

Stetson Journal of Advocacy and the Law

The first online law review designed to be read online



2 Stetson J. Advoc. & L. 179 (2015)

Protecting Innocent Infringers of Naturally Reproducing Patented Organisms

William Brees

Intellectual property attorney
Maxey Law Offices, P.L.L.C.
St. Petersburg
Florida

Protecting Innocent Infringers of Naturally Reproducing Patented Organisms

William Brees¹

2 Stetson J. Advoc. & L. 179 (2015)

I. Introduction

179. In *Diamond v. Chakrabarty*, the U.S. Supreme Court decided that genetically modified organisms are patentable subject matter under 35 U.S.C. 101.² The Court later confirmed, in *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred International, Inc.*, that genetically modified, sexually reproduced plants are also patentable subject matter.³ Since then, genetically modified organisms have grown in acceptance, while genetically modified plants have become the standard, rather than an exception, for some types of crops in the United States.⁴

180. Genetically modified organisms, as referred to in this article, include any living organism which has had its genetic makeup altered. The most common form of genetic modification is known as transgenic or recombinant DNA technology and involves incorporating genes from one organism into a different organism in order to add a desired trait to the host organism.⁵ A very common form of a genetically modified organism is a plant, such as corn or soybean, that has been modified to be resistant to an herbicide. The largest supplier of this type of genetically modified plant is Monsanto, which brands these products as “Roundup Ready” because the plants are not affected by Monsanto’s popular glyphosate herbicide Roundup. These herbicide resistant plants provide a benefit to farmers because

1 William Brees is an intellectual property attorney, with an LL.M. in intellectual property, currently working at [Maxey Law Offices, P.L.L.C.](#) in St. Petersburg, Florida.

2 *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980); 35 U.S. Code §{ } 101.

3 *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred International, Inc.*, 534 U.S. 124, 145 (2001).

4 U.S. Department of Agriculture Economic Research Service, [Adoption of Genetically Engineered Crops in the United States](#).

5 Genetically modified organism (GMO), [Encyclopaedia Britannica](#).

weeds and other plants can be cleared from a field by spraying the herbicide while not damaging the crops in any way.⁶

181. Genetically modified crops are generally sold under a license which restricts the use of the patented gene to the first generation of seeds. The farmers who purchase these crops are not permitted to save the seed and replant the crop the next season because the patent rights extend to subsequent generations of the plants.⁷ This is in stark contrast to the standard operating procedure of farmers in the past, which included saving seed from each crop to plant the following season.⁸

182. Farmers who purchased genetically modified seed under a license are not the only ones who must worry about future generations of genetically modified seed, however. Plants are living organisms which produce pollen and seeds and are able to reproduce without any human action. Because pollen may be spread great distances, plants as far as several miles away from the original plant may express the genes of the original plant, including those which are patented. For this reason, a farmer may have his plants cross-pollinated with genes covered by a patent, and thereby become an unknowing and innocent infringer of the patent.⁹

183. As genetically modified crops have grown in acceptance, the policing efforts of the patent holders for the genes containing the modified traits have expanded. The patent holders routinely enter farms and test crops, often without the farmers knowledge.¹⁰ Because of the ability of sexually reproduced plants to spread genetically modified traits without any actions on the part of humans, many farmers who do not wish to utilize genetically modified plants are nevertheless fearful of the potential threat of litigation for patent infringement.¹¹

184. This fear is evidenced by the fact that on March 29, 2011, an assortment of seed businesses, family farmers, and agricultural organizations representing over 270,000 members filed suit against Monsanto Company. The suit alleged that plants grown from genetically modified seeds produced by or under licensing from Monsanto were very likely to contaminate plaintiffs crops. It sought declaratory judgment that plaintiffs would not be liable for patent infringement if that did in fact occur. Plaintiffs alleged patent invalidity, patent exhaustion, unenforceability due to misuse, equitable estoppel, and trespass. Plaintiffs further

6 Alex Platt, *Center for Food Safety v. Vilsack: Roundup Ready Regulations*, 37 *Ecology L.Q.* 773, 774 (2010).

7 Amanda L. Kool, *Halting Pig in the Parlor Patents: Nuisance Law as a Tool to Redress Crop Contamination*, 50 *Jurimetrics J.* 453, 466 (2010).

8 Marcella Downing-Howk, *The Horns of a Dilemma: The Application of the Doctrine of Patent Exhaustion and Licensing of Patented Seed*, 14 *San Joaquin Agri. L. Rev.* 39, 42 (2004).

9 David Costa, *In Pari Delicto and Crop Gene Patents: An Equitable Defense for Innocently Infringing Farmers*, 3 *Ky. J. Equine Agri. & Nat. Resources L.* 179 (2010–11).

10 Amanda L. Kool, *Halting Pig in the Parlor Patents: Nuisance Law as a Tool to Redress Crop Contamination*, 50 *Jurimetrics J.* 453, 484 (2010). See also E. Freeman, *Settling the Matter — Part 5*.

11 David Costa, *In Pari Delicto and Crop Gene Patents: An Equitable Defense for Innocently Infringing Farmers*, 3 *Ky. J. Equine Agri. & Nat. Resources L.* 179, 180 (2010–11).

sought to invoke equity as a protection against liability, claiming Monsanto would suffer no economic injury from the contamination of plaintiffs crops.¹²

185. A 2010 United States Supreme court case, *Monsanto Co. v. Geertson Seed Farms*, paved the way for the litigation by declaring that farmers who risked economic loss due to the threatened contamination of their crops had standing to bring suit against the deregulation of types of genetically modified plants.¹³ The Court of Appeals for the Federal Circuit upheld a ruling by the United States District Court for the Southern District of New York that there was no justiciable case or controversy and dismissed for lack of jurisdiction due to Monsanto's binding assurances that it will not take legal action against growers whose crops might inadvertently contain traces of Monsanto biotech genes (because, for example, some transgenic seed or pollen blew onto the grower's land).¹⁴ While these statements were satisfactory for the Federal Circuit, they do not convey the same feeling of satisfaction to farmers who have the real possibility of receiving a threat of legal action based on unintentional infringement of patented genetically modified organisms, as evidenced by the Organic Seed Growers & Trade Association's further pursuit of the case to the Supreme Court, which denied certiorari in the case.¹⁵

186. The first part of this article will discuss the existing defenses that innocent infringers may use to defend themselves against liability for patent infringement and the reasons why these defenses are inadequate. The following section will provide a proposed modification to the patent statutes to provide innocent infringers with immunity from legal remedies for patent infringement under certain circumstances. The reasoning behind the proposed modification will also be discussed.

II. Existing Defenses

A. Patent Invalidity

187. The plaintiffs in *Organic Seed Growers and Trade Assn. v. Monsanto Co.* alleged that Monsanto's patents are invalid for failure to meet the usefulness requirement. One argument raised for invalidity was based on a District of Massachusetts case from 1817 in which Justice Story wrote that an invention must not be "injurious to the well-being, good policy, or sound morals of society," and that "a new invention to poison people ... is not a patentable invention."¹⁶ The plaintiffs supported this argument by studies that state increased use of pesticides — both enabled by the use of the genetically modified plants

¹² [Organic Farmers And Seed Sellers Sue Monsanto To Protect Themselves From Patents On Genetically Modified Seed: Preemptive Action Seeks Ruling That Would Prohibit Monsanto From Suing Organic Farmers and Seed Growers If Contaminated By Roundup Ready Seed.](#)

¹³ *Monsanto Co. v. Geertson Seed Farms*, 130 S.Ct. 2743 (2010).

