Court File No. T-1593-98

FEDERAL COURT - TRIAL DIVISION

BETWEEN:

MONSANTO CANADA INC. and
MONSANTO COMPANY

Plaintiffs

AND:

PERCY SCHMEISER and
SCHMEISER ENTERPRISES LTD.

Defendants

TRIAL BRIEF ON BEHALF OF THE DEFENDANTS

PERCY SCHMEISER AND SCHMEISER ENTERPRISES LTD.

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TRIAL BRIEF ON BEHALF OF THE DEFENDANTS PERCY SCHMEISER AND SCHMEISER ENTERPRISES LTD.

I. FACTS

A. Background

1. Percy Schmeiser is 69 years of age. He has been growing canola since the early 1950s. He follows his own practices for the growing of canola, including saving and reusing his own canola seed from crop year to crop year. This is not an unusual farming practice and has been a fundamental right enjoyed by farmers in Canada. Even though Mr. Schmeiser did nothing but follow his usual practice of saving and reusing his own canola seed in 1997 and 1998, he and Schmeiser's Enterprises Ltd., the corporation through which he carries on his farming operation, now find themselves being prosecuted by a large multi-national company alleging that in 1998 they infringed its patent.

2. The Plaintiffs, Monsanto Canada Inc. and Monsanto Company (referred to hereafter as "Monsanto"), have alleged that Mr. Schmeiser deliberately grew a Roundup resistant canola crop in 1998 from seed that he saved from his 1997 canola crop, which Monsanto alleges infringes its patent.

3. There do appear to be Roundup resistant canola plants growing on Mr. Schmeiser's property against his wishes. This is the result of contamination of Mr. Schmeiser's seed supply, and not by design. Monsanto cannot control, and has never tried to control, the spread of its gene around the countryside. They have contaminated Mr. Schmeiser's fields and now they are suing him for patent infringement.

B. The Farming Practices of Percy Schmeiser

4. Mr. Schmeiser has been growing canola since the 1950s. Ken Kirkland, an expert tendered by the Plaintiffs, admitted that such experience would make Mr. Schmeiser an experienced canola grower. After growing canola over many years, Mr. Schmeiser has

developed his own farming practices particular to the land that he farms, which practices have withstood experimentation and the test of time.

5. Percy Schmeiser's canola crops have performed much better than average in bushels per acre. His canola crops are relatively free of common diseases that plague canola such as black-leg, and are also relatively free of weeds.

6. Mr. Schmeiser has not put in one crop insurance claim for any of his canola crops due to farming methods, and in fact, he receives a premium discount on his canola crop insurance due to his claims experience.

7. Mr. Schmeiser saves and reuses his own canola seed. Many other farmers choose to do so. Farmers still have the right to choose and Mr. Schmeiser chose, at all relevant times, to save and reuse his own seed rather than being reliant on seed companies, or incurring what he sees to be an unnecessary expense. The last time that Mr. Schmeiser bought canola seed was in 1993, before the crop year of 1999 when he was forced to buy canola seed to fight the contamination of his crops by the Roundup resistant volunteer canola.

8. Mr. Schmeiser will not have his seed treated every year before planting. He treats seed on an as-needed basis. When he does seed with treated seed, he mixes the treated seed with bin-run seed and fertilizer. He does so for many reasons:

(a) The air seeder works much more effectively with a mixture because the seed will resist tendencies to coagulate; and

(b) The seed treatment on the treated seed will rub off on the bin-run seed, reducing costs.

9. Another farming practice followed by Mr. Schmeiser is that he grows canola back-to-back. He has done so up to four years in a row. This is not a recommended practice, according to Mr. Kirkland, because the practice will build up disease from year to year. If Mr. Kirkland's opinion were correct, Mr. Schmeiser's canola crops should have been choked

with disease by now. Since his fields are clean and disease free, Mr. Schmeiser's saved canola seed was either resistant to disease, or his farming practices compensated for the risk.

10. Over the years, the canola grown by Mr. Schmeiser, from his own seed, and seeded back-to back, has been of superior yield and quality. He took great pride in his canola seed. It was very difficult for him to be forced to buy new canola seed in 1999, to get rid of the contamination:

> Q And why did you go out and buy new seed?
>
> MR. HUGHES: That's already been asked.
>
> A On the advice of you because you felt I should use completely new seed for '99. And that -- I'd just like to add a few comments to that. I think that after you told me to go and purchase new seed to seed my 1999 crop, I think that was – I think that was one of -- I'm sorry. I think that was one of the hardest things I ever had to do because it – I'm sorry -- because it was seed that took years to develop and I had to get rid of it. I'm sorry.
>
> [June 13, 2000, page 90, lines 6 to 13]

11. Mr. Schmeiser does use herbicides for weed control. He will incorporate herbicide in the spring (or in the fall where he is dealing with a summer-fallow field or a field in which he is not growing canola back-to-back). Herbicides used for such purposes include Treflan (Rival). Since the herbicide is incorporated in the soil, it controls weeds before they grow. According to Mr. Schmeiser such soil incorporation of herbicide will last up to three years.

12. In the spring, as is common farming practice, Mr. Schmeiser will burn off fields with Roundup herbicide before planting (a "spring burn-off"). He will also use Roundup herbicide to "chem fallow" fields. Both Mr. Kirkland and Mr. Mitchell agreed that this is a common and acceptable use of Roundup by a conventional canola grower.

13. After the crop is in and growing, Mr. Schmeiser uses other herbicides such as Muster and Assure which are safe to spray on canola to control weeds on an as-needed basis.

Mr. Schmeiser does not, and did not, spray Roundup on his growing canola, as this would be disastrous to the canola crop. After the crop is in and growing Roundup does have a use, in spraying for weeds and volunteers around power poles and in the ditches, and for chem fallow.

14. All in all, Mr. Schmeiser's farming practices have proved to be effective. His canola seed, and the crops grown from it, are a source of great personal pride and accomplishment. He is, by all standards, a successful canola farmer.

C. The Nature of Monsanto's Invention

15. Monsanto is not a seed company. Monsanto sells no canola seeds in Canada. It has proprietary know-how that allows it to take a gene from other organisms and introduce it into plants such as canola. Once introduced, the extra gene gives the plant glyphosate resistance. This gene, and the insertion thereof into certain plants, is now the subject of a patent held by the Defendant Monsanto Company.

16. The Defendant, Monsanto Company, obtained Patent No. 1-313-80830 (the "Invention") on February 23, 1993. Monsanto Company licenses Monsanto Canada Inc. to use the Invention in Canada. Regulatory approval was obtained in 1995 for the unconfined release into the environment of the gene mentioned in the Invention. Commercial sales of the canola seed began in 1996. Monsanto delivers seeds containing the gene to seed companies who cross-breed the seed with their own canola plants and sell their canola seeds to farmers.

17. A canola plant containing the gene mentioned in the Invention behaves no differently than any other canola plant. Canola plants, whether conventional or genetically-altered, produce seeds. Wherever the genetically-modified canola seed is spread, whether by wind, blown off trucks, carried with water during spring runoff, or from farm implements, new genetically-modified canola will grow. Generally, farmers describe canola that has spread and is growing where it was not deliberately planted as "volunteer" canola.

18. The genetically-modified canola also produces genetically-modified pollen. Canola is an open-pollinated crop. This means that pollen from genetically-modified canola

plants will fertilize other conventional canola plants, and their progeny will carry the Roundup-resistant characteristic. The gene introduced into the genetically-modified canola expresses itself as a dominant gene. By the application of basic genetics, if a canola plant with the herbicide-tolerant characteristic fertilizes a Roundup-susceptible canola plant all the progeny from that canola plant will be resistant to Roundup.

19. By seeds or by pollen, Monsanto's invention can spread to places it was not planted or intended to be grown. The spread of seeds, whether by farming practices or by natural means, and the flow of pollen imparts to Monsanto's invention a unique characteristic not seen with any other "invention" protected under the Patent Act. The Invention has the unique ability to replicate itself and invade land and plants where it was not intended. Monsanto has not, and never attempted to, control the spread of its gene around the countryside.

D. The Spread of the Invention to Property of the Defendants

20. Through 1997 and 1998 Mr. Schmeiser, through Schmeiser's Enterprises Ltd., farmed the following land in the Rural Municipality of Bayne. The fields have been identified on discovery and elsewhere, and were referred to during the course of this Trial, as follows:

NW ¼ 22-39-25 W2 – "Field #1",
SW ¼ 22-39-25 W2 – "Field #2",
NW ¼ 15-39-25 W2 – "Field #3",
SW ¼ 15-39-25 W2 – "Field #4",
SE ¼ 15-39-25 W2 – "Field #5",
SE ¼ 20-38-25 W2 – "Field #6",
NE ¼ 7-39-25 W2 – "Field #7",
SE ¼ 7-39-25 W2 – "Field #8",
SE ¼ 9-38-25 W2 – "Field #9".

