This is the second of three posts examining the topic of GMOs and patents. The first post in the series provided an overview on the topic of patents and described the concept of terminator genes; this post will examine two high-profile lawsuits brought against farmers for using GM seeds, and the final post will examine whether there have been cases of lawsuits brought against farmers due to inadvertent contamination.

Most of this article will focus on Monsanto, primarily because it has been the target of many activist efforts (I have yet to see a March Against Syngenta). As you may know, the commonly repeated myth is that Monsanto has taken hundreds of farmers to court for inadvertent contamination or for replanting GE seeds. According to the company’s website, there have been 147 lawsuits filed since 1997 in the United States. This averages about eight per year for the past 18 years. To date, only nine cases have gone through full trial. In every one of these instances, the jury or court decided in our favor.

I wanted to determine if that number is normal, however it was very difficult to do a comparison. I thought I could compare it to digital piracy, however, there are millions of people who illegally download content everyday, whereas Monsanto states that it has agreements with only 325,000 farmers in the United States. As such, I cannot say whether eight lawsuits a year is aggressive or lenient. Other seed developers sue farmers as well, although I was unable to find exact numbers (this article outlines a $2.5 million settlement between farmers in Arkansas and BASF). At the same time, had I been able to find numbers from other seed developers and the numbers weren’t similar, one could always argue that Monsanto does a better/worse job identifying patent infringers.

I’m going to examine two high-profile cases in two different countries: the first is Monsanto Canada Inc. v. Schmeiser. The second is Monsanto Co v. Bowman. I selected these cases because both went to the Supreme Courts of their respective countries.

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Schmeiser v Monsanto Canada Inc.

The information in this section has been summarized from the following court documents: the Canadian Supreme Court Case.
Â (particularly the section entitled Â“Salient FactsÂ”) and the Federal Court Case. Schmeiser was also the subject of a documentary made by Journeyman Pictures entitled Â“David versus MonsantoÂ”. It is just over 1 hour long and freely available here, and Iâ€™ve included some points from it below.
Percy Schmeiser had been a farmer in Saskatchewan for over 50 years (if you haven’t been, you should go. Saskatoon is lovely). He grew canola, among other crops. He saved seeds from a portion of his field every year for planting the following year. In the mid-90s, several of his neighbors switched to Round-Up Ready (RR) canola. He never purchased a license to plant the crop. He found out that there was Round-Up Ready canola growing on his field in 1997: he routinely sprayed the area around power-poles and ditches, and he noticed that a portion of the plants he had sprayed had survived the spraying, i.e. were Round-Up resistant (keep in mind that Round-Up is used to kill grass and plants). So he then conducted a test. He sprayed three to four acres of field along the roadside with Round-Up, and he noticed that about 60 percent of them survived, with a higher density along the roadside. This road was used by his neighbors for delivery/transport of canola seeds. He then used the seeds from that field, including the swath tested for Round-Up, to plant the following year’s crop (this important point is in paragraph 40 of the Federal case).

Schmeiser’s canola was tested by a private firm who conducts random audits of canola crops. The farms are either identified by Monsanto among their licensed farmers, or they receive anonymous tips/complaints. The private firm received an anonymous tip from someone who claimed that Schmeiser was growing Round-Up Ready canola without a license.

Between 1997-1998, a series of samples were taken and tested. Some were by court order, but the first series were just from road-side samples (allegedly taken without trespassing, although this is heavily contested in the documentary). The samples showed from 0-98 percent Round-up tolerant canola. In 1999, Schmeiser was advised to buy new seeds, since the lawsuit had started.

In 1998, testing revealed that >90 percent of his 1,000 acres were Round-Up Ready. The Federal court case states that Schmeiser did not deny the presence of GM canola on his field but he claims that he did not deliberately plant or deliberately cause the planting of the seeds. Schmeiser additionally stated that he had suffered substantial damage and loss due to the GM canola, because his own variety that he had been developing over the course of many years got contaminated. Additionally, he argued that in order to have infringed upon the patent, he must have sprayed his fields with Round-Up, and he claims that he did not do this. Finally, Schmeiser’s defense team argued that by releasing the gene into the environment in an uncontrolled manner, Monsanto had lost or waived their rights to an exclusive patent.
The judge in the Federal Court Case wrote that Schmeiser’s argument that Monsanto cannot control their patent/products defies all evidence, including the fact that Monsanto tests crops/fields, and removes plants from fields of other farmers who complained of undesired spread of Roundup Ready canola to their fields.

During the trial, two farmers testified that they had called Monsanto to have unwanted crops removed from their field, which had been done (in the documentary, Schmeiser said that all the witnesses had been paid off by Monsanto). The judge also stated that Schmeiser himself admitted to have kept seeds that had been shown to be Round-Up Resistant for replanting. The judge agreed with expert testimony that the wind/birds/bees alone would not account for the high concentration of GM crop found on the field, therefore, the patent had been infringed upon. He dismissed Schmeiser’s claim that in order for Monsanto’s patent to be infringed upon, it would have required his fields to be sprayed with Round-up.

