
WAKE FOREST JOURNAL OF BUSINESS AND INTELLECTUAL PROPERTY LAW

VOLUME 12

FALL 2011

NUMBER 1

COMMENT: PROTECTING THE FARMERS: LIMITING LIABILITY FOR INNOCENT INFRINGEMENT OF PLANT PATENTS

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I. INTRODUCTION

From using reusable grocery bags to buying local produce, the American population is becoming increasingly focused on the environmental impacts of food production.¹ With this increased focus comes a more intense scrutiny about the sources of our foods and, more specifically, the increased control of farmers by corporations—not through direct ownership, but through genetically modified (“GM”) seeds.

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¹ Amy Hoak, *The Five Top Trends We'll See Inside Our Homes in 2010*, MARKETWATCH (Mar. 27, 2009, 7:03 PM), <http://www.marketwatch.com/story/the-five-top-trends-well-see>; see Ellen Gamerman, *An Inconvenient Bag*, WALL ST. J. (Sept. 26, 2008), available at <http://online.wsj.com/article/SB122238422541876879.html>.

Numerous corporations have genetically altered genes in seeds to create plants that are resistant to specific herbicides and insects. In 2003, GM crops represented “73% of the cotton, 81% of the soybeans, and 40% of the corn” in the United States.² Furthermore, a recent study revealed that 45% of the samples collected of roadside canola in North Dakota contained GM traits.³ The companies taking part in the genetic modification of crops obtain ordinary utility patents for the creation of these seeds, including the methods to create the seed and the end result.⁴ A plant patent is then obtained when a distinct and new variety of plant is invented or discovered and asexually reproduced.⁵ In order to obtain a plant patent, asexual reproduction of the new variety of plant must be used.⁶ While it is extraordinary that technology has equipped mankind with the ability to create such seeds, certain obstacles arise when attempting to patent creations within biotechnology as opposed to patents for other non-living inventions or processes.

While some farmers choose to buy seeds from corporations that have obtained such plant patents, others choose not to. However, those who choose not to purchase patented seeds risk becoming innocent infringers of patent law.⁷ Seeds are produced by plants and may travel by the wind, birds, animals, sharing of farming equipment, or other means, and could potentially end up on the land of someone who did not pay to use the patented seeds.⁸ Furthermore, pollen from patented seeds can travel to a neighboring farmer’s land and innocently fertilize a farmer’s non-patented crops.⁹ These innocent farmers are then left with plants that outwardly are no different than the seeds they did pay for, and consequently become innocent infringers of patent law.¹⁰ These farms may be unable to cover the legal costs of defending their patent violation and risk going out of

² Rebecca M. Bratspies, *Consuming (F)ears of Corn: Public Health and Biopharming*, 30 AM. J. L. & MED. 371, 380 (2004).

³ Meredith G. Schafer et al., *The Establishment of Genetically Modified Canola Populations in the U.S.*, PLOS ONE 6(10) (2011).

⁴ See THE CTR. FOR FOOD SAFETY, *MONSANTO V. U.S. FARMERS* 12 (2005), available at <http://www.centerforfoodsafety.org/pubs/CFSMonsantovsFarmerReport1.13.05.pdf>.

⁵ *Transgenic Crops: An Introduction and Resource Guide*, COLO. ST. U., <http://cls.casa.colostate.edu/TransgenicCrops/patent.html> (last visited Feb. 27, 2011).

⁶ See *id.*

⁷ THE CTR. FOR FOOD SAFETY, *supra* note 4, at 38.

⁸ *Id.* at 15.

⁹ *Id.* at 39.

¹⁰ See Donald L. Barlett & James B. Steele, *Monsanto’s Harvest of Fear*, VANITY FAIR, May 2008, available at <http://www.vanityfair.com/politics/features/2008/05/monsanto200805>.

business or being forced to file bankruptcy.¹¹ This is due, in part, to the lack of any innocent infringement provisions within patent law. This comment proposes the creation of such a provision for patented plants that does not serve as a total defense, but rather limits the financial liability farmers face for truly innocent infringement of a patent.

II. THE EVOLUTION OF PATENTING SEEDS

Despite the present dominance of patented seeds in areas such as the soybean industry, farmers once had a great deal of control over the use and utilization of seeds that they purchased.¹² Most importantly, farmers were able to save seeds with specific traits to replant for the next harvest and eventually develop a very unique crop with characteristics that individual farmer desired.¹³ Furthermore, seeds were initially not viewed as a product, but rather were viewed as a public commons and considered part of the public sector.¹⁴ Understanding the uniqueness of plant patents first requires a basic knowledge about the historical methods farmers used to select seeds and how current patent laws stand in stark contrast to the traditions of the past.

A. Historical Farming Practices

Generations of farmers have been saving seeds and selectively replanting seeds in order to develop a robust and bountiful crop.¹⁵ The practice of seed saving was not only commonplace, but was even encouraged by the United States Department of Agriculture (“USDA”), which freely developed and distributed seeds.¹⁶ Although the United States has grown away from this farming practice with crops such as soybeans and alfalfa sprouts, seed saving is still used and relied on by over eighty percent of farmers in developing

¹¹ THE CTR. FOR FOOD SAFETY, *supra* note 4, at 21.