¹⁴ *Organic Seed Growers & Trade Assn v. Monsanto Co.*, 718 F.3d 1350, 1352 (Fed. Cir. 2013).

¹⁵ [No. 13-303: Petition for a Writ of Certiorari.](#)

¹⁶ *Lowell v. Lewis*, 15 F. Cas. 1018 (C.C.D. Mass. 1817). Complaint, *Organic Seed Growers and Trade Assn. v. Monsanto Co.*, ¶ 4 (quoting U.S. Const, Art. I, § 8, cl. 8 and 35 U.S.C. § 101).

and required by the development of pesticide resistant weeds through the increased use of the pesticide — cause health problems for humans and animals.¹⁷

188. The plaintiffs' view, however, does not represent the current reasoning used by the courts for utility. In *In re Fisher*, the Federal Circuit recognized the Supreme Court's abrogation of Justice Story's requirement for utility. The question of utility now is very much concerned with "practical" or "real world" utility; the question of morals does not enter into the analysis.¹⁸ Monsanto has proven that the patented invention does have a real effect of increasing the plants' resistance to a specific herbicide.¹⁹ With this being the case, even if plaintiffs' studies were taken as a true representation of the dangers of genetically modified plants, the patents would not be affected because the tests do nothing to disprove the utility shown for the invention.

B. Patent Exhaustion

189. Patent exhaustion is a doctrine which provides that "the initial authorized sale of a patented item terminates all patent rights to that item."²⁰ In cases involving genetically modified plants, the question that is the deciding factor is often whether or not the sale was authorized. The patent holders sell the seeds under a license agreement which forbids retention and replanting of seeds and also forbids sale of the seeds for replanting. The Court of Appeals for the Federal Circuit and the United States Supreme Court have recently addressed the effect of each of these license agreements on patent exhaustion.²¹

190. *Monsanto Co. v. Scruggs* involved soybeans which are genetically modified to be resistant to glyphosate, which is a broad spectrum herbicide sold by Monsanto under the name Roundup.²² This type of seed is desirable to many farmers because the farmers are able to spray the entire field with glyphosate, which kills all plants and weeds that do not contain the glyphosate resistant gene.²³ This process makes preparation of fields much quicker and easier.²⁴

17 Complaint, *Organic Seed Growers and Trade Assn. v. Monsanto Co.*, ¶¶ 113–20.

18 *In re Fisher*, 421 F.3d 1365, 1371 (Fed. Cir. 2005); *Brenner v. Manson*, 383 U.S. 519, 534–35 (1966).

19 David Costa, *In Pari Delicto and Crop Gene Patents: An Equitable Defense for Innocently Infringing Farmers*, 3 *Ky. J. Equine Agri. & Nat. Resources L.* 179, 184 (2010–11).

20 *Tessera, Inc. v. International Trade Comn.*, 646 F.3d 1357, 1369 (Fed. Cir. 2011) (quoting *Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 625 (2008)).

21 *Monsanto Co. v. Scruggs*, 459 F.3d 1328, 1333 (Fed. Cir. 2006); *Bowman v. Monsanto Co.*, 133 U.S. 1761, 1768 (2013); *Monsanto Co. v. Bowman*, 657 F.3d 1341 (Fed. Cir. 2011).

22 *Monsanto Co. v. Scruggs*, 459 F.3d 1328, 1333 (Fed. Cir. 2006).

23 Jason Savich, *Monsanto v. Scruggs: The Negative Impact of Patent Exhaustion on Self-Replicating Technology*, 22 *Berkeley Tech. L.J.* 115, 117–18 (2007).

24 David Costa, *In Pari Delicto and Crop Gene Patents: An Equitable Defense for Innocently Infringing Farmers*, 3 *Ky. J. Equine Agri. & Nat. Resources L.* 179, 185 (2010–11).

191. Scruggs purchased commodity soybeans from a grain distributor which included second generation soybeans from crops which were originally distributed to farmers according to a license which restricted distribution so as to ensure that it was not an unrestricted sale. The license included the requirement that the soybeans not be sold to another for use as seeds. The court held that patent exhaustion was not applicable as a defense under these circumstances. The court gave two reasons for the failure of patent exhaustion as a defense:

1. The use of the seeds was conditioned on obtaining a license from Monsanto, and therefore was not an unrestricted sale; and
2. The second generation seeds were never sold by Monsanto, and therefore patent exhaustion could not apply.²⁵

192. *Bowman v. Monsanto* also involved soybeans which were genetically modified to be glyphosate resistant. In this case, the farmer purchased seeds as commodity soybeans from a distributor, but determined later that they contained the patented gene. The farmer retained and replanted the subsequent generations of those seeds. The Supreme Court held that each generation of seeds is a new infringing article, and therefore, even if Monsanto's rights were exhausted in the first generation, the planting and growing of new seeds creates a new infringing article.²⁶

193. By the reasoning of the court in the two Monsanto cases, an innocent infringer would also be unable to raise a defense of patent exhaustion. The courts have been unanimous in their recognition of Monsanto's licenses as being sufficient to remove the transaction for the seeds from the realm of a sale. The courts have also consistently held that the licenses provide only those rights to the purchaser, which are consistent with the license.²⁷

C. Notice

194. 35 U.S.C. § 287(a) requires that a patent owner provide notice to possible infringers in order to be able to collect damages for any infringement of the patent.²⁸ One law review article argues that the notice requirement must be given a broad interpretation with respect to genetically modified plants.²⁹ The purpose of the broad interpretation is to balance the rights of the patent owner and the farmers who might be accused of patent infringement.

195. The current patent statute provides that, in the event of a failure to mark as described in the statute, no recovery for damages will be available to the patentee for any act of infringement, unless there is proof that the infringer was notified and thereafter continued to infringe. In accordance with 35 U.S.C. § 287(a), in a case involving direct notification of the

²⁵ *Monsanto Co. v. Scruggs*, 459 F.3d 1328, 1335–36 (Fed. Cir. 2006).

²⁶ *Bowman v. Monsanto Co.*, 133 U.S. 1761, 1764–67 (2013).

²⁷ *Monsanto Co. v. Scruggs*, 459 F.3d 1328 (Fed. Cir. 2006).

²⁸ 35 U.S. Code §{} 287.

