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## Goliath v. Schmeiser

Phil Bereano & Martin Phillipson

Philip L. Bereano, JD, is Professor of Engineering (technology and public policy) at the University of Washington. He is the former Director of the University's Program in Social Management of Technology, a founding member of the Washington Biotechnology Action Council, a founding member of the Council for Responsible Genetics, and a national board member of the American Civil Liberties Union. Martin Phillipson is an Associate at the Estey Center for Law and Economics in International Trade and a Professor of Law at the University of Saskatchewan.

Are genes patentable? Are transgenic plants and animals patentable? In the United States the answers are affirmative, and over the past two decades the US has pressured other countries to adopt the same sort of patent rules. Yet, two years ago, in *President & Fellows of Harvard College v. Canada*, the so-called "Harvard Mouse" case, the highest Canadian court held that "higher life forms" could not be subjected to patent monopolies.

This spring, the Supreme Court of Canada rendered judgment in another closely followed case: Monsanto's suit against Percy Schmeiser, which alleged that the Saskatchewan farmer had infringed their patent on Roundup Ready canola. The result was mixed. The Court affirmed the Harvard ruling that plants are not patentable in Canada, but said that genes are. Schmeiser, though he had infringed, was not held responsible for monetary damages.

In 1993 Canadian Patent No. 1,313,830 was issued to Monsanto Canada for "Glyphosate Resistant Plants." However, the patent did not cover the plants themselves, but only the process by which genes resistant to herbicides (in this case, Monsanto's own Roundup) were developed, as well as the modified genes and cells. By the year 2000, forty percent of all canola grown in Canada was "Roundup Ready."

In order to use Roundup Ready canola, farmers must sign a Technology User Agreement (TUA), paying a royalty fee of \$15 per acre to Monsanto Canada, agreeing not to save and replant seed, promising to use Roundup herbicide, and allowing Monsanto to inspect their crops in order to verify compliance with the terms of the TUA.

On March 29, 2001 a trial judge found Schmeiser to have committed multiple infringements of Monsanto's patent and fined him \$20,000, asserting that the levels of Roundup Ready Canola on Schmeiser's property were such that he "knew or ought to have known" that his crop was planted with Roundup-ready seeds. Since Schmeiser had no agreement with Monsanto, he was guilty of using their patented product without a license.

The findings of fact of the trial judge are crucial to the overall outcome of the legal battle between Monsanto and Schmeiser. Generally, once a trial judge has made findings of fact, appellate courts will overturn them only in exceptional circumstances. Appellate courts only have the original transcripts of the trial before them and there are no new witnesses present or new evidence accepted.

Although discussions of Monsanto v. Schmeiser have been based on wildly diverging versions of "what actually happened," the only version of events that matters legally is the one accepted by the trial judge.

The Supreme Court highlighted the most significant aspects of this factual history in paragraphs 59-68 of its judgment:

In 1996 Mr. Schmeiser grew canola on his property on Field Number One, the seed which was the subject matter of Monsanto's allegations could be traced to this 370 acre field on Mr. Schmeiser's property. . . . [I]n the Spring of 1997, Mr. Schmeiser planted the seeds saved from Field Number One. He sprayed a 3 acre patch of this field with Roundup and found that 60% of the plants survived, a clear indication that these plants contained Monsanto's patented gene and cell. . . . [I]n the fall of 1997 Mr. Schmeiser harvested the Roundup Ready Canola from the 3 acre patch he had sprayed with Roundup. He did not sell it. He instead kept it separate, and stored it over the winter in the back of a pick-up truck. A Monsanto investigator took samples of canola from the public road allowance bordering two of Mr. Schmeiser's fields in 1997, and all samples contained Roundup Ready Canola. In March 1998, Monsanto put Mr. Schmeiser on notice of their belief that he had grown Roundup Ready Canola without a license. Mr. Schmeiser nevertheless took the harvest he had saved in the pick-up truck and had it treated for use as seed. Once treated, it could be put to no other use. Mr. Schmeiser planted the treated seed in nine fields, covering approximately 1000 acres in all. Samples were taken from the canola plants grown from this seed . . . and a series of independent tests by different experts confirmed that the canola Mr. Schmeiser planted and grew in 1998 was 95-98% Roundup resistant.

The trial judge found that there was no other "reasonable explanation" for the concentration or extent of Roundup Ready canola of commercial quality evident from the results of tests on Schmeiser's crop. Given these uncontested (according to the Court) findings of fact, the only legal issue to be decided by the Supreme Court was whether these actions amounted to "use" of Monsanto's patented genes and cells, and whether (in the wake of the Harvard Mouse case) Monsanto's patent was invalid as constituting a patent over a "higher life form."