¹² See generally, Michael Mascarenhas & Lawrence Busch, *Seeds of Change: Intellectual Property Rights, Genetically Modified Soybeans and Seed Saving in the United States*, 46 SOCIOLOGIA RURALIS 122 (2006) (discussing the historical practice of seed saving).

¹³ Jeremy P. Oczek, *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, 647 (2000).

¹⁴ Haley Stein, *Intellectual Property and Genetically Modified Seeds: The United States, Trade, and the Developing World*, 3 NW. J. TECH. & INTELL. PROP. 160, 162 (2005).

¹⁵ Oczek, *supra* note 13, at 647.

¹⁶ *Id.* at 631.

nations.¹⁷

Due in part to the widespread practice of seed saving, seeds were viewed in the agricultural community as common property.¹⁸ Because practices such as seed saving and seed sharing were maintained within the bounds of the agricultural community, these practices were ignored by private investment and, as a result, the seed industry was very small.¹⁹ Seeds were shared among farmers and countries both through importing seeds and distribution programs led by the USDA.²⁰

B. Plant Patents vs. Utility Patents

Intellectual property rights for inventions are protected in the United States through governmental issuance of patents. In order to gain patent protection, the invention must be novel, useful, and not obvious.²¹ Though each of these requirements are very important to receiving a patent, an in-depth discussion of the particulars of each requirement is not necessary to understand the problem of innocent infringement of a patented plant. An understanding of plant patents is aided by a discussion of the ways in which intellectual property rights in plants may be protected. The first way patentable material is protected in plants is through gaining a utility patent applied to plants. In this method of protection, the utility patent protection “can apply to the method used to engineer a plant, the genetic sequences that are inserted, and the plant that results.”²² Unlike plant patents, utility patents may be used to patent a sexually reproducing plant organism.²³ Another type of patent exists that applies solely to plants. A plant patent for a plant or variety of plant, as opposed to a utility patent, is granted to protect the intellectual property rights of a creator who has invented or discovered and asexually reproduced a distinct and new variety of plant.²⁴ These current approaches to patenting plants developed after a rather rapid evolution in both statutory law and case law over a period of roughly seventy years.

¹⁷ Samantha M. Ohlgart, *The Terminator Gene: Intellectual Property Rights vs. The Farmers’ Common Law Right to Save Seed*, 7 DRAKE J. AGRIC. L. 473, 488 (2002).

¹⁸ Lara E. Ewens, *Seed Wars: Biotechnology, Intellectual Property, and the Quest for High Yield Seeds*, 23 B.C. INT’L & COMP. L. REV. 285, 286 (2000).

¹⁹ Keith Aoki, *Weeds, Seeds & Deeds: Recent Skirmishes in the Seed Wars*, 11 CARDOZO J. INT’L & COMP. L. 247, 252–53 (2000).

²⁰ *Id.* at 264–66.

²¹ 35 U.S.C. §§ 101–103 (2006).

²² *Transgenic Crops*, *supra* note 5.

²³ *Id.*

²⁴ 35 U.S.C. § 161 (2006).

C. The Birth of Plant Patents

Although the patenting of plants and seeds is very common in modern times, it was not until 1930 that plants and seeds were considered patentable material.²⁵ Intellectual property rights are founded in the United States Constitution under Article I, Section 8.²⁶ Traditionally, plants and seeds were unable to satisfy the requirement of a written description for patents because they are a product of nature.²⁷ The Plant Patent Act of 1930 (“PPA”) began to pave the way for plant and seed patents by providing intellectual property rights for privately developed plant varieties for asexually reproducing plants.²⁸

Although the PPA established the beginning steps toward plant and seed patents, the asexual reproduction limitation put very narrow restrictions on the granting of plant patents.²⁹ These restrictions were indicative of Congress’ intent to reject the notion that sexually reproducing plants should be subject to patent protection.³⁰ Congress reiterated its commitment to limiting plant patents to asexually reproducing plants through the defeat of a proposed amendment in 1968 that would have included sexually reproducing plants.³¹ Despite the clear resistance in Congress to expanding the PPA, pressure from private industry eventually resulted in the widening of the PPA to include both asexual and sexually reproduced plants.³²

By enacting the Plant Variety Protection Act (“PVPA”) in 1970, Congress provided a new protection for patented plants by allowing for sexual reproduction in patented plants, including seed germination.³³ The PVPA established a twenty-year term of protection for most crops and granted the owner exclusive rights to

²⁵ J.M. Spectar, *Patent Necessity: Intellectual Property Dilemmas in the Biotech Domain & Treatment Equity for Developing Countries*, 24 HOUS. J. INT’L L. 227, 232–33 (2002).

²⁶ U.S. CONST. art I, § 8.

²⁷ Anne E. Crocker, *Will Plants Finally Grow Into Full Patent Protection on an International Level?*, 8 DRAKE J. AGRIC. L. 251, 257–58 (2003). The written description requirement states that the patent application “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.” 35 U.S.C. § 112 (2006).