21. The crop that Mr. Schmeiser planted in 1997 was derived entirely from canola seed saved from the crop grown in 1996. Since Field #1 was summer-fallow in 1995, and since the granaries in which Mr. Schmeiser stored his canola were located on Field #6, the canola seed for 1997 likely came from Fields #1 and #6. It was Mr. Schmeiser's farming

practice to use canola seed from a field that had been summer-fallow the year previous because that is where the cleanest seed (free of weeds and other seeds) can be found.

22. Carlyle Moritz described how in 1996, wind blown swaths from Mr. Huber's adjacent field blew into Field #6, were picked up with a combine and put into the grain bins on the same Field. According to Monsanto's records, Mr. Huber had been growing Roundup Ready canola on the field from which the swaths blew in.

23. The crop that Mr. Schmeiser planted in 1997 was seeded with an air seeder. The seed source was his saved seed from 1996.

24. In the summer of 1997 Mr. Schmeiser arranged for Roundup herbicide to be sprayed by hand along the ditch and around power poles adjacent to the road running alongside Fields #1, #2, #3 and #4. After the spraying Mr. Schmeiser was puzzled by the number of volunteer canola plants that had survived and which ought to have died.

25. Mr. Schmeiser, thinking he made a mistake with respect to the application rate, or wondering whether the canola in the ditches had developed resistance to Roundup because of many years of exposure to that herbicide, performed an experiment. Mr. Schmeiser sprayed Roundup herbicide with his sprayer adjacent to the power poles in Field #2. He used his 80-foot sprayer for this purpose but cut off one-half the sprayer and, therefore, only sprayed 40 feet at a time. He made one trip weaving in and around the power poles and a return trip beside the power poles. The total area sprayed was approximately three acres.

26. Following this experiment, both Mr. Schmeiser and his hired hand, Carlyle Moritz, observed that approximately 40% of the canola plants that had been sprayed with Roundup had died, and that approximately 60% survived. They both clearly observed that the surviving canola plants grew in clumps and were thickest nearest the road and thinned out further into the field.

27. In the fall of 1997, Mr. Schmeiser was injured in a farm accident. Therefore, he relied heavily on Carlyle Moritz's help to swath and combine the 1997 canola crop. It was Mr. Moritz who swathed and combined Field #2.

28. Mr. Moritz was given no special instructions before swathing and combining Field #2, and he went about the task in an ordinary fashion. As is the normal farming practice, Field #2 was swathed and combined separately. To swath the field Mr. Moritz used a self-propelled swather. He drove around the field three or four times, changing directions with each rotation, and then went back and forth parallel to the road to complete the task. Mr. Moritz was aware of the area that had been sprayed with Roundup, however, he was given no special instructions to make sure that he swathed and combined that area separately, and he did not do so.

29. Mr. Moritz also combined the field in an ordinary fashion. He drove the combine on the approach road and first cleared the area around the approach so that trucks could be driven into the field without disturbing canola swaths. He then went back and forth following the swathes he had laid earlier. He continued until the combine, having a capacity of 150 bushels, was full. He filled the combine with canola not only from the area that had earlier been sprayed, but also, with canola harvested from outside this area. Otherwise, he would not have filled his combine.

30. The first load from the combine, 150 bushels, was dumped into what has been described as the "old Ford truck". The old Ford truck is a 1962 Ford 2-ton grain truck, with a red box and blue-green cab, owned by Schmeiser Enterprises.

31. Because of mechanical difficulties, the old Ford truck was left on Field #2 for a period of time. A tarp was put on it. Eventually the mechanical problem was repaired and the truck was driven into Bruno, Saskatchewan in the late fall of 1997 and stored in a quonset in Bruno.

32. Mr. Schmeiser went away that winter on holidays. When he returned he decided to take the seed in the old Ford truck to be treated at Humboldt Flour Mills, to be used in the seed that he was going to plant his 1998 crop with. He chose the seed in the old Ford truck partially because it came from Field #2 which had been summer-fallow in 1996. As stated, Mr. Schmeiser usually sowed his crops with seed derived from a field that had been summer-fallow the year before. The canola seed was augured into a newer grain truck and taken to Humboldt Flour Mills to be treated. **Mr. Schmeiser did not have the canola**

seed cleaned before he took it to Humboldt Flour Mills. Humboldt Flour Mills did not clean canola in 1998 and Wayne Towstego testified that Mr. Schmeiser had no canola cleaned at his facilities in 1998.

33. Mr. Schmeiser also selected the seed in the truck because of spring road restrictions. Because the seed was already located in Bruno, he would not have to worry about the restrictions on the grid road leading to Bruno and could drive on the main highway to Humboldt. He was thus able to make one trip instead of two. It is not unusual for farmers to keep seed they intend to re-use the following year in trucks to avoid spring road restrictions.

34. The invoice from Humboldt Flour Mills dated April 24, 1998 indicates that Mr. Schmeiser had 8,014 pounds of canola seed treated.

35. When Mr. Schmeiser used the treated seed to plant his 1998 canola crop, he followed his usual practice of mixing the canola seed with bin-run seed and fertilizer as he had done in the past. The treated seed he got from Humboldt Flour Mills was used with this seed to plant his 1998 crop until he ran out and used seed that he had saved from previous years.

E. The Three Certainties

36. It is against the foregoing factual background that this case must be decided. In doing so, it must be kept in mind that this case bears three certainties:

(a) the Defendants did not obtain Roundup Ready canola seed;

(b) the Defendants did not segregate any Roundup Ready canola seed that found its way onto the lands in question; and

(c) the Defendants did not spray in-crop with Roundup.

F. Did Not Obtain

37. The initial Statement of Claim of the Plaintiffs made the following accusation:

15. The Defendants, at least as early as 1997, obtained canola seeds which are resistant to glyphosate from one or more persons licensed by the Plaintiff, Monsanto Canada Inc. The Defendants have planted or caused to be planted such seed on lands farmed by them including lands in the Rural Municipality of Bayne, Saskatchewan. The Defendants have grown and harvested crops grown from said canola seeds. Further, the Defendants have prepared seed from said harvest, including cleaning and treatment with a fungicide, for replanting. The canola seeds and the crops and seeds cultivated and harvested from them are resistant to glyphosate and herbicides such as ROUNDUP which contain glyphosate as the active ingredient.

This allegation was completely withdrawn along with any claim in respect of the 1997 crop in a subsequent amendment to the pleadings. The present Amended Statement of Claim makes no such allegation, nor is any claim asserted for the 1997 crop. Notwithstanding this, the Plaintiffs have persisted in accusing Mr. Schmeiser of obtaining Roundup Ready canola throughout this Trial in spite of having no proof.

38. That the Plaintiffs have no proof of this allegation is abundantly clear. Mr. Mitchell, the lead investigator for Monsanto in this case, candidly admitted so during his cross-examination:

Q And you suspected that he got it from one of your licensed users?

A No, we heard a rumour and we had lots of rumours in 1997 that we investigated. As a matter of fact the majority of the rumours that we investigated did not come to be true, so a suspicion was not -- maybe that's even too strong a word, we had information that said someone might be doing so, so we'd follow up on it.

[June 8, 2000, page 85, lines 2 to 7]

...

Q What steps did Monsanto take to find the licensed user who may have sold boot-leg Roundup ready canola to Mr. Schmeiser?

A We had investigators talks to various folks around the area to see what they heard and to see if there was anything definitive that we could follow up on.

Q Did you interview the 1996 growers?

A We interviewed some of them, yes.

Q Did you attempt to interview all of them?

A I was not present so I'd have to go back to check to see if we interviewed all of them or not.

Q But the idea was to interview as many of them as possible?

A I know we interviewed several anyway.

Q Were your representatives instructed to keep their ears open?

A With the technology that we had because it was invisible and renewable we felt we always had to be vigilant on this technology so I think instructions we'd have with all of our folks is to be vigilant. I mean it's not fair to the people paying if other folks aren't, so we've instructed our folks to be vigilant everywhere.

Q So you instructed your representatives to keep their ears open in relation to this case, in particular?

A Certainly this case and in every other area that we are.

[June 8, 2000, page 85, lines 12-26, page 86, lines 1-7]

...

Q **And in spite of all this effort, you were not able to find the one licensed user or farmer who sold boot-leg canola to Mr. Schmeiser?**

A **We have no proof that anyone sold seed to Mr. Schmeiser.**

Q **Nor does Monsanto to your knowledge have anyone who witnessed such a thing?**

A **Not to my knowledge.**

Q **Nor does Monsanto have anyone who heard Percy Schmeiser admit to such a thing?**

A **No.**

(emphasis added)

[June 8, 2000, page 87, lines 3-11]

39. Mr. Hughes, during his cross-examination of Mr. Schmeiser, attempted to make a receipt for the sale of some peas into the "smoking gun" by suggesting that as the memo on the cheque referred to a "grain purchase", it was really canola that was purchased. His efforts were thwarted when Mr. Schmeiser fully accounted for the peas that he purchased. He could not seed them in the field he intended because the field was infested with volunteer Roundup resistant canola. He produced a sales receipt showing the subsequent sale of most of the peas to the Saskatchewan Wheat Pool, and testified that he kept the rest in inventory.