²⁹ David Catechi, Two Wrongs Don't Make a Patent Right, 56 *Hastings L.J.* 769 (2005).

patent, damages may only be recovered after notice is provided. The purposes of the statute includes notifying the public that articles are patented so they can avoid infringement, thereby removing from the public the duty to investigate whether an article is patented, and instead placing the duty to notify onto the patent holder.³⁰

196. In the case of genetically modified plants, the patent holder must rely on the notice provision. The Federal Circuit has held that the notice must be “of the infringement” and that the notice must be in the form of an “affirmative communication with a specific charge of infringement by a specific accused product or device.”³¹ While there is no set requirement for the language of the notice, it must at least provide notification of the existence of the patent, the alleged infringing conduct, and “in some circumstances, reasonable suggestions for compliance with the patent.”³²

197. Said law review article proposes that, instead of the more lax requirement of notice that has been required in the past, the notice requirement should be read broadly so that it requires the patent owner to provide sufficient information to allow the alleged infringer to cease the actions alleged to be infringing. Most genetically modified plants cannot be visibly differentiated from the non-genetically modified version of the same plant variety. Under the narrow reading of the notice requirement, after notice is given, an innocently infringing farmer would have an affirmative duty to perform expensive testing to determine the existence and the extent of intrusion of genetically modified plants, pay a royalty on the entire crop, or destroy the entire crop.³³

198. The notice requirement would have no influence on the farmers who purchase seed directly from the manufacturer because they receive notice on the seed packaging and with the licensing agreement accompanying the seeds. The broad interpretation of notice would however encourage patent holders to incorporate a means of easily discerning the patented product from the naturally occurring, most likely through a visible marker. The patent holders may also be encouraged to develop means of reducing the possibility of the patented genes invading the fields of neighboring farms through pollen drift.

199. This seems like a very useful solution to the problem. However, there are still several problems that remain with a broadened interpretation of notice. The largest problem is that the notice requirement only protects innocent farmers from damages, but does not affect the ability for patent holders to obtain injunctions. Farmers would still be forced to determine which plants infringe the patent, pay a royalty on the entire crop, or destroy the entire crop.

30 David Catechi, Two Wrongs Don't Make a Patent Right, *56 Hastings L.J.* 769, 788–89 (2005).

31 *Amsted Indus., Inc. v. Buckeye Steel Castings Co.*, 24 F.3d 178, 186–87 (Fed. Cir. 1994).

32 David Catechi, Two Wrongs Don't Make a Patent Right, *56 Hastings L.J.* 769, 790 (2005).

33 David Catechi, Two Wrongs Don't Make a Patent Right, *56 Hastings L.J.* 769, 790–92 (2005).

D. In Pari Delicto

200. In pari delicto is a common law equitable doctrine which prohibits a plaintiff from recovering damages if they arise out of conduct for which the plaintiff is responsible.³⁴ One law review article suggests that this doctrine should be available to farmers faced with charges of infringement because the infringement would be unavoidable due to the nature of plant reproduction.³⁵ The article argues that the equitable defenses of laches and estoppel are available to defendants in a patent infringement suit, and therefore there is precedent for the application of common law defenses to patent infringement cases. The empowerment of the courts by 35 U.S.C. § 283 to grant injunctions in accordance with the principles of equity is noted as further evidence of the “specific legislative intent embodied in the U.S. patent law for courts to apply common law principles of equity to do so at their discretion.”³⁶

201. The article cites *SmithKline Beecham v. Apotex* as an example of a situation in which it would be fitting to apply the in pari delicto defense. In the *SmithKline* case, *SmithKline* held patent rights for, and produced, a hemihydrate crystalline form of the compound paroxetine. *Apotex* produced an anhydrate crystalline form of the compound paroxetine, which the court found not to infringe the patent rights held by *SmithKline*. However, the environment in which *Apotex* produced the anhydrate crystalline form of paroxetine was contaminated with *SmithKline*’s hemihydrates crystalline form, and it was from that point forward practically impossible to produce the anhydrate crystalline form without also producing *SmithKline*’s hemihydrates crystalline form.³⁷

202. Judge Posner stated:

Although I cannot find any statutory language or case law that bears on the question, I believe that as a matter of fundamental principle it must be a defense to a charge of patent infringement that the patentee caused the infringement.³⁸

203. Judge Posner then stated that it is similar to the well known defense to a suit for breach of contract that the plaintiff prevented the defendant from performing his contractual duty. Unfortunately for *Apotex*, the Federal Circuit did not agree with Judge Posner in this regard, finding instead that even containing trace amounts of the infringing compound was infringement. The court in fact praised the intentions of Judge Posner in presenting the equitable defense, but stated that because the case could be decided without resort to anything beyond the patent law, the court would not address the defense.³⁹

34 Black’s Law Dictionary 361 (3rd pocket ed. 2006).

35 David Costa, *In Pari Delicto and Crop Gene Patents: An Equitable Defense for Innocently Infringing Farmers*, 3 *Ky. J. Equine Agri. & Nat. Resources L.* 179 (2010–11).

36 David Costa, *In Pari Delicto and Crop Gene Patents: An Equitable Defense for Innocently Infringing Farmers*, 3 *Ky. J. Equine Agri. & Nat. Resources L.* 179, 192 (2010–11); 35 U.S.C. §{} 283.

37 David Costa, *In Pari Delicto and Crop Gene Patents: An Equitable Defense for Innocently Infringing Farmers*, 3 *Ky. J. Equine Agri. & Nat. Resources L.* 179, 193 (2010–11); *SmithKline Beecham Corp. v. Apotex Corp.*, 247 F. Supp. 2d 1011, 1015–17, 1019–21, 1043, 1052 (N.D. Ill. 2003).

38 *SmithKline Beecham Corp. v. Apotex Corp.*, 247 F. Supp. 2d 1011, 1043 (N.D. Ill. 2003).

39 *SmithKline Beecham Corp. v. Apotex Corp.*, 403 F.3d 1331, 1341–42 (Fed. Cir. 2005).

204. Because courts have both the powers of a courts of law and courts of equity, the courts have the ability to look beyond the mere fact that there has been infringement and look at the totality of the circumstances to find substantial justice.⁴⁰ While this would be a change of position for the Federal Circuit, the rest of this section will discuss four underlying wrongs that could be persuasive reasons for the Federal Circuit to acknowledge, as other courts have, “the fundamental injustice of holding an unintentional infringer liable when the unintentional party pursuing the infringement made the act unavoidable”:⁴¹

1. Inducement of infringement;
2. Trespass;
3. Nuisance; and
4. Negligence.

Inducement

205. 35 U.S.C. § 271(b) states that “whoever actively induces infringement of a patent shall be liable as an infringer.”⁴² This language requires that:

1. There is an act of direct infringement by someone; and
2. The inducer have the requisite intent in causing or encouraging that act of infringement.⁴³

206. For the sake of the present analysis, the first element, direct infringement, can be assumed because the direct infringement would be alleged by the patent owners as the basis for litigation.

207. The second element, the intent requirement, comes from the “actively inducing” language in the statute. As a threshold requirement, the alleged inducer must have known of or have been willfully blind to the existence of the patent.⁴⁴ In the case of an innocent infringer applying inducement as a defense, the plaintiff would hold the patent rights and would therefore necessarily know of the existence of the patent.

208. Beyond knowledge or willful blindness of the existence of the patent, an inducer either must have actually known, or based on the circumstances should have known, that his actions would induce actual infringements.⁴⁵

40 *Wabash Ry. Co. v. American Refrigerator Transit Co.*, 7 F.2d 335, 346 (8th Cir. 1925).