Schmeiser took the case to the Supreme Court of Canada (Ottawa’s a beautiful place if you haven’t visited. And yes: I’m a shill for Travel Canada 😏 ). The Supreme Court ruling was in favor of Monsanto, but it was not unanimous: several of the judges wrote partially in favor of Schmeiser. Schmeiser’s team had creatively argued that the patent was over the gene and the seed, not over the plant because plants are not patentable as higher life forms. The lawyers stated that Schmeiser had ultimately ‘used’ the canola plant and not the seed. It is on this point that several of the Justices agreed, however, the majority ruled that Mr Schmeiser had infringed on the patent by keeping and replanting the seed.

Much of what Schmeiser said in the documentary contradicted the official court documents. Schmeiser stated that Round-Up resistant canola was introduced without much testing and that government officials were blinded by Monsanto’s promise of better yields and more nutritious crops. This statement defies evidence since Round-Up Ready crops are built on the premise of nutritional equivalence. Schmeiser also stated that he had developed his own strain of canola, which had taken him 50 years to develop, and that Monsanto’s contamination of his fields destroyed all his work and effort. Again, this statement contradicts his own testimony in court, where he admittedly used seeds that survived Round-Up treatment to plant the following year’s crop. I have to be honest: if you like conspiracy theories, this movie is a goldmine. The topic that wasn’t addressed in the documentary was the subject of patents: the fact of the matter is that Monsanto’s seeds are patented, and if you’re a farmer and you don’t like Monsanto’s business practices, then you don’t have to plant Monsanto’s seeds.

**Bowman v. Monsanto**
Most of the information in this section comes from the Supreme Court Case delivered by Justice Kagan. The case was argued and decided in 2013. Vernon Hugh Bowman is an Indiana farmer who, it is fair to say, appreciates Roundup Ready soybean seed. He used to buy Monsanto’s Round-Up Ready soybean seeds each year, which he’d plant and then sell the crop to a grain elevator. He’d try to squeeze in a second crop, which was riskier, and as such, he didn’t want to buy seeds again from Monsanto so he simply bought commodity soybeans intended for human or animal consumption; and planted them in his fields. He saved the seeds from this second harvest and used it for the following season’s second crop, and he did this for eight seasons. Monsanto found out and sued Bowman.

Bowman’s defense was based on patent exhaustion, which means that once you buy a patented
item, that item belongs to you and you can do whatever you’d like with it. The District Court rejected Bowman’s argument, and the Federal Court affirmed the decision, yet the case made its way to the U.S. Supreme Court.

The Supreme Court received briefs from many different organizations and business sectors describing the impact that the ruling would have. I was surprised to find that one of my former employers joined forces with several of its competitors to submit a brief on behalf of the biotech sector. Similar briefs were written on behalf of the software sector, and economists also wrote a brief about the impact that the ruling would have on the economy.

In a very unusual display of unity, the court’s decision for the case was unanimous: the Justices concluded that patent exhaustion applies only to the item sold, and that the buyer cannot replicate the item. Their opinion states that if purchasers of items were to be able to make endless copies, then the patent would be effective only for the very first sale. As such, Bowman could have sold the beans he purchased from the elevator grain, or he could have eaten them or fed them to animals, but he couldn’t make copies of them by replanting the seeds.

The tone in the opinion strikes me as mocking Bowman at certain points. For example, the document states:

Still, Bowman has another seeds-are-special argument: that soybeans naturally “self-replicate or “sprout” unless stored in a controlled manner, and thus “it was the planted soybean, not Bowman” himself, that made replicas of Monsanto’s patented invention.

Justice Kagan then writes,

But we think that blame-the-bean defense tough to credit. Bowman was not a passive observer of his soybeans’ multiplication; or put another way, the seeds he purchased (miraculous though they might be in other respects) did not spontaneously create eight successive soybean crops.

In conclusion, the Supreme Court’s opinion states that by planting the beans, he effectively replicated Monsanto’s patent and the patent exhaustion principle does not apply in this scenario.

Conclusion
In both of the cases I’ve reviewed above, the farmers admitted to replanting Monsanto’s seeds, and from my perspective, the courts ruled fairly. As explained in the first post in the series, GE crops are not unique in being patented. Many other crops and decorative plants are patented, and some non-GE seeds have licensing agreements between seed developers and farmers, too. As such, I think that knowingly replanting patented seeds of any variety for financial gain is equivalent to theft, particularly when your neighbors may be farming honestly and paying market price for the same seeds.

A 2003 New York Times’s story reporting a lawsuit between a farmer and Monsanto provided the following comment:

> In this respect, the seed lawsuits resemble the record industry’s actions against people who share music files on the Internet. There, too, the goal is not primarily to recover money from particular defendants but to educate the public, and perhaps to scare other potential offenders.

I’d agree with that, however, I’m also left wondering if it has been in Monsanto’s best long-term interest: the lawsuits may have educated and scared farmers, but also generated much negative press with consumers.

The question remaining is whether any of the lawsuits have been in instances in which farmers have been sued for unknowingly planting patented seeds. That’s the topic of the final post in this series.

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