G. Did Not Segregate It

40. As reviewed above, it was observed by Mr. Schmeiser, and his farmhand, Carlyle Moritz, that Field #2 contained an uneven distribution of canola plants which did not die when sprayed with Roundup. Approximately 3 acres of this field were sprayed with Roundup. When it came time to harvest this field, Mr. Moritz did so, given no special instructions.

41. It was the testimony of Mr. Moritz that the canola seed which went into the old Ford truck contained not only canola from the "test strip", but also, from an area outside the test strip. Mr. Moritz combined until the combine was full.

42. The veracity of Mr. Moritz' testimony is confirmed by that of Dr. Downey, who confirmed that harvesting only 3 acres would not fill the combine used to harvest Field #2.

43. The fact that seed from an area outside the test strip was harvested and, ultimately, used to plant the 1998 crop, is confirmed by the test results obtained from the University of Manitoba, which clearly showed that the 1998 crop was a mixed crop of Roundup resistant and Roundup susceptible canola.

44. Furthermore, any effort to segregate would have been completely undermined by mixing bin-run seed with the seed in the old Ford truck when Mr. Schmeiser seeded his canola in 1998.

H. Did Not Spray It

45. At the opening of the Plaintiffs' case, it was stated that evidence would be adduced to the effect that the Defendants' 1998 Roundup purchases were consistent with a grower of Roundup Ready canola. No such evidence was produced. Monsanto licenses Roundup Ready canola, and sells Roundup herbicide. Mr. Schmeiser had fully disclosed his Roundup purchases before Trial. It can be certainly expected that if his Roundup use was inconsistent with that of a conventional canola grower, and consistent with a Roundup Ready canola grower, evidence would have been led. Because no such evidence was adduced it is reasonable to infer that Mr. Schmeiser's Roundup purchases were entirely consistent with a conventional canola grower. Mr. Schmeiser testified that he would need approximately 1000 litres more Roundup herbicide if he were a Roundup Ready canola grower following Monsanto's recommendations. Mr. Schmeiser was unchallenged in this assertion, including by any of the several potential rebuttal witnesses that Monsanto had on hand.

46. The records for the Defendants' Roundup purchases are found in Exhibit D-15, Tab 2, and were included in the read-ins from Mr. Schmeiser's discovery. Reference should also be made to Tab 2 of this Brief for a testimony digest of the Defendants' Roundup use. The 1996 receipts show 16 cases of Roundup were purchased. During his cross-examination by Mr. Hughes, Mr. Schmeiser explained that 8 such cases would amount to 160 litres, for 320 litres in total (16 cases). In 1997, the Defendant purchased 870 litres and also paid for a 70 litre custom application on some summer fallow. In 1998, the Defendant purchased 720 litres.

47. Field #s 3 and 8 were not farmed until 1997, adding considerable land base to the lands farmed by the Defendants. The acres seeded to canola also increased significantly. From Mr. Hughes' cross-examination of Mr. Schmeiser, the total acres seeded to canola in 1996 was stated by Mr. Schmeiser to be between 300-400. In 1997 it was 780. In 1998 it was 1030.

48. 1996 is a year that Mr. Schmeiser could not have been using Roundup to in-crop spray his canola, because the only source of Roundup Ready canola in 1996 was by license with Monsanto. Mr. Schmeiser's use of Roundup compared to his acres seeded to

canola therefore provides an indication of what a conventional canola grower would use, and a base-line to measure his 1997 and 1998 use. The table below illustrates the Defendants' Roundup usage in these terms.

Year	Litres of Roundup Used	Canola acres	Litres of Roundup used per acre (Litres Used ÷ Canola acres)
1996	320 litres	300-400 acres	1.07 - .80 litres/acre
1997	940 litres	780 acres	1.21 litres/acre
1998	720 litres	1030 acres	.70 litres/acre

49. It is clear that the Defendants' Roundup use was consistent over a three-year period of time. With 1998 being the pivotal year, it appears as though Mr. Schmeiser's Roundup use decreased as a percentage of acres seeded to canola. Indeed, according to Mr. Schmeiser's testimony, he would have to undertake 2 more applications of Roundup, each at a rate of ½ a litre per acre, if he were follow Monsanto's recommendations and he was a Roundup Ready canola grower. Since he had 1030 acres seeded to canola, he would have required 1030 additional litres of Roundup. The Plaintiffs failed to prove he purchased anywhere near this quantity of Roundup.

50. It is necessary to remember what the Defendants used Roundup for. It is common practice to do a spring burn-off, and in fact, this was done by Mr. Schmeiser in 1998. If a spring burn-off was done on the fields he seeded to canola in 1998, at the recommended application rate of .50 litres per acre, a spring burn-off on all his acres seeded to canola would use about 515 litres of Roundup. This leaves only 205 litres of Roundup – for spraying around power poles, in ditches, and on chem fallow fields.

51. Finally, it was Dr. Rene Van Aker's opinion that, based on the tests performed by the University of Manitoba, that Mr. Schmeiser could not have in-crop sprayed with Roundup in 1998.

I. The Tale of Two Cases

52. The Plaintiffs' began this case with a court application to obtain access to Mr. Schmeiser's fields in order to obtain seed or tissue samples suitable for a PCR test, or a quick test. Both of these tests allow the Plaintiffs to pool samples together to increase the chance of finding the Roundup Ready gene. Armed with the laboratory test results, the Plaintiffs could confront Mr. Schmeiser at his Examination for Discovery, and discover which of their licensed users sold him the canola seed.

53. The Plaintiffs obtained no such admission because their suspicions were unfounded. Rather than accept this, a new plan was made — run the case not on whether the gene was present, but on how much of the gene was present. The sampling procedure used to garner the samples was never intended for this type of case. It was not designed for a grow-out test. Nevertheless, after the Discoveries, Aaron Mitchell retrieved a set of samples which had been stored in James Vancha's freezer – a backup set of samples, in case the first set were lost – and decided to perform a grow-out test. This was done despite the fact that the sampling and storage methods employed with respect to these samples were never intended to be the foundation for a grow-out test.

54. The Plaintiffs' case rests solely on this grow-out test. It is the foundation of Dr. Downey's opinion. Because of the pooling that occurred, the laboratory results from St. Louis do not allow one to conclude the extent to which the samples had the Roundup Ready gene, only that the gene is present. The PCR tests are of assistance only to show that Monsanto's gene is likely responsible for any observed Roundup resistance in Mr. Schmeiser's canola fields. Three of Monsanto's biochemists openly admitted that because tissue samples were pooled together from 6 plants per sample, only one of the plants needed to have the gene to get a positive result, notwithstanding the other 5 may not have possessed the gene.

J. Garbage In, Garbage Out

55. An important issue in this case is the extent to which the Defendant's canola fields had Roundup resistant canola. The main competing tests are the internal grow-out test

conducted by Aaron Mitchell of Monsanto, and the grow-out test done by Lyle Friesen of the University of Manitoba. Neither are of any consequence unless it is clearly established that these samples are fairly representative of the fields from which they were taken. Without this, any testing of any of the samples taken by Mr. Vancha and Mr. Todd only tells us what is in the bags, not what is in the fields.

56. The samples which were subjected to the grow-out tests were not obtained, stored, or tested by independent third parties. They were not obtained in any sort of scientific manner – rather, they were obtained from three locations on the perimeter of the Defendants' fields. A handful of pods, possibly from one plant at each location, was grabbed and divided between two plastic bags. They were stored in a manner which caused 10 out of 27 samples to deteriorate to the point that they could not be tested at all by Monsanto's labs in St. Louis. A similar result happened with 15 of the 27 samples given to Mr. Schmeiser.

57. It was never intended that these samples be representative of the Defendants' fields. It was never intended that they by the subject of a grow-out test. They were obtained to secure a quick determination that the Plaintiffs' gene was present on the Defendants' fields. The following is from the cross-examination of Mr. Vancha on June 7, 2000, page 18 line 26 to page 19 line 12:

> Q What did you know of the sampling procedure that you were to follow when you went on Mr. Schmeiser's fields, if anything?
>
> A Other than to go to random areas and take leaf samples or pods, it was mostly pods because of the maturity of the crop and put them in the bags.
>
> Q Who explained to you the sampling procedure, was it Mr. Todd?
>
> A Well, I guess I just, by accompanying auditors on previous audits I observed how they did the sampling and that's, they did it the same way.
>
> Q And is the sampling done the same way as what you would have done to use a quick-tester, the same way you would do it if you take samples to do quick-test samples?
>
> A Yes.

58. The samples were taken by former R.C.M.P. officer while a Monsanto employee watched. Neither had any scientific training and both seemed to operate with little or no prior instructions as to how to take the samples. Their training was that in 1997 they sprayed 5 areas of a field with Roundup and came back later to see what happened. In 1998 they began to take leaf and seed samples to be pooled together in quick-testers.