41 David Costa, In Pari Delicto and Crop Gene Patents: An Equitable Defense for Innocently Infringing Farmers, 3 *Ky. J. Equine Agri. & Nat. Resources L.* 179, 195 (2010–11).

42 35 U.S. Code § 271.

43 Michael Edward McCabe Jr. & Lindsay J. Kile, Recent Developments in Patent Law and their Impact on the Pharmaceutical and Biotechnology Industries, 19 *U. Balt. Intell. Prop. L.J.* 75, 77 (2011).

44 *Global-Tech Appliances, Inc. v. SEB, S.A.*, 131 S.Ct. 2060, 2071 (2011).

45 *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1304 (Fed. Cir. 2006) (quoting *Manville Sales Corp. v. Paramount Systems, Inc.*, 917 F.2d 544, 554 (Fed. Cir. 1990)).

209. The mental state required to find inducement has been difficult for the courts to clearly define. One law review article explored the varying treatment of the intent element in the courts and concluded that there are three elements that must be present for the required intent to be found. First, the alleged inducer must have intended to perform the acts that form the basis of the alleged inducement. Second, the alleged inducer must have intended for the direct infringer to have engaged in the relevant acts. Third, the alleged inducer must have possessed sufficient fault with respect to whether those acts infringed.⁴⁶

210. The first element of the intent analysis is clearly present in the context of an innocent infringer. The patent right holder as the alleged infringer necessarily intends to sell the patented product which is by its nature self-replicating. The alleged inducer also satisfies the second element of the intent analysis by knowingly and willfully causing future parties to infringe by releasing the self-replicating patented organism into the environment thereby making infringement unavoidable.⁴⁷

211. The third element is harder to prove, but the requisite fault can be seen by the actions taken by the manufacturers of transgenic crops. Taking Monsanto as an example of these manufacturers, the fault can be seen by what was known at the time of the release and the knowledge that resulting infringement would necessarily occur. Monsanto stated in its own 2005 Technology Use Guide provided to farmers who purchased genetically modified seeds that:

Since corn is a naturally cross-pollinated crop, a minimal amount of pollen movement (some of which can carry genetically improved traits) between neighboring fields is a well known and normal occurrence in corn seed or grain production.⁴⁸

212. The language in the 2014 Technology Use Guide now uses language which downplays the danger of cross-pollination, but does provide two full pages of instructions on mitigating the danger.⁴⁹ These statements in Monsanto's Technology Use Guides are clear admissions that Monsanto is aware of the consequences of its release of genetically modified self-replicating organisms.

213. Although inducement is generally brought against another party for infringement of a patent, in the case of self-replicating technologies, courts should recognize the part played by the patent holder in causing the infringement by others. As one law review article has argued, it would be difficult to view a finding of infringement as equitable if a genetically modified seed company had secretly planted genetically modified seeds on a farmer's land and then sued that farmer for infringement when the seed grew. The same principle of equity should be applied in the case where the genetically modified seed company manufactured seeds that naturally propagate onto the farms surrounding those of the seed company's

46 Jason A. Rantanen, An Objective View of Fault in Patent Infringement, *60 Am. U. L. Rev.* 1575, 1599–1601 (2011).

47 David Costa, In Pari Delicto and Crop Gene Patents: An Equitable Defense for Innocently Infringing Farmers, *3 Ky. J. Equine Agri. & Nat. Resources L.* 179, 197 (2010–11).

48 Monsanto Co., 2005 Technology Use Guide at 17.

49 Monsanto Canada, *2014 Technology Use Guide* 4–5.

customers and grow without the farmers knowledge. The application of in pari delicto in such a case is not much different, and no less supported, than the defenses of laches and estoppel which have been applied by the courts.⁵⁰

214. The application of in pari delicto, based on inducement of infringement by the patent owner, could be a very useful tool in finding an equitable solution to the innocent infringer problem. The Federal Circuit and the Supreme Court, however, have been unwilling to look beyond the simple fact that there has been direct infringement.⁵¹

Trespass

215. The Restatement (Second) of Torts § 158 states the rule for trespass is that:

One is subject to liability to another for trespass, irrespective of whether he thereby causes harm to any legally protected interest of the other, if he intentionally (a) enters land in the possession of the other, or causes a thing or a third person to do so, (b) remains on the land, or (c) fails to remove from the land a thing that he is under a duty to remove.⁵²

216. Although trespass is generally a direct tort, plaintiffs may rely on *Martin v. Reynolds Metal Co.* to extend common law trespass principles to a cause of action for trespass resulting from pollen drift.⁵³

217. *Reynolds* involved fluoride particles that settled on the Martins' land, which the court held could be a trespass. Moreover, in determining trespass, Martin did not need to show that any harm was caused by the thing entering onto the land. However, if a plaintiff were to use this rationale, he would still have to identify the source of the contamination.⁵⁴

218. Determining the source of the contamination could be a big problem for plaintiff farmers. With many farms packed closely together in some parts of the country, there would be no sure way to determine the exact source of their contamination, making the defense not viable. This defense is also only viable against the surrounding farmers unless a sufficiently persuasive argument could be developed to claim that the genetic seed manufacturer "cause[d] a thing" to enter onto the farmers' land. Because of these problems, trespass is not a reliable defense for innocent infringers.

50 David Costa, *In Pari Delicto and Crop Gene Patents: An Equitable Defense for Innocently Infringing Farmers*, 3 *Ky. J. Equine Agri. & Nat. Resources L.* 179, 199 (2010–11).

51 See *Monsanto Co. v. Bowman*, 657 F.3d 1341 (Fed. Cir. 2011); *Bowman v. Monsanto Co.*, 133 U.S. 1761 (2013).

52 Restatement (Second) of Torts § 158.

53 *Martin v. Reynolds Metal Co.*, 342 P.2d 790 (Or. 1959). David Catechi, *Two Wrongs Don't Make a Patent Right*, 56 *Hastings L.J.* 769, 782 (2005).

54 David Catechi, *Two Wrongs Don't Make a Patent Right*, 56 *Hastings L.J.* 769, 782 (2005).

Nuisance

219. A very persuasive argument for the use of nuisance with respect to genetically modified plants was made in a 2010 law review article.⁵⁵ This appears to provide a very useful tool for those facing damage from genetically modified plants encroaching on their crops.

220. The law in most states, together with regulations from the United States Department of Agriculture, place the burden on a farmer who is not using genetically modified seed to protect his crop from contamination. This creates a gap in the law regarding the responsibility of those who do not use genetically modified crops and those who do, and perhaps more importantly, between the patent holder and the property holder.

221. Private nuisance theory could be a way to more equitably balance the responsibility between these parties and determine a good balance between patent rights and property rights. If a court were to evaluate the patent owners infringement suit concurrently with the policy arguments raised by the farmers nuisance counterclaim, the intellectual property rights might not so thoroughly overshadow the property rights of the farmer.