²⁸ See 35 U.S.C. § 161.

²⁹ Aoki, *supra* note 19, at 280.

³⁰ THE CTR. FOR FOOD SAFETY, *supra* note 4, at 12.

³¹ *Id.*

³² Aoki, *supra* note 19, at 284.

³³ See Crocker, *supra* note 27, at 259–60.

multiply and market seeds of that particular variety of plant.³⁴ Though the private seed industry began to grow as plant and seed patent rights began to increase, the PVPA still contained an exemption for seed saving by farmers who purchased patented seed varieties; however, this exemption applied only to plant patents and not utility patents.³⁵ This exemption meant that farmers who bought patented seeds could save, replant and resell the patented seed without restriction.³⁶ Even with farmers retaining the right to save their seeds, by 1998, ten companies controlled thirty percent of the seed trade worldwide.³⁷ As the ability of companies to patent living organisms increased, so did the litigation to protect these rights, which ultimately ended with plant patent holders having a great deal of power in the creation and enforcement of their patents.

D. Upholding and Expanding Plant Patents

The landmark case of *Diamond v. Chakrabarty* in 1980 established the first patent on life.³⁸ In a 5-4 decision, the Supreme Court ruled that living organisms (in this case, a bacterium) could be patented.³⁹ The Court reached its decision by reading the PPA very broadly.⁴⁰ The Court articulated the question of patentability as hinging on whether an organism was a product of nature or of human invention.⁴¹ When addressing issues of congressional intent, the Court reasoned that Congress intended patentable materials to “include anything under the sun that is made by man.”⁴² Although this case dealt with living organisms and did not specifically address the issue of patenting plants, this broad interpretation of the PPA resulted in further expansion on the issue of what materials were patentable.

The property protections of plants were further expanded in 1985 in *Ex parte Hibberd*.⁴³ Building upon the ruling in *Diamond v. Chakrabarty*, the United States Patent and Trademark Office (“PTO”) held that sexually reproducing plants were patentable through utility patents.⁴⁴ After the ruling in this case, the PTO began approving

³⁴ 7 U.S.C. § 2483 (2006).

³⁵ See Ewens, *supra* note 18, at 293.

³⁶ Aoki, *supra* note 19, at 284.

³⁷ Ewens, *supra* note 18, at 289–90.

³⁸ *Diamond v. Chakrabarty*, 447 U.S. 303, 321 (1980) (Brennan, J., dissenting); Aoki, *supra* note 19, at 287.

³⁹ *Chakrabarty*, 447 U.S. at 321 (Brennan, J., dissenting).

⁴⁰ *Id.* at 310–14 (majority opinion).

⁴¹ *Id.* at 313.

⁴² *Id.* at 309 (quoting H.R. REP. NO. 1923, at 6 (1952)).

⁴³ *Ex parte Hibberd*, 227 U.S.P.Q. 443 (T.T.A.B. 1985).

⁴⁴ *Id.* at 445.

applications for sexually reproducing plants, despite the fact that Congress was clear in its intent to limit plant patent protection to asexually reproducing plants.⁴⁵ By allowing utility patents for sexually reproducing plants, the PTO was providing utility patent holders the ability to exclude others from using patented plant varieties for research and agricultural purposes.⁴⁶

The final significant expansion of interpretations of the PPA and PVPA occurred in 2001, in the case of *J.E.M. AG Supply v. Pioneer Hi-Bred International, Inc.*⁴⁷ In this case, the Supreme Court upheld utility patents for sexually reproducing plants.⁴⁸ Pioneer, a large seed company, was suing a smaller seed company for violating a patent protecting a hybrid corn seed.⁴⁹ In the majority opinion, Justice Thomas stated that utility patents protect newly developed plant seeds and that neither the PPA nor the PVPA can limit the scope of a utility patent.⁵⁰ In reaching its decision, the Court held that because Congress failed to explicitly exclude plants in the provision of the Patent Act that provides for utility patents, there was no reason why extending utility patents to plants should be viewed as contrary to congressional intent.⁵¹ This interpretation meant that utility patents, previously thought to exclude living organisms, now could allow for the patenting of living organisms.

Ultimately, the line of cases that expanded interpretations of the PPA and PVPA resulted in a lowering of the standards required to receive a patent. Furthermore, the broad interpretations provided to patent statutes indicate that nearly all plants or living organisms can receive either a plant patent or a utility patent—a result that creates a unique and troubling legal issue that was not previously found within patent law. Unlike traditional patentable creations, patented living organisms, specifically sexually reproducing plants, are able to independently reproduce and create more seeds that contain the same genetics as the original patented plants. Seeds travel naturally across distances through various means. If a patented seed travels from a licensee's land to the land of a farmer without a license for the patented seed and a plant begins to grow, the unlicensed farmer has innocently violated the intellectual property rights of the patent holder.⁵² It is in this manner of infringement that a conflict arises

⁴⁵ THE CTR. FOR FOOD SAFETY, *supra* note 4, at 12.

