, and the expansion of the patent system has been largely a function of judicial adaptation, ¹⁷⁴ a court can safely look to WIPO recommendations in areas of congressional silence when trying to adapt the Patent Act to changing technology and public accessibility. The *Elsner* court has already proposed a test that takes an affirmative step toward harmonization that the international community believes could usefully apply to all objects. Subsequent courts should follow the WIPO recommendations and

^{171.} See Harold C. Wegner, Elsner: Judicial Drive to Eliminate the Territoriality Limitations of "Prior Art," 23 BIOTECH. L. REP. 747 (2004).

^{172.} For instance, WIPO leads investigations to find out how IP rights affect traditional knowledge. Intergov'tal Comm. On Intel. Prop. and Genetic Resources, World Int'l Property Org., Intellectual Needs and Expectations of Traditional Knowledge Holders (1998–99) (2001), http://www.wipo.int/tk/en/tk/ffm/report/final/index.html (last visited Jan. 16, 2005); see also Overview of WIPO's Activities & Services, http://www.wipo.int/activities/en (last visited Oct. 7, 2005) ("WIPO carries out a wide variety of activities and services in its work. These include establishing international standards for intellectual property laws and practices and providing registration services that allow patents, trademarks, and designs to be protected in many countries. WIPO also extends various technical and legal assistance to developing countries, facilitates resolution of intellectual property disputes, and explores new issues arising in the global intellectual property arena. In all these activities, the latest information technologies are employed to promote efficiency and facilitate the electronic exchanges of information on intellectual property.").

^{173.} STATEMENT OF JON DUDAS, UNDER SEC. OF COMMERCE FOR INTEL. PROP. AND ACTING DIR. OF THE U.S. PATENT AND TRADEMARK OFFICE, available at www.uspto.gov (last visited January 6, 2005).

^{174.} Convention Establishing the World Intellectual Property Organization art. 3, July 14, 1967, 21 U.S.T. 1749, 1154 U.N.T.S. 437 (as amended Dec. 21, 1979) ("(i) to promote the protection of intellectual property throughout the world through cooperation among States and, where appropriate, in collaboration among the Unions"); see also Vision and Strategic Direction of WIPO, www.wipo.org/about-wipo/en/dgo/pub487.htm (last visited Sept. 24, 2005).

interpret *Elsner* to encompass "widgets" as well as asexually reproducing plants.

CONCLUSION

An examination of the congressional and judicial sources shows that courts should broadly apply Elsner's possession test to § 101 inventions and thereby change the § 102 bar for inventions patentable under § 101 to the same standard that it applied for plants. This Note first examined the congressional sources to show a history of a flexible test-one that does not prejudice any objects under the Patent Act. It then showed that past interpretations of the Patent Act adapted general standards for new circumstances instead of creating exceptions for certain inventions to suggest that plants should not be excluded from the general provisions of the Patent Act without express congressional language. It used In re Argoudelis to show that since the problems of *In re Elsner* are not unique to plants, reading *Elsner* to create a plant-specific exception would be to apply it arbitrarily. Finally, this Note argued that for intellectual property there are many reasons to regard the recommendations of international bodies-—even if at the risk of losing a U.S. bargaining-chip. Thus, interpreting the Patent Act according to current domestic and international trends leads to a broad reading of Elsner that would apply its "possession test" to all utility inventions and would further harmonize U.S. with foreign law.