222. At least two cases have recognized the private nuisance right of a farmer against a seed company, one of which wound up with a large verdict for the farmer asserting the nuisance claim.⁵⁶ The factors present in each case “such as the type of crop grown, the market to which the farmer sells, the circumstances of the contamination, and the jurisdiction in which the farm resides will greatly affect a plaintiffs likelihood of success.”⁵⁷

223. The Restatement (Second) of Torts § 822 states that:

One is subject to liability for a private nuisance if, but only if, his conduct is a legal cause of an invasion of another’s interest in the private use and enjoyment of land, and the invasion is either (a) intentional and unreasonable, or (b) unintentional and otherwise actionable under the rules controlling liability for negligent or reckless conduct, or for abnormally dangerous conditions or activities.⁵⁸

224. At first glance, this section might seem to leave the farmer with only a remedy against the neighboring farmer from whom the genetically modified genes have drifted. However, courts have found that a defendant may be liable under private nuisance law “not only when he carries on the activity but also when he participates to a substantial extent in carrying it on.”⁵⁹

55 Amanda L. Kool, Halting Pig in the Parlor Patents: Nuisance Law as a Tool to Redress Crop Contamination, 50 *Jurimetrics J.* 453 (2010).

56 *In re StarLink Corn Products Liability Litigation*, 212 F. Supp. 2d 828 (N.D. Ill. 2002). *In re Genetically Modified Rice Litig.*, 666 F. Supp. 2d 1004 (2009).

57 Amanda L. Kool, Halting Pig in the Parlor Patents: Nuisance Law as a Tool to Redress Crop Contamination, 50 *Jurimetrics J.* 453, 480–81 (2010).

58 Restatement (Second) of Torts § 822.

59 Restatement (Second) of Torts § 834 (quoted in *Page County Appliance Center, Inc. v. Honeywell, Inc.*, 347 N.W.2d 171 (Iowa 1984)).

225. The article posits that the control maintained by genetically modified plant patent owners participate in carrying it on because they have substantial control of the seeds through the license agreements under which they are sold. Also, in order for a plaintiff to bring a successful private nuisance suit, the plaintiff must allege physical damage to his property. The physical damage to property can be either pollen drift onto the plaintiffs property or co-mingling of the seeds in transport or storage after they are harvested. Once the first two factors have been established, a court will try to

balance the harm suffered by the plaintiff and society against the benefit derived by the defendant and society through the lens of five factors:

1. Harm caused to the plaintiff by the defendants actions;
2. Whether defendants use of the property is for a socially beneficial purpose;
3. Whether the defendant is in the best position to bear the cost of mitigating the harm;
4. The time, place, manner, and circumstances of defendants use; and
5. Who was there first.⁶⁰

226. The analysis of these factors will be very fact intensive and will have to be dealt with on a case by case basis. It is not yet clear how courts will weigh these factors in a standard case of innocent infringement, because the few cases which have alleged private nuisance have had differing results.⁶¹ From these cases, it is clear that it is possible for some plaintiffs to show harm to their crops, show a sufficient connection to the manufacturer, and show that the factors of the nuisance balancing test weigh in their favor. But this is a highly fact intensive investigation and will only work for some plaintiffs. This is not a reliable solution that can be applied for all innocent infringers.

Negligence

227. In order to make out a case of negligence, a plaintiff must show that the defendant owed the plaintiff a duty, that the duty was breached, that there were damages, and that the breach caused the damages.

228. The plaintiff farmer will most likely have a hard time proving that the genetically modified seed manufacturer owed him a duty. The regulatory agencies that control genetically modified organisms consider the genetically modified crops to be substantially equivalent to the natural crops and therefore they do not impose any duty on the farmer of genetically modified crops to restrain from contaminating the natural farmers crops.⁶²

60 Amanda L. Kool, Halting Pig in the Parlor Patents: Nuisance Law as a Tool to Redress Crop Contamination, *50 Jurimetrics J.* 453, 482–85, 486 (2010).

61 See *In re StarLink Corn Products Liability Litigation*, 212 F. Supp. 2d 828 (N.D. Ill. 2002); *In re Genetically Modified Rice Litigation*, 666 F.Supp.2d 1004 (E.D. Missouri, 2009).

62 A. Bryan Endres, Coexistence Strategies, *The Common Law of Biotechnology and Economic Liability Risks*, 13 *Drake J. Agric. L.* 115, 138 (2008).

229. Causation may also be hard for a plaintiff farmer to prove because the plaintiff must prove the source of the contamination that caused the harm. The source may be impossible to identify because pollen and seed drift can cause contamination up to several miles from the source of the contamination. If there are multiple possible farms, the exact farm must be pinpointed, and then the source of that farms seed must be traced.⁶³

230. Beyond causation, the plaintiff farmer must also prove damages. With the proliferation and increased acceptance of genetically modified foods, a plaintiff will have a hard time basing the harm analysis on the idea that genetically modified plants are unsafe or dangerous. This element may be easier for organic farmers or farmers who supply to foreign countries that do not accept genetically modified crops. It seems that there might be some rare occasions when negligence might be successfully proven, but it does not cover the majority of farmers.⁶⁴

E. No Financial Recovery

231. The plaintiffs in *Organic Seed Growers and Trade Assn. v. Monsanto Co.* also argued that, even if the patent was found to be valid, infringed, and enforceable, Monsanto would not be entitled to any damages because Monsanto suffers no lost profits when its genetically modified seed contaminates the property of a certified organic or non-genetically modified farmer or seed distributor. Furthermore, the plaintiffs stated that no injunctive relief could be issued because the weighing of hardships is in their favor.⁶⁵

232. Again, it must be noted that there is currently no intent requirement in the analysis of direct patent infringement under 35 U.S.C. § 271(a). For this reason, there is no guarantee that a court will look at the balance of hardships between the parties. This unwillingness to look beyond the facts of infringement was seen in *SmithKline Beecham Corp. v. Apotex Corp.*, where the Federal Circuit refused to look beyond the language of the statute, even though they had been invited to do so by the District Court.⁶⁶

233. Other courts have recognized that any damages must take into account the equities involved. One such case was decided by the Canadian Supreme Court. In that case, the farmer, Schmeiser, found that glyphosate resistant canola had infiltrated his non-genetically modified canola. Schmeiser proceeded to cover his field with glyphosate and kept seeds from the plants that remained. When he replanted the field, between 95% to 98% of the crop carried the glyphosate resistant trait, which was patented by Monsanto.⁶⁷

63 David Catechi, *Two Wrongs Don't Make a Patent Right*, 56 *Hastings L.J.* 769, 780 (2005).

64 David Catechi, *Two Wrongs Don't Make a Patent Right*, 56 *Hastings L.J.* 769, 780–81 (2005).

65 Complaint, *Organic Seed Growers and Trade Assn. v. Monsanto Co.*, ¶¶ 161–63.

66 *SmithKline Beecham Corp. v. Apotex Corp.*, 403 F.3d 1331, 1342 (Fed. Cir. 2005).

67 *Monsanto Can. Inc. v. Schmeiser*, [2004] 1 S.C.R. 902 ¶¶ 61–64 (Can.).