⁴⁶ *Id.*

⁴⁷ *J.E.M. AG Supply v. Pioneer Hi-Bred Int'l, Inc.*, 534 U.S. 124 (2001).

⁴⁸ *Id.* at 127.

⁴⁹ *Id.* at 128.

⁵⁰ *Id.* at 145.

⁵¹ *Id.*; THE CTR. FOR FOOD SAFETY, *supra* note 4, at 12.

⁵² Patent infringement occurs when an alleged infringer “without authority
continued . . .

between the protection of intellectual property rights by companies who develop patented seeds and farmers who may innocently acquire patented material.

III. PROBLEMS SURROUNDING INNOCENT INFRINGEMENT

There are two primary ways in which farmers may become innocent infringers of patent law: 1) through inadvertent possession due to seed travel and 2) through cross-fertilization with patented material. For example, seeds are disbursed across land through methods such as the wind or by being picked up and later dropped or eaten by animals such as birds.⁵³ Additionally, cross-pollination can occur when a non-patented breed of corn pollinates a patented breed.⁵⁴ When farmers come to possess patented material either through cross-pollination or seed disbursal, they become infringers of the patent through no fault of their own. Although there are very few cases that address issues related to innocent infringement, a statutory provision should nevertheless be created so farmers who believe they are innocent infringers have a statutory defense in place that could limit their potential liability. As GM crops begin to consume ever-increasing portions of the agricultural industry, cases of alleged innocent infringement are likely to increase and a preemptive solution must be established.⁵⁵

On March 29, 2011, the Public Patent Foundation filed a lawsuit against Monsanto in the federal district court of Manhattan—*Organic Seed Growers & Trade Association, et al. v. Monsanto*.⁵⁶ The lawsuit was filed on behalf of over sixty family farmers, seed businesses, and organic agricultural organizations, composed of over 270,000 members.⁵⁷ In June 2011, additional plaintiffs were added to the suit, bringing the total number of plaintiff organizations to eighty-three.⁵⁸ The plaintiffs, all proponents of organic farming, are suing Monsanto as a preemptive step to avoid future accusations of patent infringement

makes, uses, offers to sell, or sells any patented invention, within the United States, or imports into the United States any patented invention during the term of the patent.” 35 U.S.C. § 271 (2006).

⁵³ Amanda L. Kool, *Halting Pig in the Parlor Patents: Nuisance Law as a Tool to Redress Crop Contamination*, 50 JURIMETRICS J. 453, 460–61 (2010).

⁵⁴ See THE CTR. FOR FOOD SAFETY, *supra* note 4, at 38.

⁵⁵ See Bratspies, *supra* note 2, at 376.

⁵⁶ *Organic Farmers and Seed Sellers Sue Monsanto to Protect Themselves From Patents on Genetically Modified Seed*, PUBLIC PATENT FOUND. (Mar. 29, 2011), <http://www.pubpat.org/osgatavmonsantofiled.htm>.

⁵⁷ *Id.*

⁵⁸ First Amended Complaint at 4–33, *Organic Seed Growers & Trade Ass’n v. Monsanto Co.*, (S.D.N.Y. June 1, 2011) (No. 11-cv-2163-NRB).

by Monsanto.⁵⁹ This case seeks to aim at the heart of what this comment addresses—whether Monsanto has the right to sue farmers for patent infringement if Monsanto’s seed should land on an innocent farmer’s property.⁶⁰ While the court has not yet heard the case, this is the first lawsuit aimed at this precise issue within patent law in the United States.

A. Innocent Infringement In Action: Monsanto Canada v. Schmeiser

One of the most heavily cited cases regarding innocent infringement of plant patents took place not in the United States, but in Canada. Although the case took place in Canada, the applicable patent protection laws are similar enough to those of the United States for this case to remain a useful example in studying innocent infringement of patented plants. In 1998, Percy Schmeiser was sued by Monsanto Canada for allegedly growing Roundup Ready Corn without a license, thereby violating Monsanto’s patent.⁶¹ Schmeiser used traditional seed saving methods to select for the best crop and replant the seeds each year.⁶² In 1997, Schmeiser sprayed three acres of his land with Roundup and sixty percent of the crop survived.⁶³ At the time, five of Schmeiser’s neighboring farmers were using the patented Roundup Ready Corn in their fields.⁶⁴ Although it is disputed how the patented corn ended up on Schmeiser’s land, the next year, using seed saving methods, Schmeiser planted the patented seeds on 1,030 acres of land.⁶⁵

Following the replanting of the seeds, Monsanto investigators tested the plants along a roadway near Schmeiser’s corn and the test results revealed that Roundup Ready Corn was present in Schmeiser’s cornfields.⁶⁶ The investigator notified Schmeiser of the test results and a patent infringement lawsuit was filed.⁶⁷ In 2004, the Canadian Supreme Court ruled in favor of Monsanto, finding that Schmeiser “used” the patented trait, deprived Monsanto of part of their monopoly, and possessed the patented material for business interests.⁶⁸

⁵⁹ PUBLIC PATENT FOUND., *supra* note 56.