59. The samples were not taken to support a grow-out test. If the sampling was not done right, the opinions based upon them are of little import.

K. The 1997 Samples from Field #5

60. Wayne Derbyshire, a private investigator with Robinson Investigations, was sent to collect samples from Mr. Schmeiser's fields. He took samples from two of Mr. Schmeiser's fields, Field #2 and Field #5. At the same time he was also investigating other farmers suspected of growing Roundup Ready canola without a license. Mr. Derbyshire was not told to stay off farmers' fields.

61. In 1997, Wayne Derbyshire obtained samples of crops growing in the right of way adjacent to Field #5. Mr. Derbyshire contends that he did not trespass on to the Defendants' property when he obtained these samples.

62. Mr. Derbyshire's statement that he did not trespass when he took samples from Field #5 calls into question whether he had the right land description. On one side of the field where he was supposed to have taken the samples is a steep ditch where no canola was sown. He stated he took two additional samples along a dirt road running alongside the canola field. The area where he said he took the samples from, however, was not cultivated in 1997 because the land was not broken. If he found canola plants in the areas where he says he found them, then they were not from canola sown by Mr. Schmeiser.

63. Accordingly, any samples obtained by Mr. Derbyshire in respect of Field #5 are of no consequence.

L. The 1997 Samples from Field #2

64. Mr. Derbyshire states that he obtained three samples in the ditch beside Field #2. He says he took them from canola seeded into the public right-of-way. These canola plants are clearly the property of the Defendants. As was stated by Lonnie Sowa, the Rural Municipality of Bayne permits farmers to sow their crops into the public rights-of-way. Any crops growing in these areas are considered by the R.M. to be the property of the farmer planting the same.

65. Accordingly, if these samples were taken without the permission of the Defendants, any testing performed upon them must be disregarded. Merely because they were found in the public right-of-way does not give Mr. Derbyshire the right to take a sample from them. If Mr. Schmeiser parked his truck in the public right-of-way, Mr. Derbyshire is not entitled to take pieces off it.

66. Furthermore, these samples were taken after the ditch area was sprayed with Roundup and after the test strip was made. It should come as no surprise that they had Roundup resistant seeds in them.

M. Authenticity of the 1997 Samples

67. Included in Tab 1 to this Brief is a chart showing the chain of possession of the canola samples obtained by Mr. Derbyshire. Mr. Mitchell swears that he received them on September 2, 1997. He states that each sample consisted of 10 to 40 pods of canola. He testified that he removed the pods from the seeds and placed the seeds in coin envelopes.

68. Mr. Mitchell then delivered the seeds to Merle Waterfield at the University of Saskatchewan in the fall of 1997 to do a grow-out test. This was a very limited initial test and only four seeds per sample were used. On January 24, 2000, Mr. Mitchell delivered the seed envelopes to Dr. Downey to do his test. Very few seeds were found in the seed envelopes. One envelope had only two seeds in it. The most that any envelope had was approximately 30.

69. If Aaron Mitchell received samples consisting of 10 to 40 pods per sample, then he ought to have started with 200 to 800 seeds. If he only used four in his grow-out test, he should have been delivering 196 to 796 seeds per sample, not 2 to 30.

70. Another anomaly is that Mr. Schmeiser noticed, on January 24, 2000, the presence of cleavers seeds among the seeds that Dr. Downey was setting aside from the samples. A subsequent grow-out test by Mr. Schmeiser confirmed that these were in fact cleavers seeds. The significance of the presence of cleavers seeds also calls into question the integrity of the sample. If Mr. Derbyshire took seed pods, he would not have mixed in cleavers seeds. The presence of cleavers seeds is common for bin-run samples because the seed is very similar in size and shape to canola seed. Furthermore, many of the seeds were cracked, and debris was present indicating that they had been through a combine.

71. These envelopes were identified only by a numbering system. The original samples, as sworn to by Mr. Robinson, were in carefully marked bags that included the legal description. Putting these samples into coin envelopes without any identifying information, at the same time Mr. Mitchell was handling numerous other samples, could easily result in samples being mixed up.

N. The Humboldt Flour Mills Samples

72. When Mr. Schmeiser had his canola seed treated at Humboldt Flour Mills, Humboldt Flour Mills, without telling him, took samples of untreated and treated canola seed. They did this as part of their business practice, keeping before and after samples of seed they treated for farmers in case a farmer should sue them for contamination. Humboldt Flour Mills did not have Mr. Schmeiser's permission to do this, and they certainly did not have his permission to give such samples to Monsanto. The samples may have been taken for the purpose of being provided to Monsanto. The initial discussions between Mr. Pappenfoot and Mr. Chomyn took place before Mr. Schmeiser had his canola ~~cleaned~~. TREATED

73. Mr. Chomyn from Monsanto collected the sample from the Humboldt Flour Mills. He had contacted Mr. Pappenfoot and asked if Humboldt Flour Mills would give to Monsanto samples of canola being treated by farmers they were investigating. Because of the

amount of business done between Humboldt Flour Mills and Monsanto, Humboldt Flour Mills agreed to help Monsanto by giving Monsanto samples of canola seed being treated by them for farmers they were investigating.

74. All the samples of canola seed that Mr. Schmeiser had treated at Humboldt Flour Mills in 1998 are clearly seed that had been cleaned. Mr. Schmeiser took bin-run seed straight from his truck to Humboldt Flour Mills for treatment. Humboldt Flour Mills did not clean seed. Towstego Seeds, which cleans Mr. Schmeiser's seed, did not clean his seed either.

75. No evidence was heard from the person who was supposed to have taken the samples of Mr. Schmeiser's seed. There is no way of confirming that the samples taken from Humboldt Flour Mills were taken of Mr. Schmeiser's seed, or that such samples were taken in a representative manner.

76. Because of the inability to confirm the authenticity of these samples, and due to the fact it was obtained by Monsanto without Mr. Schmeiser's permission, any evidence derived from these samples must be disregarded.

O. The 1998 Samples

77. Pursuant to a Court Order, Don Todd and James Vancha attended Mr. Schmeiser's farm for the purpose of taking samples from his canola fields on August 13, 1998. The letter given to the Court dated August 12, 1998 by the lawyers for Monsanto undertook to the Court that Mr. Behiel, Mr. Schmeiser's lawyer, would be contacted on the morning of August 13, 1998 before any samples were taken so that a representative of Mr. Schmeiser could accompany the experts who were supposed to be taking the samples.

78. Twenty-seven different locations were sampled from nine fields. Supposedly when the samples were taken, a handful of pods was grabbed, half the handful was put in Mr. Schmeiser's bag, and the other half was put in Monsanto's bag.

79. Mr. Vancha and Mr. Todd testified that they asked Mr. Schmeiser to accompany them when the samples were taken. They testify they did so despite the fact that

they received no written instructions with respect to the sampling procedure, apart from a Court Order which made no mention of Mr. Schmeiser being present. The verbal instructions they received were to the effect that they were to obtain samples from Mr. Schmeiser's fields in accordance with the Court Order.

80. Mr. Todd testified that Mr. Schmeiser declined to accompany them, citing a "bad leg". Mr. Schmeiser maintains he asked to come, but was told by Mr. Vancha and Mr. Todd they had no such instructions. Accordingly, the resolution of this conflict will require a finding of credibility.

81. In assessing credibility, it should be kept in mind that not 2 weeks prior to the incident in question, Rob Chomyn requested Mr. Schmeiser grant Monsanto access to his fields. Mr. Schmeiser vehemently refused. Why his feelings would have changed so radically that he was not concerned about two Monsanto investigators taking samples from his fields without his presence is a mystery.

82. Mr. Schmeiser was concerned about Monsanto trespassing on his land, as is clear from the testimony of Mike Robinson. Why he would have allowed their presence on his land without supervising them is difficult to explain.

83. And finally, for a man who has climbed mountains, crossed deserts, who was running every morning, and water skied, following around Mr. Todd and Mr. Vancha while they took samples would not be physically demanding. He is unlikely to have complained about a bad leg.

84. If Mr. Schmeiser's testimony is accepted on this point, then any testing on the 1998 samples should be disregarded because of fundamental requirement of the condition for granting the order was infringed. Mr. Schmeiser was deprived of the right to ensure that the samples were taken in a proper fashion.

P. The "Simplest Explanation"

85. During its cross-examination of Mr. Schmeiser, much was made of Monsanto's position that in order for Mr. Schmeiser's testimony to be accepted, the majority

of Monsanto's witnesses must be lying. In its argument, Monsanto referred to a principle to the effect that the simplest explanation should be resorted to in order to resolve a conflict. In order for Mr. Schmeiser's testimony to be accepted, it is not necessary to determine that any witness is lying. This is not the simplest explanation for the differences, however minor, between the testimony of various witnesses. Rather, the simplest explanation is as follows. The factual differences are in respect of who said what in regard to meetings and telephone conversations that happened years ago. Even if both participants are equally able to recall what transpired it is not uncommon for two people to have different recollections about what was said in the same conversation.