234. The Canadian Supreme Court stated in the beginning of the Schmeiser opinion that they were not dealing with the case of an innocent infringer. The court later indicated that if Schmeiser had “been a mere ‘innocent bystander’, he could have refuted the presumption of use arising from his possession of the patented gene and cell.”⁶⁸ This analysis by the Canadian Supreme Court recognized the idea that a farmer who unknowingly grows patented crops should only be liable for that infringement to the extent that he has benefited from the use of the patented traits.⁶⁹

235. In the example case of Schmeiser, if he had never used Roundup on the crops, the Canadian Supreme Court probably would have decided that he had gained no benefit from the existence of the crops on his land, and therefore he should have no liability due to the existence of the infringing plants. This is not a well accepted concept, particularly with the Federal Circuit, which tends to stick to the plain language of the infringement statute and does not look at the equities of a case.⁷⁰ Because of the treatment this principle has received in the Federal Circuit, it cannot be relied upon as a defense by innocent infringers.

III. Proposed Legislative Protection

A. Proposed Statutory Language: 35 U.S.C. § 287(d)

With respect to a farm owner or farming personnel activity related to genetically modified organisms that constitutes an infringement under section 271(a) or (b) of this title, the provisions of sections 281, 283, 284, and 285 of this title shall not apply against the farm owner or farming personnel or against a related farming entity with respect to such activity where: the activity was performed without intent to acquire the genetically modified organisms, and the activity includes no affirmative acts to knowingly facilitate increased propagation of the patented organism relative to comingled unpatented organisms.

- (1) Activity under this section shall be deemed to have been performed without intent to acquire the genetically modified organisms if such activity relates to 5% or less of that species of organism within a growth group.
- (2) Activity under this section shall be deemed to have been performed with intent to acquire the genetically modified organisms if the patented organisms are readily discernible from non-patented organisms and are not removed by the farm owner or farming personnel.

68 *Monsanto Can. Inc. v. Schmeiser*, [2004] 1 S.C.R. 902 ¶ 95 (Can.).

69 David Costa, *In Pari Delicto and Crop Gene Patents: An Equitable Defense for Innocently Infringing Farmers*, 3 *Ky. J. Equine Agri. & Nat. Resources* L. 179, 186, 189 (2010–11).

70 *SmithKline Beecham Corp. v. Apotex Corp.*, 403 F.3d 1331, 1342 (Fed. Cir. 2005).

B. Reasoning for Statutory Language

236. The above proposed statute immunizes actions that would otherwise constitute infringement by farm owners or farming personnel if certain conditions are met. In order for the actions to be immunized, the farm owner or farming personnel must not intentionally acquire or propagate the patented organism. The statute also provides bright line rules which will protect a majority of farmers who unintentionally have genetically modified plants enter onto their farms through pollen drift and also provide an incentive for the patent owners to make the patented organisms easily identifiable.⁷¹

237. Immune infringement is not a new concept in patent law. 35 U.S.C. § 287(c) provides a framework for immunizing medical practitioners from infringement suits.⁷² 35 U.S.C. § 287(c)(1) provides that:

With respect to a medical practitioners performance of a medical activity that constitutes an infringement under section 271(a) or (b) of this title, the provisions of sections 281, 283, 284, and 285 of this title shall not apply against the medical practitioner or against a related health care entity with respect to such medical activity.⁷³

238. 35 U.S.C. § 287(c)(3) then limits the immunity so that it does not cover “commercial development, manufacture, sale, importation, or distribution of a machine, manufacture, or composition of matter or the provision of pharmacy” or, under certain circumstances, clinical laboratory services.⁷⁴

239. Congress was concerned with the potential liability of doctors and other medical professionals and therefore examined different ways of ensuring that they would not be subject to medical method suits. Two amendments were proposed and quickly abandoned after strong criticism. The first proposal was to remove medical method patents from the arena of patentable subject matter under 35 U.S.C. § 101; the second proposal was to declare use or inducement by certain individuals to not be infringement. The final bill was accepted in large part because of concerns about the effect that medical method patents could have on the medical profession.

240. The solution found by 35 U.S.C. § 287(c) was to specify that the actions taken by the medical professionals on which a patent read would be considered infringement, but that the medical professional was immune from legal remedies. This is in stark contrast to 35 U.S.C. § 271(e)(1), under which research related to the development and submission of information to the FDA is not infringing activity.⁷⁵ This is an important distinction because

71 Peter Thomison, Managing “Pollen Drift” to Minimize Contamination of Non-GMO Corn, [AGF-153-04](#).

72 Elizabeth Moulton, Inducing Immune Infringement: The Interplay Of Section 287(c) And Section 271(b), [13 Colum. Sci. & Tech. L. Rev. 206, 209](#) (2012).

73 35 U.S.C. § 287(c)(1).

74 35 U.S.C. § 287(c)(3).

75 35 U.S.C. § 271(e)(1).

secondary liability, such as contributory infringement, can attach to immune infringement, but cannot exist for non-infringing actions.

241. 35 U.S.C. § 287(c) has been used as a guide for the proposed statute because both that statute and the proposed statute address the balance of the rights granted to the patent owner and concerns of other individuals. The policy behind allowing medical professionals to perform patented medical methods without being liable for infringement is to enhance the medical treatment available to the public.⁷⁶

242. The policy behind the proposed statute is to protect farmers, who through no fault of their own, have come into possession of patented living organisms with no intent to possess or make use of any of the advantages of the patented living organism over unpatented organisms of the same species. These are the same policy concerns that have prompted so many commentators to suggest common law solutions based on equity principles, as discussed earlier in this Article.⁷⁷

243. As discussed, genetically modified traits can transmit from one field to another without any human interference. One of the main questions raised by such a fact scenario is whether it is equitable to hold an unknowing farmer guilty of infringement, when he has his crop altered by another and, in the case of organic farmers or farmers who supply to areas that do not accept genetically modified crops, could have suffered economic loss due to the invasion of genetically modified plants. Allowing a patent owner to release an organism into the environment which will undoubtedly cause instances of innocent infringement is a broadening of the patent owner's rights because it is the patent owner, and not the farmer to whom he sold his patented product, who is responsible for the plant's presence in the alleged infringer's field.⁷⁸

244. The problem of pollen drift is growing as more and more crops and farms become genetically engineered. As of 2011, 89% of corn, 91% of cotton, and 94% of soy beans grown in the United States are genetically modified. The percentage of genetically modified crops has been steadily increasing for more than a decade.⁷⁹ Because of the prevalence of genetically modified crops, organic or non-genetically modified farms are usually surrounded by genetically modified crops, any one of which could cause genetically modified genes to

76 Elizabeth Moulton, *Inducing Immune Infringement: The Interplay Of Section 287(c) And Section 271(b)*, 13 *Colum. Sci. & Tech. L. Rev.* 206, 212–14 (2012).

77 David Costa, *In Pari Delicto and Crop Gene Patents: An Equitable Defense for Innocently Infringing Farmers*, 3 *Ky. J. Equine Agri. & Nat. Resources L.* 179, 179 (2010–11); Amanda L. Kool, *Halting Pig in the Parlor Patents: Nuisance Law as a Tool to Redress Crop Contamination*, 50 *Jurimetrics J.* 453, 466 (2010); A. Bryan Endres, *Coexistence Strategies, The Common Law of Biotechnology and Economic Liability Risks*, 13 *Drake J. Agric. L.* 115, 138 (2008).