⁶⁰ *Id.*

⁶¹ *Monsanto Canada, Inc. v. Schmeiser*, 2004 SCC 34, [2004] 1 S.C.R. 902, 912 (Can.).

⁶² *Id.* at 927.

⁶³ *Id.* at 928.

⁶⁴ *Id.* at 927.

⁶⁵ *Id.* at 928, 930.

⁶⁶ *Id.* at 928.

⁶⁷ *Id.*

⁶⁸ *Id.* at 917, 930, 937.

Although the Court found that Schmeiser was liable for patent infringement, Monsanto was unable to prove that Schmeiser profited from the infringement.⁶⁹ Schmeiser's case provides an excellent example of how innocent infringement issues arise in actual litigation and how an innocent infringement provision within patent law is needed.

B. The Ongoing Heated Debate

Although the plight of potentially innocent farmers in patent suits is certainly sympathetic, it is not without controversy. Most notably, the story of the David and Goliath battle between Monsanto and small farmers was portrayed in the documentary "Food, Inc."⁷⁰ The film features interviews with people who, at the time of filming, were engaged in a legal battle over allegations of patent infringement through seed saving.⁷¹ The farmer defendants claimed that they acquired the seed innocently and expressed outrage of having to face a large, wealthy corporation in court.⁷²

Farmers expressed further outrage about the aggressive and deceptive investigation tactics of patent holding corporations like Monsanto, the world's largest seed provider.⁷³ Gary Rinehart, a resident of Eagleville, Missouri, claims that Monsanto investigators threatened him in 2002.⁷⁴ Rinehart claims the investigators told him they had proof he planted Monsanto's GM soybeans in violation of the company's patent and that he should settle with Monsanto or "face the consequences."⁷⁵ The unique aspect in this story is that Rinehart is neither a farmer nor a seed dealer—he owns a small country store in a town of roughly 350 people.⁷⁶ In farming communities throughout rural America, Monsanto has developed a reputation for aggressively enforcing patents by relying on "a shadowy army of private investigators and agents in the American heartland to strike fear into farm country."⁷⁷ The aggressive investigations may be geared at

⁶⁹ David Catechi, *Two Wrongs Don't Make a Patent Right*, 56 HASTINGS L. J. 769, 777–78 (2005).

⁷⁰ FOOD, INC. (Magnolia Pictures 2008).

⁷¹ *Id.*

⁷² *Id.*

⁷³ See generally Rich Miller, *Commodities Boom Signals Growth With U.S. Companies Benefiting*, BLOOMBERG (Jan. 18, 2011, 7:52 PM), <http://www.bloomberg.com/news/2011-01-19/commodity-boom-signals-u-s-accelerating-with-corporate-america-benefiting.html>.

⁷⁴ Barlett & Steele, *supra* note 10.

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ *Id.*

intimidating farmers so they will settle rather than engage in a legal battle with Monsanto.

Court documents also show allegations that Monsanto's investigators secretly videotape and photograph potential infringers, infiltrate community meetings, and gather information from informants.⁷⁸ When questioned about the allegations of aggressive investigations, Monsanto declined to comment specifically but stated they are merely protecting their patents.⁷⁹ Monsanto dropped their case against Rinehart after realizing that their investigator targeted the wrong man.⁸⁰ Although the case against Rinehart was eventually dropped, the nonpartisan Center for Food Safety states that Monsanto has filed over ninety lawsuits against American farmers involving more than 147 farmers and 39 small businesses or farm companies.⁸¹ Monsanto has over seventy-five staff and \$10 million devoted *solely* to investigating and prosecuting farmers suspected of patent infringement.⁸²

Accusations of threatening investigations and predatory lawsuits did not go unnoticed by Monsanto. Due to the great deal of negative attention Monsanto receives in the press, a significant portion of Monsanto's website directly addresses issues presented by the movie "Food, Inc."⁸³ The website even goes so far as to address specific ongoing infringement lawsuits and attempts to defend their actions.⁸⁴ Regardless of the ongoing public relations battle between defendant farmers and Monsanto, the creation of an innocent infringement provision limiting liability within patent law would help guarantee that truly innocent farmers are provided with a statutory mechanism that would reduce the financial burden of defending against an infringement allegation.

IV. THE FAILURE OF THE COMMON LAW TO PROTECT FARMERS

Under current laws, farmers may attempt to find protection for patent violation under common law property doctrines including negligence, nuisance, and trespass.⁸⁵ Although these doctrines are available, it is difficult to successfully raise one of these defenses.

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ THE CTR.FOR FOOD SAFETY, *supra* note 4, at 4.

⁸² *Id.*

⁸³ *Issues and Answers*, MONSANTO, <http://www.monsanto.com/newsviews/Pages/Issues-and-Answers.aspx> (last visited Oct. 21, 2011).

⁸⁴ *Id.*

⁸⁵ Catechi, *supra* note 69, at 779.