86. **Meeting with Mike Robinson in February of 1998**: Mr. Robinson accused Mr. Schmeiser of growing Roundup Ready canola, Mr. Schmeiser denied this. Mr. Schmeiser accused Mr. Robinson of trespassing. This is the substance of what occurred, and they both agree on it. Whether the tape recorder was mentioned in the beginning or in the middle, or whether Mr. Robinson said he was from Monsanto are details of no consequence.

87. **Telephone conversation with Robert Chomyn on July 30, 1998:** Mr. Chomyn asked to get access on Mr. Schmeiser's land and Mr. Schmeiser said no. This is the substance of the conversation and again they both agree. Nothing else of substance was discussed.

88. **Meeting with Morris Hoffman on July 8, 1999:** There is no difference in what transpired at this meeting. Mr. Hoffman could not recall much about what transpired in relation to it, and he could not remember if Mr. Schmeiser asked him "are these all my samples?"

89. **Meeting with Dr. Downey on January 24, 2000:** Mr. Schmeiser noticed cleavers seeds, Dr. Downey did not. There obviously were some there because of the grow out that Mr. Schmeiser did. To suggest that Mr. Schmeiser invented this entire incident of finding cleavers seeds and taking some with him, is too bizarre to be considered. It also should be noted that after reading Dr. Downey's opinions about his case, Mr. Schmeiser would likely view Dr. Downey with some suspicion. Conduct by Dr. Downey during the

planting that may have been entirely innocent, may have been perceived differently by Mr. Schmeiser.

90. **Statements allegedly made by Carlyle Moritz to Wesley Neibrugge:** Mr. Neibrugge had a very vague recollection of what Mr. Moritz was supposed to have said, and it could have been said anywhere between the fall of 1997 and 1999. If Mr. Moritz was merely explaining the test strip and finding the Roundup resistant canola in 1997, it is easy to see how this could be misheard by Mr. Niebrugge. Mr. Moritz was a relaxed witness who gave his evidence in a forthright manner and denied making the statements attributed to him by Monsanto.

Q. Did Mr. Schmeiser Tamper with his Samples?

91. The chain of possession with Mr. Schmeiser's samples is simple. He used some of the samples to do his own grow-out test in July of 1999. In August of 1999 he delivered the bags to his lawyers who, in turn, sent them to the University of Manitoba for an independent test.

92. Mr. Schmeiser kept the canola samples in his possession since he was given them by Mr. Todd and Mr. Vancha. The samples were kept in their original bags and he made no attempt to remove anything from the bags.

93. Like Mr. Schmeiser, Lyle Friesen of the University of Manitoba could not properly grow many of the seeds that were given to Mr. Schmeiser. The grow-out in St. Louis is similar to Mr. Friesen's with respect to germination as both were unable to grow many of the same samples. Mr. Friesen's results sharply contrast with those obtained by Mr. Mitchell, who got germination from all samples.

94. The tests of Mr. Friesen show between 0% and 67% Roundup Ready contamination.

95. The results are very significant because they prove that Mr. Schmeiser did not spray his fields with Roundup herbicide in 1998. If he did, he would have killed the Roundup-susceptible plants. It is also significant that one of the fields, Field #7, showed a

very low level of contamination, 0% to 6%. The test done by the University of Manitoba are similar to the results obtained by Mr. Schmeiser, although the contamination rates are a bit higher.

96. There are a number of problems with suggesting that Mr. Schmeiser tampered with his results. If he set out to tamper with his results, why did he not tamper with all the bags? Further, the bags that were sent to Mr. Friesen appear to be genuine in the sense that they match up with the bags that were presented to Mr. Schmeiser. The bags that Mr. Schmeiser was given also match up, in their condition and the samples contained, with the bags that were initially sent to Monsanto.

97. Mr. Schmeiser's test shows less contamination then the University of Manitoba test. If Mr. Schmeiser set out to tamper with the seed bags, one would expect that he would have added more non-Roundup Ready canola seeds.

R. Reasons to Question Aaron Mitchell's Grow-Out Test

98. Aaron Mitchell did his own grow-out test of a back-up set of samples that were taken by James Vancha and Don Todd and left in Mr. Vancha's freezer. He received these samples in January of 1999.

99. For some reason Mr. Mitchell decided to remove all the pods and debris from the samples before passing them on to Leon Perehudoff of Prairie Plant Systems who was to assist him with his grow-out test. When Mr. Perehudoff received the samples he noted that he only had seeds and it looked as though the seed samples had been cleaned. Mr. Mitchell states that he did this by hand.

100. Mr. Mitchell states that it took him approximately one hour to remove the pods and debris from the seed samples. Mr. Friesen testified that it would take several hours to do this with a screen and a fan, and days to do it by hand. The following are his answers in chief on June 16, 2000, page 17, lines 15-22:

> Q And if you were to remove all of the pods and all of the debris from all these sample bags, how long would it take you?

A With screens and a fan, probably several hours, and by hand it would take days.

Q Is there any need to do so in order to do a grow-out test?

A No, as long as -- I mean, there should be no stratification or sort of segregation of seed from one side to another side. I mean a person can sort of shake it and then pick out 100 seeds.

101. Mr. Mitchell was able to obtain germination from each and every one of the samples, notwithstanding that no one at Monsanto's laboratories in St. Louis was able to do so, and no one was able to do so with Mr. Schmeiser's copy.

102. The plants were taken by Mr. Mitchell, who drove away in his van to spray them with Roundup. He returned them to count the survivors with Mr. Perehudoff.

103. With one of the samples for Field #1, sample C, there was actually an increase in the number of canola plants after spraying, resulting in a percentage of 106% Roundup Ready canola. Mr. Mitchell admits this is an error. While inconsequential on its face, this error was not rectified – instead, it was averaged with the other results. Furthermore, the results from the samples were pooled together. Two of the samples actually tested at 84% but all the results are reported as 92-98%.

104. Mr. Mitchell was not qualified as an expert in herbicide tolerant grow-outs as was Mr. Friesen. There was no statistical information given with his results and no tolerances reported. A lawyer in Ottawa prepared the report based on hand written notes provided by Mr. Mitchell. This was not a proper scientific test.

105. It also must be remembered that Mr. Mitchell had access to quick-testers during the course of his grow-out test. He admitted during his cross-examination that he probably used them on the samples before he tested them. He said the following at his cross-examination June 8, 2000, page 11, lines 4-11:

Q What about the samples you got in January did you quick test those?

A I don't recall whether I did or not right now.

Q You could well have?

A I may have, yeah.

Q Before you did your grow-out experiment?

A It would be possible although there is a time sensitivity to the strip, so I may or may not have, I don't know.

106. Removing the pods and discarding the bags was unnecessary. There is no means to verify whether the sample bags are authentic. They along with the pods, were likely thrown in the garbage.

107. These factors cannot be ignored. This is especially so when one considers that Mr. Mitchell is not an independent party. He was the person from Monsanto in charge of the investigation.

S. Origin of the Roundup Resistant Seed in the 1997 Crop

108. It has never been disputed that the Defendants' 1997 crop contained Roundup resistant canola. This canola was located on Field #2, on an area of approximately 3 acres. This canola seed, because it was used to plant the Defendants' 1998 crop, caused the contamination of that year's crop. The issue which must be determined is where the Roundup resistant canola seen in 1997 originated.

109. It is clear this canola seed was not deliberately planted by Mr. Schmeiser. He has steadfastly and consistently denied doing so. One very important fact is the distribution of the surviving canola. It was thickest near the road, and thinned moving into the field. Dr. Downey agreed that if an air seeder was used, and Roundup Ready canola was mixed in, a random distribution would be expected.

110. The Plaintiffs contend that the seed which contaminated the 1997 crop could not have come off passing trucks, because the 1996 herbicide-tolerant canola crop was identity preserved. The Identity Preservation Program was dropped in 1997 and, beginning

in 1997, farmers could transport and sell the canola like any other canola grown in Saskatchewan. It must be remembered that the purpose of the Identity Preservation Program was to ensure that the herbicide-tolerant canola was sold to the right elevator. The program was never intended to stem the spread of genetically-modified canola around the countryside by seed dispersal and pollen contamination. Farmers were not required to tarp their canola during transport from the field to grain bins so that seed would not blow off their grain trucks. They were not required to keep a buffer zone. They were not required to clean equipment. And they were not required to warn their neighbours about herbicide tolerant volunteers.

111. Further, it is clear that farmers do not always tarp their loads. Evidence to this effect was given by Elmer Borstmayer and by Mr. Schmeiser. Failure to tarp will result in a substantial amount of grain lost, which was confirmed by Dr. Downey.