The Court was at pains to point out that its decision was based on the facts as found at trial and that in different factual circumstances, a

different legal outcome might result. "The issue is not the perhaps adventitious arrival of Roundup Ready Canola on Mr. Schmeiser's land in 1998. What is at stake in this case is the sowing and cultivation which necessarily involves deliberate and careful activity on the part of the farmer" (Paragraph 92). Schmeiser was, however, spared the insult of having to pay damages to the multinational corporation, since the majority found that he had not profited additionally from the sale of the patented genes in his canola.

The monopoly granted by a country's patent extends only within the boundaries of that nation. So, literally, the Monsanto v. Schmeiser case only governs the nature of patent law in Canada. Yet some cases (particularly the 1980 U.S. *Chakrabarty* decision, the first in the world to find a living organism patentable) have had impacts far beyond the country's borders. Abetted by cajoling and pressures from all recent U.S. administrations, patent doctrines favoring the biotech industry have spread rapidly, consistent with the growth of corporate globalization, international trade harmonization agreements, and the desire of multinationals to operate under uniform rules. Monsanto and its governmental allies may try to extend aspects of the Schmeiser case to more lands. Thus, it is important to dig beneath the corporate spin and understand exactly what the Canadian court did, and did not, decide.

The following are the major elements of this decision:

• In Canada, plants are not patentable. In this regard, one should also note that the subject of the litigation was Monsanto's patent on the altered gene and the process for making it, which did not even claim the resulting plant.

- Although the general rule of patent infringement is that any unauthorized use, even unknowing or minimal, is infringement (although the damages would depend on such factors), this decision says that for gene patents the basis for a successful suit depends on the intention of the defendant and the nature and extent of the defendant's use.
- Thus, the Schmeiser case centers on the nature of his use; any liability is highly fact-dependent. The judges split 5-4 over whether the "use" of protected genes in unpatentable crop plants could amount to infringement; the minority said no, since the plants cannot be monopolized. However, the majority held that, because the factual use of the crop containing Monsanto's patented genes was extensive, was in a commercial context, and was found to be done "knowingly," it did legally constitute "use" of Monsanto's invention and therefore amounted to infringement (Paragraph 87).
- Contamination the "accidental and unwelcome" presence of the transgenes by itself is not automatically patent infringement in Canada (Paragraph 86). The subsequent conduct of farmers upon discovering the existence of Roundup Ready Canola in their fields will be more determinative of their legal liability than the mere factual existence of the crop on their property (Paragraph 95).
- Also, this case says nothing about whether contamination is actionable against a patent holder like Monsanto (for example, under the common law doctrines of nuisance, trespass, or — like a pending Saskatchewan case — violation of environmental protection statutes).
- •Farmers' rights are not inherently jeopardized by this decision, no matter what the industry says. Canada has a Plant Breeders Rights Act which allows for a form of intellectual property protection over novel

plant varieties. The rights granted under the Plant Breeders Rights Act are not as extensive as those granted under the Patent Act, but of significance in light of Monsanto v. Schmeiser is the fact that the Act contains a specific "farmers privilege." Farmers are allowed to save and replant seeds from a protected variety subject to certain conditions. In Canada, therefore, a traditional feature of intellectual property law remains intact — i.e., that if something is protected under one piece of intellectual property legislation, it cannot be simultaneously protected under another. This is contrary to the position in the United States, where in 2001 the Supreme Court held in the *Pioneer* case that regular patent protection was available for plant varieties in spite of the existence of two separate legislative schemes to give other protection to them.

In conclusion, we must understand that the results of this case were heavily dependent upon the facts found by the trial court. It is a confusing decision. Monsanto was able to exert legal control over crop plants even though the law does not allow plants to be patented. This is why the minority dissented. They stated the old adage of patent law, that "what is not claimed is automatically disclaimed." Monsanto claimed only the gene and the process; ergo they disclaimed the plant (which in Canada is non-patentable in any event) and Schmeiser could not be guilty of patent infringement by "using" the canola plants. The majority found this view of "use" to be unrealistic and disagreed, stating that by cultivating a plant containing the patented gene and composed of the patented cells Mr. Schmeiser of necessity "used" the patented material. In many respects, this finding is the most significant (and most troubling) outcome of the Monsanto v. Schmeiser battle, because it gives Monsanto control over something which it cannot patent — the Roundup Ready Canola plants themselves.

Although in many ways the Schmeiser case is rightly seen as a setback for GMO critics, it also sets a useful precedent for arguing that such contamination is not an infringing use of patented biological materials if a corporation were to try to raise an infringement argument in defending against a contamination lawsuit. In the future, opponents of genetically modified organisms will be able to argue that the contamination by GMOs that is already occurring — and which governmental regulations have not yet been effective in preventing — can be the basis for litigation; the possibility of the award of damages will pressure corporations to avoid further contamination.

The authors would like to acknowledge the tireless efforts of Mr. Schmeiser, whose campaigning against GMOs has significantly raised the visibility of issues of monopolies over life forms, farmers' rights, GMO contamination, and corporate control of agriculture.