There are inherent difficulties farmers will face, such as an inability to identify patented crops or traits resulting in an inability to determine the presence of contamination of their own crop and any damage that has been caused.⁸⁶

A. Negligence Claims

One possible defense for an innocent infringer of a patented seed is a negligence counterclaim against the patent holder. Negligence is “the failure to exercise the standard of care that a reasonably prudent person would have exercised in a similar situation”⁸⁷ including “any conduct that falls below the legal standard established to protect others against unreasonable risk of harm.”⁸⁸ In order to make a successful negligence claim, a farmer must prove duty, proximate cause, cause-in-fact, and damages.⁸⁹ In a case of innocent infringement of a plant patent, each one of these elements will be difficult to prove and will likely make for a hard-fought and costly legal battle that the farmer will most likely lose.⁹⁰ Farmers will be faced with obstacles such as showing the patent holder had a duty to prevent contamination of non-patented crops, identifying the source of the contamination, and proving that the contamination caused harm or damage to the farmer’s crops.⁹¹

B. Public and Private Nuisance Claims

Another common law claim a farmer could raise is a nuisance action. In order to prove a nuisance claim, a farmer would have to prove that disbursed seeds or cross-pollination resulted in an “invasion of [an] interest in the private use and enjoyment of [his] land,” that the invasion was “intentional and unreasonable,” and that “significant harm” was caused.⁹²

One example of a successful nuisance claim in action is *In re StarLink Corn Products*. This case dealt with a situation where patented corn was developed that was toxic to certain pests that were common to corn.⁹³ The patented corn, ruled unsuitable for human

⁸⁶ *Id.*

⁸⁷ BLACK’S LAW DICTIONARY (9th ed. 2009).

⁸⁸ *Id.*

⁸⁹ *In re Starlink Corn Prods. Liab. Litig.*, 212 F. Supp. 2d 828, 843 (N.D. Ill. 2002).

⁹⁰ Catechi, *supra* note 69, at 779 (discussing the difficulty of succeeding in a negligence cross-claim against a patent holder).

⁹¹ *Id.* at 779–80.

⁹² RESTATEMENT (SECOND) OF TORTS §§ 821F, 822 (1979).

⁹³ *Starlink*, 212 F. Supp. 2d at 833–34.

consumption by the Environmental Protection Agency, made its way into several products intended for human consumption.⁹⁴ This contamination was allegedly due to either cross-pollination in the fields or comingling in the distribution chain.⁹⁵ The contamination drastically reduced the value of the contaminated corn so the farmers filed lawsuits against Aventis, the owner of the patented corn, under common law claims alleging negligence, strict liability, nuisance, and conversion.⁹⁶ Ultimately, the District Court for the Northern District of Illinois rejected the farmers' conversion claims because the corn was not destroyed, the farmers were not deprived of possession, and the farmers were unable to prove intent.⁹⁷ The court, however, did find that the plaintiff farmers successfully proved their private nuisance claim.⁹⁸ The court stated, "residue from a product drifting across property lines present[ed] a typical nuisance claim," and "[a]ll parties who substantially contribute to the nuisance are liable."⁹⁹ Though this was a unique scenario, it shows how common law claims, though difficult, sometimes have the potential to protect farmers at a minimum level.

C. Trespass Claims

The final common law claim a farmer could assert is trespass. In order to successfully prove a claim for trespass, the farmer must prove that the patent holder "intentionally . . . enter[ed] land in the possession of the other, or cause[d] a thing . . . to do so, or . . . fail[ed] to remove from the land a thing which he is under a duty to remove."¹⁰⁰ Although the transfer of pollen from patented plants may satisfy the element of causing or failing to remove a "thing" from the land of another, a potential trespass claim encounters the same obstacle found in a negligence claim—proof.¹⁰¹ In both negligence and trespass claims, a farmer is required to prove the source of the pollen contamination and, for farmers who do not have the same level of resources as the corporate patent holders of many of these seeds, such proof may be too costly or difficult to obtain.¹⁰²

⁹⁴ *Id.* at 834–35.

⁹⁵ *Id.* at 841.

⁹⁶ *Id.* at 833.

⁹⁷ *Id.* at 844.

⁹⁸ *Id.* at 847.

⁹⁹ *Id.*

¹⁰⁰ RESTATEMENT (SECOND) OF TORTS § 158 (1965).

¹⁰¹ Catechi, *supra* note 69, at 782.

¹⁰² *Id.*

D. Contracting Away Common Law Liability

Going beyond the numerous issues in successfully bringing a common law counterclaim in an infringement case, some patent holders are attempting to use contracts to eliminate their liability for natural seed travel in lawsuits based on common law, leaving farmers to sue other farmers.¹⁰³ A clause in Monsanto's 2009 Technology Stewardship Agreement shifts all liability from incidental, direct, or indirect consequences from its seeds from Monsanto to the farmer.¹⁰⁴ The broad language of this clause extends to suits that an innocent infringement farmer may file against a fellow farmer in an attempt to recoup costs defending an infringement suit.¹⁰⁵ Contractual provisions such as this provide even more barriers to successful common law claims than the already difficult task of meeting the elements of the claim.