78 Amanda L. Kool, *Halting Pig in the Parlor Patents: Nuisance Law as a Tool to Redress Crop Contamination*, 50 *Jurimetrics J.* 453, 456 (2010). See also Malla Pollack, *Originalism, J.E.M., and the Food Supply, or Will the Real Decision Maker Please Stand Up?*, 19 *J. Env'tl. L. & Litig.* 495, 517–34 (2004); Siddharth Khanijou, *Patent Inequity?: Rethinking the Application of Strict Liability to Patent Law in the Nanotechnology Era*, 12 *J. Tech. L. & Pol'y* 179 (2007).

79 *Adoption of Genetically Engineered Crops in the United States 1996–2014*.

appear on that farm. Balancing the costs and benefits in regulating biotech crops is a policy decision and therefore lies within the political arena.

245. Farmers have very important economic interests that can be damaged if genetically modified traits contaminate their organic or non-genetically modified crops. Agricultural exports for the fiscal year 2015 are forecast at \$143.5 billion.⁸⁰ Yet many countries require segregation of genetically modified foods from non-genetically modified foods.⁸¹ For example, Japan does not allow food products which contain 5% or more of approved genetically modified crops, like corn and soybeans, to be labeled as non-genetically modified, and does not allow any food products containing any level of unapproved genetically modified crops. The European Union requires that foods, containing more than 0.9% biotech material be labeled as genetically engineered.⁸² The limitations placed on genetically modified crops in other countries can limit the market for American farmers if their crops become tainted by genetically modified plants. Even if the crops are to be sold within the U.S., if organic crops become contaminated with genetically modified traits, the crops will greatly decrease in value.⁸³

246. Pollen is a means by which genetically-modified genes can be transmitted throughout a plant population or a related species.⁸⁴ Pollen can be transmitted through the air or by insects such as bees. Studies show that the amount of gene transfer from a plant carrying a specific trait to other plants of the same species varies by the type of plant, but consistently decreases with the distance from the source plant to the receiving plant.⁸⁵

247. Individual corn plants produce 4 to 5 million pollen grains. Corn produces one of the largest pollen spores which fall to the earth, much faster than pollen produced by grassy crops.⁸⁶ One study found that although most of a corn plants pollen falls to the ground near the plant, some of the pollen can travel up to 0.5 miles within a few minutes in a 15 mile per hour wind. Another study showed that the concentration of pollen present at 200 feet from a corn plant was 1% of the concentration present three feet from the plant. The amount of cross pollinated plants present in another field decreases exponentially with the distance between the fields until the amount approaches 0.1%. The study found, however, that even a distance of 1,640 feet was not sufficient to consistently limit cross pollination to less than 0.1%. Even state seed certification agencies have rejected the idea of eliminating

80 Outlook for U.S. Agricultural Trade, [AES-84](#) (2014).

81 A. Bryan Endres, Coexistence Strategies, *The Common Law of Biotechnology and Economic Liability Risks*, [13 Drake J. Agric. L. 115, 117](#) (2008).

82 Peter Thomison, Managing “Pollen Drift” to Minimize Contamination of Non-GMO Corn, [AGF-153-04](#).

83 Hilary Preston, Drift of Patented Genetically Engineered Crops: Rethinking Liability Theories, [81 Tex. L. Rev. 1153](#) (2003).

84 Paul C. St. Amand, Daniel Z. Skinner, and Richard N. Peaden, Risk of Alfalfa Transgene Dissemination and Scale Dependent Effects, [101 Theor. Appl. Genet. 107](#) (1999).

85 Allen E. Van Deynze, Frederick J. Sundstrom, and Kent J. Bradford, Pollen-Mediated Gene Flow in California Cotton Depends on Pollinator Activity, [45 Crop Science 1565](#) (2005).

86 Allen E. Van Deynze, Frederick J. Sundstrom, and Kent J. Bradford, Pollen-Mediated Gene Flow in California Cotton Depends on Pollinator Activity, [45 Crop Science 1565](#) (2005).

cross-pollination and have instituted policies for the buffer zones between fields of corn with the goal of maintaining the cross-pollination between fields at or below 0.5%.⁸⁷

248. Unlike corn, alfalfa pollen is spread by bees. One study showed that bees can carry alfalfa pollen more than 2/3 of a mile.⁸⁸ Another study confirmed that alfalfa plants were pollinated over 750 feet away from the source alfalfa. The study concluded that it is “highly unlikely” that farmers can stop contamination of non-genetically modified alfalfa with genetically modified alfalfa traits with current farming practices.⁸⁹

249. In order to minimize contamination,

a farmer must undertake expensive and burdensome measures at every step of production:

1. having seed tested;
2. implementing buffer zones to avoid cross-pollination;
3. paying for extra time and equipment to ensure that the harvester and cleaner do not contaminate the crop from previous jobs;
4. testing after harvest to check for contamination from events such as seed blowing from a passing truck ... ;
5. paying to have the truck cleaned prior to hauling non-GM grain to market;
6. paying extra for special storage or storing the grain on the farm after harvest.⁹⁰

250. The necessary step of implementing buffer zones is particularly troublesome because, even with the minimum buffer zone suggested by research from Ohio State University, a farmer would lose about 35% of a 20 acre field.⁹¹ Even with these additional steps, farmers will have to deal with purchased seed, which will become increasingly contaminated as cross-pollination affects the farms from which the commodity seeds are purchased.⁹²

87 Peter Thomison, Managing “Pollen Drift” to Minimize Contamination of Non-GMO Corn, [AGF-153-04](#) (citing Bob Nielsen, Tassel Emergence & Pollen Shed, [Corny News Network](#) (2010)).

88 Linda McGraw, Keeping Transgenic Pollen in Its Place, [Agri. Research 7](#) (2001).

89 Paul C. St. Amand, Daniel Z. Skinner, and Richard N. Peaden, Risk of Alfalfa Transgene Dissemination and Scale Dependent Effects, [101 Theor. Appl. Genet. 107](#) (1999).

90 Brief for Amici Curiae, In Support of Plaintiff’s Opposition to Defendant’s Motion to Dismiss, Organic Seed Growers and Trade Assoc. v. Monsanto Co., [Case 1:11-CV-2163-NRB-RLE](#) (S.D.N.Y. 2011).

91 Peter Thomison, Managing “Pollen Drift” to Minimize Contamination of Non-GMO Corn, [AGF-153-04](#).

92 Brief for Amici Curiae, In Support of Plaintiff’s Opposition to Defendant’s Motion to Dismiss, Organic Seed Growers and Trade Assoc. v. Monsanto Co., 17, [No. 11-CV-2163-NRB-RLE](#) (S.D.N.Y. 2011) (citing Lyle F. Friesen, Alison G. Nelson and Rene C. Van Acker, Evidence of Contamination of Pedigreed Canola (Brassica Napus) Seedlots in Western Canada with Genetically Engineered Herbicide Resistance Traits, [95 Agron. J. 1342](#) (2003)).