112. Further, evidence was given by Mr. Mitchell that the volunteer canola problem experienced by Louis Gerwing, which extended 1000 feet into his field, was likely caused by passing trucks. The following is from Mr. Mitchell's cross-examination on June 8, 2000, page 97, lines 9-26:

> Q Were you able to determine what the cause of the contamination in Mr. Gerwing's field was?
>
> A I don't think we -- we just picked the plants, there was only -- the estimate I got from Rob Chomyn was about 200 plants spread along two roads, and we did not do any testing so I do not know what the cause was.
>
> Q But what about how the plants got on his land in the first place?
>
> A Well, I don't have any evidence. I know there was farms nearby, that it was a busy road, so -- and the dispersion pattern might indicate that there was some canola coming off of the roadways because it was certainly heaviest near the two roads, that's all I heard.
>
> Q So it appeared to have been blown off a truck?
>
> A That would be the best guess we have, yes. The estimate of 200 plants, though, if you look at 200 plants and they said it was probably

> spread over about 10 acres of field, that's about 20 plants per acre. So I mean very, very few plants spread over a bit of an area.

113. Barry Hertz's opinion regarding how far a canola seed will blow in a wind is of interest only in that it shows that the type of winds that can be experienced in Saskatchewan would have been sufficient to blow a canola seed off a grain truck well into Mr. Schmeiser's fields. Using wind speed and direction observed at the airport in Saskatoon, Saskatchewan, for only two months in 1996 and 1997 is of no help or relevance to wind speed and direction experienced in Bruno, Saskatchewan, during any of the months that canola could have been hauled. Mr. Hertz' opinions, when challenged, reveal that wind will indeed cause canola seed to blow off trucks far enough to reach the three acre "test strip" where Mr. Schmeiser observed Roundup resistant canola. The following is from Mr. Hertz's cross-examination on June 8, 2000, page 19, 8-15:

> Q Isn't your opinion and analysis more relevant to somebody growing canola beside the runways of Saskatoon than in Bruno, Saskatchewan?
>
> A Well, you could look at it from that point of view, but this was the only available wind data.
>
> Q Right. Unfortunately there's not a weather station in Bruno, correct?
>
> A Right.

114. Evidence was also tendered to establish that swaths of canola can travel great distances in the wind. Indeed, Mr. Schmeiser's neighbour, Al Huber, grew Roundup Ready canola in 1996. Swaths from this field blew into Field #6, which swaths likely also contaminated his seed supply.

115. The only scientific studies done about the spread of genetically-modified canola appear to have been done regarding pollen movement. Genetically-modified canola can pollinate non-genetically modified canola. Because the gene that gives plants Roundup resistance is a dominant gene, a Roundup-susceptible canola plant can be pollinated and all

its progeny will be Roundup-tolerant. The recent contamination problem with canola which was supposed to be non-genetically modified that was shipped to Europe is proof in and of itself that pollen will travel much further than had been anticipated.

116. Furthermore, Dr. Downey's opinions regarding pollen contamination are predicated on an assumed fact as to where Roundup Ready canola was grown in each of the years 1996, 1997 and 1998. This opinion is only as good as the evidence on which it is based, which only consists of Monsanto's information. For example, farmers could have grown it on land descriptions other than what is stated in their license, and canola growers could have grown it without a license. Because genetically-modified canola looks the same as conventional canola, there is no way for a farmer to know which field the canola may be growing on.

117. Additionally, it must be remembered that, in the words of Dr. Downey, "one hungry bee" can travel a considerable distance. Cross pollination occurs, and likely to a greater extent than was anticipated.

118. As to what exactly caused the contamination of Field #2 in 1997, who is able to say without speculating? All that matters is how the Plaintiffs' gene *did not* get on his land: it did not get there as a result of Mr. Schmeiser obtaining bootlegged seed and deliberately planting it. This allegation was dropped by the Plaintiffs. It could have arrived in a variety of ways - off a truck, broken seed bags, wind blown swaths or pollen from Mr. Huber's land to Field #6, spring run off, and passing equipment.

T. No Utility to Grow a Mixed Crop

119. All witnesses agreed that there in no utility in growing a mixed Roundup Ready/Roundup susceptible crop. The advantage in growing Roundup Ready canola is that a grower may spray in-crop with Roundup and achieve broad spectrum weed control. If a grower plants a crop which is a mixture of Roundup Ready and Roundup susceptible canola, he cannot spray in-crop with Roundup. To do so would be suicide.

120. Accordingly, it defies logic that the Defendants would have saved the seed from the "test strip", which included Roundup resistant and Roundup susceptible canola, mixed that seed with bin-run conventional canola, all in some deliberate move to take advantage of the Plaintiffs' patent.

U. The Defendants would not have Planted a Roundup Ready Crop

121. During the course of this Trial, it was clear that Mr. Schmeiser is, and has always been, a conventional canola grower. He does not believe his farming practices can benefit from growing a herbicide-tolerant crop. He took great pride in the seed he had developed over the course of some 40 years. In particular, growing Roundup Ready canola would not allow him to continue his practice of growing canola back to back.

122. The evidence confirmed that Mr. Schmeiser continued to use Treflan (Rival), Muster, and Assure to achieve weed control. A testimony digest of the evidence to this effect is found behind Tab 3 to this Brief. He would not have done so if he was growing a Roundup Ready crop. His Roundup use is consistent with a conventional canola grower. Furthermore, the University of Manitoba test results prove he did not in-crop spray with Roundup in the opinion of Dr. Van Aker.

123. The Defendants would not, and did not, plant a Roundup Ready crop.

II. ISSUES

124. The following issues must be determined in the case at bar:

(1) Must certain evidence be excluded because it was obtained improperly?

(2) Is the Invention in gene technology of the Plaintiffs used within the meaning of the *Patent Act* merely by a grower growing canola containing the gene?

(3) Are the patent rights of the Plaintiffs lost or waived as against the Defendants by reason of introducing a biotechnological invention into the environment that they are unable to contain?

(4) If the Defendants, in these circumstances, are found to have infringed the Plaintiffs' patent, will farmers in Western Canada potentially lose their rights to save and re-use their seed?

(5) Are the Plaintiffs claiming a patent over unpatentable subject-matter?

(6) Are the Plaintiffs seeking excessive amounts?

III. DISCUSSION

(1) Must certain evidence be excluded because it was obtained improperly?

125. The first issue to consider is whether any evidence derived from the 1998 canola samples, taken pursuant to the Court Order dated August 13, 1998 are admissible in evidence. The Defendants contend that all tests that were done on these samples should be excluded from evidence, as the undertaking that was given to the Court was not complied with.

126. Counsel for Monsanto undertook to contact Mr. Schmeiser's lawyer the morning before the samples were taken. The obvious intent of the undertaking was to permit Mr. Schmeiser to be advised by legal counsel respecting the samples that were going to be taken. The Defendants had the right to accompany the persons taking samples from his fields.

127. Mr. Schmeiser was not allowed to accompany Mr. Todd and Mr. Vancha when they took samples. As a result, Mr. Schmeiser was not able to verify where the samples were taken from and to ensure they were taken from his land, he was not able to verify how the samples were taken and whether the samples fairly represented the canola crop being grown on his land, and he was unable to observe the manner in which the samples were taken.

128. The failure by Monsanto to comply with its own undertaking is fundamental to the admissibility of the samples and they ought to be excluded.

129. The Defendants submit that the order obtained by Monsanto is somewhat akin to an Anton Pillar order. Such orders have variously been described as "civil search warrants", and in this regard, the Defendants draw the attention of the Court to the decision of *Castlemore Marketing Inc. v Intercontinental Trade and Finance Corp.*, (1995) 64 C.P.R. (3d) 462 (F.C.T.D.) (Book of Authorities, Tab 1) at p. 463:

> An Anton Piller [sic] order is a very intrusive order. It is the issuing of what is essentially a civil search warrant.

130. In the decision of *Grenzservice Speditions GmbH. v. Jans,* (1995) 15 B.C.L.R. (3d) 370 (S.C.) (Book of Authorities, Tab 2), the Court dealt with the consequences of an Anton Pillar order which had been executed in contravention of its terms and ordinary practice. The order permitted the plaintiffs to search the defendants' premises for Deutschmarks, and to take possession of the same. It specifically prohibited the plaintiffs from entering the premises of third parties located on the defendants' premises.

131. In executing the order in issue, the plaintiff was accompanied by persons not authorized to be present. The search extended beyond a search for currency, and in the course of the search, the defendants were examined by the plaintiffs' counsel. Further, premises occupied by third parties were searched, in contravention of the order. Additionally, the usual practices of serving the defendants with the materials in support of the order, filing with the court a written report, or compiling a list of items seized, were not followed.