In conclusion, though the common law provides potential claims that innocent farmers could assert against patent holders, each type of claim presents inherent difficulties. Furthermore, these common law doctrines allow farmers to assert a counterclaim against the patent holder or a fellow farmer to try to recoup costs, but do not provide a defense or liability limitation to the infringement of the patent.

V. CREATING A NEW SOLUTION

The first step in finding a solution to issues such as truly innocent infringement of plant patents is to examine already-governing patent law. Unfortunately, existing laws are insufficient to adequately protect the financial interests of farmers. Alternatively, and more effectively, a new statute may be created which draws upon both existing defenses to patent infringement and innocent infringement within copyright law. Through borrowing from the language of other statutes, a newly crafted statute could help provide a clear and straightforward resolution method for patent infringement litigation.

A. Current Damages for Patent Infringement in the United States

Under current laws, a defendant found guilty of patent infringement may face very costly expenses including both legal fees and damages assessed by the court. A defendant is guilty of infringement if he "without authority makes, uses, offers to sell, or

¹⁰³ See Eric Holt Gimenez, *Not Monsanto's Fault! Ever.*, HUFFINGTON POST (Mar. 2, 2011, 2:00 PM), http://www.huffingtonpost.com/eric-holt-gimenez/not-monsantos-fault-ever_b_827924.html.

¹⁰⁴ *Id.*

¹⁰⁵ *See id.*

sells any patented invention, within the United States . . . during the term of the patent therefore, infringes the patent.”¹⁰⁶ Although there is a section regarding possible defenses to an infringement claim, there is no provision related to an innocent infringement of a patent.¹⁰⁷ The present issue is the lack of a limit on damages that an innocent infringer may face. Current patent law provides that if a court finds a defendant guilty of patent infringement, the court shall award damages not only to compensate for the infringement based on a reasonable royalty, but also to cover interest and costs fixed by the court.¹⁰⁸ Furthermore, the court may, in exceptional cases, award attorney’s fees for the prevailing party.¹⁰⁹ Plant patents create a problem unique from other patented materials in that truly innocent infringement would be much less likely—indeed, nearly impossible—for many other patented materials.

Though the statutory language, on its face, appears reasonable, these statutes in action can be extraordinarily expensive. The largest recorded judgment in Monsanto’s favor resulting from a farmer lawsuit is \$3,052,800.¹¹⁰ The mean sum paid by farmers in cases with recorded judgments is \$412,259.54, and the recorded judgments granted to Monsanto from farmer lawsuits total \$15,253,602.82.¹¹¹ In addition to these judgments, many farmers must pay additional court and attorney’s fees and, in some cases, the investigation costs Monsanto incurred while investigating them.¹¹²

The expansion of patents to include plant life should be accompanied by an expansion of defenses in patent law to provide clear remedies for innocent infringement cases. While cases of truly innocent infringement may be few, farmers who are at no fault for violating a patent should be provided with a clear remedy that may reduce the financial burden that they bear as defendants.

B. International Approaches to Innocent Infringement

Although the United States has not taken any affirmative action to address the problem of innocent patent infringement, our peer nations have developed statutes and approaches to protect farmers who are truly innocent. In calculating damages for infringement, the “United States stands alone in awarding punitive damages . . . based on the

¹⁰⁶ 35 U.S.C. § 271(a) (2006).

¹⁰⁷ 35 U.S.C. § 282 (2006).

¹⁰⁸ 35 U.S.C. § 284 (2006).

¹⁰⁹ 35 U.S.C. § 285 (2006).

¹¹⁰ THE CTR. FOOD SAFETY, *supra* note 4, at 5.

¹¹¹ *Id.*

¹¹² *Id.*

perceived willfulness of the defendant's conduct."¹¹³ The time has come for the United States to join its economic allies in protecting the rights of innocent infringers of patent rights.

In the United Kingdom, an "innocent infringer" statute has been created.¹¹⁴ The statute states that innocent infringement may either reduce or eliminate damages, provided the infringer can prove that "at the date of the infringement he was not aware, and had no reasonable grounds for supposing, that the patent existed."¹¹⁵ Although the United Kingdom has an innocent infringement provision, when damages are assessed the losing party may also be forced to pay either a portion or all of the attorney's fees.¹¹⁶

A different approach to innocent infringement of a plant patent may be found in India through its Protection of Plant Varieties and Farmers' Rights Act of 2001.¹¹⁷ This Act provides a provision to protect farmers who have innocently infringed a patent. Section 42 of the Act states that a patent "shall not be deemed to be infringed by a farmer who at the time of such infringement was not aware of the existence of such right."¹¹⁸ This provision is a defense against infringement and allows for patent law in India to adequately balance the interests of intellectual property right holders and the interests of farmers. Learning from our international peers, the United States must acknowledge innocent infringement issues and create a statute to deal with these problems.

C. Infringement Exceptions Have a Place in Patent Law

In order to ensure that infringement litigation provides an adequate balance between the patent holder's rights and the rights of innocent farmers, a statutory provision must be enacted by Congress that would limit the level of liability farmers would face in a legal battle. Such a statute should draw upon language both from existing defenses in patent law and innocent infringement statutes in copyright law.