251. The rights granted to patent owners should be balanced against the increased burdens placed on the non-genetically engineered crop farmers due to the self-replicating nature of genetically modified organisms in light of the policy behind patent law as a whole. “Patent protection is granted so that the patentee can control who can capture the benefit of the patentees invention, and in what manner.”⁹³ This goal is not furthered by providing legal remedies for infringement of the patents by farm owners or farming personnel under the circumstances prescribed in the proposed statute because such activities do not derive a benefit from the patentees invention.

252. The proposed statute requires that the alleged infringer not purposely obtain or promote the growth of the patented crop and therefore, the advantages of the patented inventions may not be realized. For example, a farmer who finds a small percentage of glyphosate resistant corn on his property would not be able to use a glyphosate herbicide on the crop because all of the non-genetically modified crop would be destroyed. Not only would the farmer lose much of his crop in this situation, but the farmer would also be removed from the protection of the statute because the use of a glyphosate herbicide on the corn would be an affirmative act that facilitates increased propagation of the patented corn relative to comingled unpatented corn.

253. The proposed statute also protects the biotech companies who are the patent owners for genetically modified organisms by maintaining the current level of protection for any direct infringement that is not exempted by the statute. The statute exempts only a narrow range of actions which can be seen as innocent and also which do not detract in any way from the potential profit of the patent owners. Any actions exempt by the statute would be carried out by parties who would not be interested in purchasing licenses from the patent owners or using the patent owners technology if it was not forced upon them without their knowledge.

254. The proposed statute also takes into account the situations where a farmer may obtain knowledge of some infringing product within the growth group, but insufficient amounts to influence his current use of the crop. If the amount is still under the limits set by foreign countries to be considered non-genetically engineered, the farmer may still take advantage of those markets.⁹⁴ The proposed statute allows the farmer to continue his planned use of the crop and therefore removes the wasteful requirement that the farmer destroy his crop to ensure non-infringement or the inequitable alternative of paying a license for technology that he did not want and from which he received no benefit.

255. If, on the other hand, the farmer learns of the infringing plants and takes steps to further cultivate those plants, it would be inequitable for the farmer to be exempt from the applicable legal remedies based only on the fact that the farmer obtained the plants innocently. The proposed statute removes this type of activity from the exemption. The importance of this type of action can be seen in *Schmeiser* where a farmer found glyphosate

⁹³ Hilary Preston, *Drift of Patented Genetically Engineered Crops: Rethinking Liability Theories*, 81 *Tex. L. Rev.* 1153, 1168 (2003).

⁹⁴ Peter Thomison, *Managing “Pollen Drift” to Minimize Contamination of Non-GMO Corn*, [AGF-153-04](#).

resistant plants on his land through no action of his own, but then removed all other plants through the use of glyphosate and saved the seeds from the glyphosate resistant plants that remained so that his next crop was almost entirely glyphosate resistant.⁹⁵ It would be inequitable to allow someone who performed actions like those in *Schmeiser*, because the farmer in such a case could take advantage of the benefits of the patented invention.⁹⁶

256. The bright line rule in subsection (1) of the proposed statute, considering possession or use of patented genetically modified organisms that constitute up to 5% of the organisms in a growth group to be activity performed without intent to acquire the genetically modified organisms, is included for the protection of farmers who find a small amount of the genetically modified organism within their crop through no fault of their own. Some genetically modified organism producers have a track record of aggressively addressing any possibility of infringing action.⁹⁷ If testing proves that the patented genetically modified organisms constitute 5% or less of the organisms in the growth group, any threatened investigation or litigation would be pointless because the activities of the farm owner or farming personnel would be exempt from legal remedies. This adds to quick and fair resolution of the type of cases that will ordinarily come from a case of pollen drift or inadvertent contamination.

257. The bright line rule in proposed subsection (1) does not mean that any activity related to patented genetically modified organisms constituting more than 5% of the organisms in the growth group would not be exempt from legal remedies. The bright line rule only applies to situations in which the patented genetically modified organisms constitute 5% or less of the organisms in a growth group. If the amount is more than 5%, then the intent of the alleged infringer and the actions taken by that alleged infringer must be examined to see if the actions fall within the proposed statute.

258. The bright line rule in subsection (2) of the proposed statute, that if the patented organisms are readily discernible from non-patented organisms and are not removed by the farm owner or farming personnel the activity under the proposed statute would be deemed to have been performed with intent to acquire the genetically modified organisms, is meant to motivate patent owners to make the genetically modified organisms easily identifiable. The majority of genetically modified organisms are not visibly distinguishable from non-genetically modified organisms of the same species.⁹⁸ Currently, either expensive genetic testing or physical testing, which destroys useful organisms, must be performed in order to determine which organisms contain patented genetic traits and which do not contain the patented traits.⁹⁹

95 *Monsanto Can. Inc. v. Schmeiser*, [2004] 1 S.C.R. 902 (Can.).

96 Drew L. Kershen, *Of Straying Crops and Patent Rights*, 43 *Washburn L.J.* 575, 586 (2004).

97 Amanda L. Kool, *Halting Pig in the Parlor Patents: Nuisance Law as a Tool to Redress Crop Contamination*, 50 *Jurimetrics J.* 453, 466 (2010). See also E. Freeman, *Settling the Matter — Part 5*.

98 Jakub Kwieciński, *Genetically modified abominations?* 10 *EMBO Rep.* 1187 (2009).

99 See Hilary Preston, *Drift of Patented Genetically Engineered Crops: Rethinking Liability Theories*, 81 *Tex. L. Rev.* 1153, 1172 (2003). See also David Catechi, *Two Wrongs Don't Make a Patent Right*, 56 *Hastings L.J.* 769, 790 (2005).

259. The bright line rule in subsection (2) of the proposed statute would increase efficiency for both the farmers and the patent owners. If a visibly distinguishable trait were added to patented genetically modified organisms, farmers would be able to determine very easily by visual inspection if there were potentially infringing organisms on their farms. The farmer could then remove these organisms and stop the infringing activity. The patent owner would also benefit from ease of enforcement. A simple visual inspection of a farmers crop would inform the patent owner of potential infringement without the need for costly testing.

260. The rule in subsection (2) of the proposed statute is also in line with the policy behind the notice statute as discussed above. A farmer would be able to distinguish between the organisms which are infringing, would therefore be on notice that they are covered by a patent, and would have a duty to remove the infringing organisms.

261. Currently, the patent owner must give notice of specific infringement and must therefore test the organisms before such notice can be provided. If a patent owner could refer to a visibly distinguishable feature, the entire process of providing notice would be simplified for both the farmer and the patent owner.

IV. Conclusion

262. Patented self-replicating organisms create unique problems for innocent parties who come to possess or use the patented organisms without any intent to do so and often without knowledge that the organism is anything other than a naturally occurring organism. In these cases, policy concerns warrant an exemption from recovery of legal remedies by the patent owner, but current patent law and common law doctrines are insufficient to adequately address these policy concerns.

263. The statute proposed in this article balances the rights provided by the patent statute to the patent owner and the property rights of the innocent infringer. Adoption of the proposed statute will result in an equitable solution to a problem which threatens to appear in an ever increasing number of factual situations and law suits. The proposed statute will provide some clarity, so that both the patent owner and the alleged infringer will be free from fear of a reduction in patent rights or of threatened litigation.