132. The court strongly disapproved of the conduct of the plaintiffs and their solicitors in the execution of the order in issue. It felt the solicitors had acted in a manner which it described as "egregious", and proceeded to remove the plaintiffs' counsel as solicitors of record. The Court also dealt with the admissibility of the evidence obtained in execution of the order in issue. At p. 400, the Court ordered as follows:

> Ancillary to that order, there will be orders requiring the plaintiffs and their agents, including Douglas Symes and Brissenden, to return everything they garnered from the search, including all copies of the sworn declaration and of the videotape. Furthermore, Coopers & Lybrand Limited will be required to

> return anything they may be holding as a result of the search, while the use of such material obtained in the search will be restrained in this litigation (emphasis added).

133. Accordingly, as a result of the improper execution of the Anton Pillar order, all evidence obtained by virtue of that order was inadmissible. It is submitted that the failure of Monsanto's counsel to comply with its own undertaking in the execution of the order in issue must result in the exclusion of all evidence obtained therefrom.

134. With respect to the samples that were taken of Mr. Schmeiser's 1997 canola crop and the Humboldt Flour Mills' samples, these samples should be excluded because they were also illegally obtained. Humboldt Flour Mills did not obtain Mr. Schmeiser's permission to retain samples of his property. While it may observe a legitimate business practice of retaining samples for quality control, it has no right to turn these samples over to Monsanto, or anyone else.

135. The 1997 samples are either canola plants belonging to Mr. Schmeiser or not. If the canola plants were taken from the uncultivated ditch, they did not belong to Mr. Schmeiser, and it matters not if they are Roundup resistant. If they did belong to Mr. Schmeiser, and were found in the rights-of-way, then Wayne Derbyshire had no right to take these samples without Mr. Schmeiser's consent.

136. The samples taken by Wayne Derbyshire, and those emanating from Humboldt Flour Mills, were clearly obtained without Mr. Schmeiser's consent and amount to conversion of property belonging to him. Any testing done on such illegally obtained evidence should be excluded by the Court.

137. Monsanto takes the position that it may obtain evidence - illegally, improperly, or in breach of the rights of another – and come to this Court and build a case on that evidence.

138. At common law, all evidence, regardless of the manner in which it was obtained, is admissible: see, for example, *The King v. Honan* (1912), 20 C.C.C. 10 (Ont. C.A.) (Book of Authorities, Tab 3).

139. Whether the above-noted rule ought to be applied in this dispute must be decided. The decisions of *Noel v. Botkin* and *Metropolitan Toronto Housing Authority v. Pennant* were cited by the Plaintiffs as authorities on this issue. In the *Noel* decision, the evidence in issue found to have been obtained in violation of the *Charter*, were not admitted into evidence. In the *Metropolitan Toronto* decision, the Court assumed the *Charter* would apply to a civil dispute.

140. In the decision of *Sweeten v. Sweeten,* [1996] B.C.J. No. 3138 (S.C.) (Book of Authorities, Tab 4), the Court considered whether recordings of conversations between family members should be admitted into evidence. It was held that the evidence was relevant and ought to be admitted. The Court held that the *Charter* did not apply to the dispute before it.

141. Accordingly, at best, it can only be said that there exists conflicting authority on the issues of whether illegally obtained evidence ought to be excluded in civil disputes, now that the s.8 of the *Charter* states that every citizen has a right not to be subjected to unreasonable search and seizure. None of the decisions cited by either party are binding upon this Court, and it is free to consider whether the common law rule ought to be considered corrected by the *Charter*. Even if the *Charter* is intended to apply only to government action, it is part of the fundamental law of Canada and ought to inform the common law. This antiquated rule has no place in our free and democratic society.

142. Moreover, the above-noted decisions ought to be distinguished from the facts of the case at bar, where a large multinational company is monitoring canola being grown by farmers with its own private army of private investigators. If the Court does not define the rights of farmers as against corporations such as Monsanto, and allows the admission of evidence illegally obtained, it will be giving Monsanto the incentive and right to trespass on farmers' lands and take canola samples whenever they want to, knowing at the end of the day the Court will allow the evidence in. Monsanto should not ask for this right and the Court should not give it to Monsanto. The remedy is to exclude the evidence unlawfully obtained. The principles of the *Charter* should be invoked to protect individuals against corporations such as Monsanto abusing their considerable economic power.

143. Even if the evidence is not to be excluded, it should be disregarded because the Court cannot be satisfied as to the integrity of the samples. The testing that was done on the 1997 samples was of a very limited extent by Aaron Mitchell, and the seed samples delivered to Mr. Downey were of questionable value. If Aaron Mitchell was delivered the amount of seed that he says he was when the samples were given to him, he has been unable to account for how the seeds disappeared when they were in his possession before delivering them to Dr. Downey for his test.

144. Similarly, the Humboldt Flour Mills' samples are all of cleaned canola seed. Mr. Schmeiser never cleaned the seed delivered to Humboldt Flour Mills. He delivered bin-run seed to Humboldt Flour Mills in April of 1998 for seed treatment. The canola samples ought to have been similar to the bin-run seed that he provided to the University of Manitoba from his 1998 canola crop. No satisfactory explanation for the condition of this seed has been offered by the Plaintiffs.

(2) Is the Invention in gene technology of the Plaintiffs used within the meaning of the Patent Act *merely by a grower growing canola containing the gene?*

145. Monsanto does not own a patent for a canola plant. It owns a patent for a gene. This gene comes from other organisms and is added to a plant such as a canola plant to give it glyphosate resistance. It is something added to the gene structure of the plant. It neither causes the plant to grow, nor causes it to grow any better. It is merely something superfluous to the plant unless it happens to be challenged by glyphosate-based herbicide.

146. To grow canola is not to use the gene. This is because the gene does not cause canola to grow. The invention has no utility unless a farmer is spraying his canola with Roundup intending it to survive. Only then is he using the gene technology patented by Monsanto. There is no utility, and no use of the gene technology, if the farmer grows a mixed crop.

147. The rights given to a patent holder under the *Patent Act* are contained in Section 42 of the Act. Those rights include "...the exclusive right, privilege and liberty of making, constructing and using the invention and selling it to others to be used...."

148. It is to be noted that the list does not include the exclusive right to "possess" an invention. In other words, it is not patent infringement to merely possess an invention, only to use it. As stated in Fox, Canadian Patent Law and Practice (4th ed.) (Toronto: Carswell, 1969) (Book of Authorities, Tab 5) at pp. 383-4:

> Mere possession of a patented article may amount to infringement where such possession is unlicensed and where there is present the intention of use to the detriment of the patentee, *but not if there is no intention to use.* (emphasis added)

149. *See also British United Shoe Co. v. Collier* (1910), 27 R.P.C. 567 (H.L.) (Book of Authorities, Tab 6), and *Meters v. Metropolitan Gas Co.* (1907), 24 R.P.C. 506 (H.C.J.) (Book of Authorities, Tab 7).

150. Mr. Schmeiser clearly lacks the necessary laboratory skills and equipment to make or construct the gene covered by Monsanto's patent. It remains to be considered whether he has "used" the gene, thus infringing Monsanto's patent.

151. The question of infringement, and the manner in which a court is to determine whether an infringement has occurred, was addressed in the decision of *Visx Inc. v. Nidek Co.* (1999), 3 C.P.R. (4th) 417 (F.C.T.D.) (Book of Authorities, Tab 8). At p. 444, the Court commented as follows:

> Infringement is not specifically defined in the *Patent Act* but any act which interferes with the full enjoyment of the monopoly granted to the patentee is an infringement. The question of infringement is a mixed question of fact and law. Whether the defendants' activities fall within the scope of the patent is a question of fact but the construction and scope of the patent is a matter of law. As mentioned earlier, *the first task in the approach to a question of infringement is to construe the claim.* The burden is on the patentee to prove on the balance of probabilities that infringement has occurred. *In considering infringement, the Court must bear in mind the language in which a patentee has cast his claim.* It has been referred to as a "fence" within which the patentee claims protection from trespassers and outside of which others are free to roam. A patentee is not justified in claiming an invention in such a way as to put a person wishing to enter the field in a position of doubt and fear as to whether he is infringing upon the monopoly or not (emphasis added).

152. Accordingly, the first step is to construe the claims of the patent in issue. In this regard, the comments of the Court in *Reliance Electric Industrial Co. v. Northern Telecom Ltd.* (1993), 47 C.P.R. (3d) 55 (F.C.T.D.), aff'd (1994) 55 C.P.R. (3d) 299 (F.C.A.) (Book of Authorities, Tab 9) at p. 61 are instructive:

> When construing a patent, the claims are to be read in the context of the whole patent including the specifications and drawings. Overly technical interpretations should not defeat a patent claim. *The patent should be given a purposive construction and be read with a mind willing to understand* (emphasis added).

153. What is the purpose of the Plaintiffs' patent? Clearly, it is to protect a gene, and a method of inserting a plant cell with that gene, which gene will confer glyphosate-resistance on that plant. In order to use the patent, that portion of a canola plant which provides glyphosate-resistance must be engaged.

154. It must be determined whether the Defendants have "taken the substance of the invention" (see *Consolidated Car Heating Company v. Came,* [1903] A.C. 509 (P.C.) (Book of Authorities, Tab 10) at p. 516). Clearly, the Defendants have not done so. No Roundup was sprayed on the 1998 crop.