In some patent law infringement cases, liability exemptions are

¹¹³ Larry Coury, *C'est What? Saisie! A Comparison of Patent Infringement Remedies Among the G7 Economic Nations*, 13 FORDHAM INTELL. PROP. MEDIA & ENT. L. J. 1101, 1118 (2003).

¹¹⁴ Patents Act, 1977, c. 37, § 62(1) (U.K.).

¹¹⁵ *Id.*

¹¹⁶ *Patent Litigation in the United Kingdom*, LADAS & PARRY, LLP (June 25, 2002), http://www.ladas.com/Litigation/ForeignPatentLitigation/UK_Patent_Litigation.html.

¹¹⁷ The Protection of Plant Varieties and Farmers' Rights Act, No. 53 of 2001, INDIA CODE (2001), vol. 15, available at <http://agricoop.nic.in/PPV&FR%20Act,%202001.pdf>.

¹¹⁸ *Id.* at § 42(i).

appropriate and necessary. In 35 U.S.C. 271(e)(1), liability exemptions within patent law are created for very specific cases. The origins of this statute stemmed from the common law case of *Whittemore v. Cutter*, which established that infringement should not be punished when merely for scientific experiments in which infringement was innocent.¹¹⁹ Ultimately, the statutory foundation for the research exemption was created in the Drug Price Competition and Patent Term Restoration Act of 1984 and is now known as the Hatch-Waxman Act.¹²⁰ The Hatch-Waxman Act has limited the situations where the research defense is available; however, the courts nevertheless have upheld the exemption and used it to limit the potential liability of an alleged infringer of a patent.¹²¹ This exemption provides an affirmative defense for infringement of a patent performing research and gathering information in preparation for federal regulatory approval for a limited term before the end of the violated patent term. This exemption most commonly applies to drug patents; however, it provides an example of a precedent within patent law for limiting infringement liability.

D. Crafting the Language for an Innocent Infringement Provision

An innocent infringement statute in patent law could be modeled on innocent infringement provisions in the Copyright Act such as 17 U.S.C. § 504(c)(2). This statute allows for a reduction in damages that goes below the statutory minimum for infringement. While there are very few successful cases of innocent copyright infringement, the wording of such provisions and the goal of mitigating damages provide an excellent paradigm of how to protect the rights of copyright or patent owners while recognizing cases of truly innocent infringers. An infringer cannot, however, claim innocent infringement in order to mitigate damages under 17 U.S.C. § 402(d) when a proper notice of copyright was placed on the work and the infringer had access to the notice. The present issue of plant patents and innocent infringers are even more difficult than copyright infringement because there is no distinguishing mark that can be placed on the seeds or plants that are patented.

¹¹⁹ *Whittemore v. Cutter*, 29 F. Cas. 1120, 1121 (C.C.D. Mass. 1813) (No. 17600).

¹²⁰ TOSHIKO TAKENAKA, *PATENT LAW AND THEORY: A HANDBOOK OF CONTEMPORARY RESEARCH* 649–50 (2008).

¹²¹ *Id.*

E. Proposed Statutory Language

Based upon the statutes discussed above, an innocent infringement statute in the Patent Act aimed at protecting farmers could read as follows:

I. Statutory Damages--

(1) In a case where the infringer of a plant patent or utility patent applied to plants, and the court finds, that such infringer was not aware and had no reason to be aware that his or her acts were an infringement of a patent, the court may not award statutory damages of an award of not more than \$20,000 for the patented material that the defendant should have paid to the plaintiff for such use during the preceding period of up to 3 years.

(2) In calculating damages, the court shall consider the strength of the innocent infringement defense in the case, the number of acres where patented material was found, and any other relevant mitigating factors to ensure damages reflect the level of infringement in the case.

(3) Nothing in this paragraph limits what may be considered willful infringement under this subsection.

The language in this proposed amendment to the Patent Act will provide reasonable damage limitations and clearer resolutions in plant patent infringement cases. The time and acreage limitations will help provide more boundaries on damages and still allow for the damages to adequately reflect the level of infringement and the size of the infringing farm. Through considering both the need for a cap on the calculation of damages and the need to protect the rights of patent holders, the language in this proposed statute provides a starting point for a more equal balancing of interests in plant patent infringement lawsuits.

VI. CONCLUSION

The inadvertent movement of patented seeds onto the land of farmers who do not have a license to use the seeds is a problem that can no longer be ignored. Under current laws and regulations, a great deal of power and control lies with the patent holders of these seeds resulting in inequitable results for farmers who choose to abstain from using patented seeds. As patent infringement litigation moves forward, it will be essential to the livelihood of farmers to balance the interests of plant patent holders and the interests of farmers who

innocently obtain patented seeds on their land. Through the creation of an innocent infringement provision within plant patent law, innocent farmers will have access to a statutory mechanism through which their liability may be limited while still acknowledging the rights of plant patent holders.