155. It is clear that no infringement occurred, especially when one considers the object of the patent in issue. In *Nobel's Explosives Company, Limited v. Jones, Scott & Co.,* [1882] A.C. 5 (H.L.) (Book of Authorities, Tab 11), the Court dealt with what manner of "use" will amount to patent infringement (at p. 13):

> I quite agree that when it is a question of the use of a patented article, it is important to see what the nature of the patented article is, for a dealing with the article in a particular way which would have been a use of it if the object of the patent was one thing might not be a use of it if the object of the patent was another thing.

156. If the object of the patent was to protect a component which made a plant grow, or grow better, merely growing canola may constitute "use" of Monsanto's invention. But Monsanto's invention does not cause the plant to grow. The gene is merely an accidental and non-essential part of the plant.

157. Rather, the object of the patent is to protect a component which makes a plant resistant to Roundup. Accordingly, the invention will be used if a grower applies Roundup to his canola after it has reached the leaf stage. In this case he is utilizing the invention, i.e. a gene which gives a plant glyphosate-resistance. If he is not applying Roundup in this manner, he is not using the gene. No infringement has occurred.

158. In *Adair v. Young,* [1879] XII Ch. Div. 13 (C.A.) (Book of Authorities, Tab 12), the Court considered whether the master of a ship, which contained pumps patented by the plaintiff, had infringed the plaintiff's patent rights. While the ship was fitted with the plaintiff's pumps, and the ship was used, the pumps themselves were never operated. The master was restrained from making use of the pumps, but according to the judgment of Brett, L.J., the plaintiff's patent was not infringed because the pumps were never used. At p. 20, the Court commented as follows:

> It is said that he was bound to have pumps on board, and would be liable if he put to sea without them; that they were necessary to make the equipment of the ship complete, and that therefore the having them on board was using them. Since the master had no power to say whether he would have them on board or not, he cannot, in my opinion, be said to use them unless he used them as pumps. If they are so used, that is a use by him, but in this case he never did so use them within British waters, and in my opinion, therefore, he never did infringe the patent.

159. Accordingly, it cannot be said that the Defendants infringed Monsanto's patent. Construing the patent in a purposive manner leads to the conclusion that it protects an invention which confers glyphosate resistance upon plants. The Defendants had no control over whether the gene in issue invaded the 1997 crop. Regardless of the suspicions, if any, held by Mr. Schmeiser as to the glyphosate-resistance of portions of the 1997 crop, it is clear that he did not intend to spray Roundup on the 1998 crop. Indeed, he did not do so. Accordingly, the gene was never engaged. The Plaintiffs' patent has not been infringed.

160. It should be noted that this is not an "innocent infringement" defence. Under this interpretation it is difficult to see how Monsanto's patent could be innocently infringed. Roundup cannot normally be innocently sprayed on canola, because a farmer would only do so because he wished to kill it, or if it is in his crop, to survive the spraying and kill weeds. In

this defence there is no infringement if there is no spraying. Until there is infringement, it is not necessary to consider whether it is inadvertent or innocent.

(3) Are the patent rights of the Plaintiffs lost or waived as against the Defendants by reason of introducing a biotechnological invention into the environment that they are unable to contain?

161. Monsanto has no property interest in its gene, only intellectual property rights. It certainly does not own canola seed, or canola plants this gene has decided to incorporate itself into. Where there is spillage of canola seed or pollen into a farmer's fields such that it intermixes with his property, ownership passes to the victim farmer. Thus if Mr. Borstmayer drives his truck beside Mr. Schmeiser's fields and loses canola seed into them, the plants growing from such seeds become Mr. Schmeiser's property. The same may be said of pollen or wind blown swaths from a neighbour's land.

162. Mr. Schmeiser's old Ford truck may have had contaminated seed in it. He may even have been aware of it. But that canola seed was his property.

163. If it came by pollen, in an agricultural setting, an analogy can be made to the "stray bull" cases. In these cases a bull belonging to the defendant trespasses on the plaintiff's land and impregnates the plaintiffs' cows. The plaintiffs were able to successfully recover damages on the basis that the early breeding stunted their heifers; they also recovered damages for such losses as interruption of business.

Popowich v. Letweniuk, [1972] 1 W.W.R. 641 (Sask. D.C.) (Book of Authorities, Tab 13)

Neeb v. Hoffman, [1989] O.J. 302 (Ont. D.C.) (Book of Authorities, Tab 14)

Weeks v. Weeks, (1977) 81 D.L.R. (3d) 371 (PEI S.C.) (Book of Authorities, Tab 15)

164. In these cases the courts affirmed the common-law position that a defendant is absolutely liable for damage done by a trespassing animal that he owns. In none of these cases did the defendant claim any right to the offspring of his bull. The common-law position

has always been that the offspring belongs to the owner of the female where the owner has the animal in possession.

165. The same can be said of plants fertilized by pollen from other plants.

166. The principles dealing with offspring in the "bull" cases are part of the larger law of intermixture. The idea of the "admixture of goods" comes from the Roman law concepts of confusio and conmixto. It applies when goods have been mixed together so that they are no longer distinguishable. The basic premise is this:

> ...but where a man willfully causes or allows property of another to inter-mixed with his own without the other's knowledge or consent, the whole belongs to the latter ...
>
> JC Vaines, Personal Property (London: Butterworth's, 1967) at p. 387 (Book of Authorities, Tab 16).

167. In making this proposition Vaines relied on the following text from *Blackstone*, vol. 2 ch. 26 at 405:

> ... if one willfully intermixes his money, corn, or hay, with that of another man, without his approbation or knowledge, or casts gold in like manner into another's melting pot or crucible ... our law, to guard against fraud, allows no remedy (to the guilty party) in such a case; but gives the entire property, without any account, to him whose original domain is invaded, and endeavored to be rendered uncertain without his consent.

168. Or, as it was simply put in *Colwill v. Reeves* (1811), 2 Camp. 575 (Book of Authorities, Tab 17) at p. 576:

> If a man puts into my bag, in which before there is some corn, the whole is mine, because it is impossible to distinguish what was mine from what is his.

169. Monsanto's patent gives to it certain defined rights under the Act. But it does not give it ownership. Even if contaminated with Monsanto's gene, the canola seed in Mr. Schmeiser's old Ford truck belonged to the Defendants. Monsanto alleges that its patent is

used when a farmer grows canola with its gene. If this is the case, the extent of contamination in the truck is immaterial, as is Mr. Schmeiser's knowledge or it, as innocence or inadvertance is no defence. If Monsanto is right, Mr. Schmeiser would not be permitted to save and re-use his canola seed once it has become contaminated with their gene.

170. Granted, Monsanto initially obtained a valid patent on subject matter accepted by the Patent Office. This patent gave to it certain exclusive rights. Had it maintained control over its invention, it may have maintained its exclusive rights. However, inventions do not usually spread themselves around. They do not normally replicate and invade the property and lands of others. Ever since regulatory approval for this invention was given, it has been released unconfined into the environment. Mr. Schmeiser has produced ample evidence of just how extensive the release is in the Rural Municipality of Bayne, where he farms. Any exclusive rights Monsanto may have had to its invention were lost when it lost control over the spread of its invention. Surely, the exclusive right to possess such an invention cannot be maintained if the spread of the invention cannot be controlled. The unconfined and uncontrolled release into the environment is an act by Monsanto completely inconsistent with its exclusive rights. It cannot on the one hand unleash self-propagating matter uncontrolled into the environment and then claim exclusivity wherever it invades. It can, by this, be taken by its conduct to have waived its statutory rights.

171. Monsanto obtained regulatory approval for the "unconfined release" into the environment of the gene in issue. Section 107 of the *Seeds Regulations*, C.R.C., c.1400 (Book of Authorities, Tab 18) defines this term as follows:

> "unconfined release" means release on an unrestricted basis.

172. "Confined release", on the other hand, is defined in these Regulations as follows:

> "confined release" means release under conditions intended to minimize the establishment and spread, in the environment, of seed or of genetic material from plants derived from the seed, and the interaction of the seed or genetic material with the environment;

173. Roundup Ready canola could not be contained the minute it was introduced into the rural environment in Saskatchewan and commercially sold. It was Monsanto's obligation to control its own technology to ensure that it did not spread about. They have not attempted to do so. They cannot put the obligation on the farmer to keep this gene out of his property.

174. This issue becomes particularly problematical if Monsanto continues to bring actions for patent infringement merely from a farmer having canola plants with their gene growing on his land. If this is the case, Monsanto should simply be allowed to collect royalties from every seeded acre of canola growing in western Canada, and particularly, in the Rural Municipality of Bayne, because there is no way of ensuring that their canola gene has not spread to, or soon will have spread to, every seeded acre of canola growing in the Rural Municipality of Bayne.

175. The evidence showed that 40% of the seeded acres of canola in western Canada are seeded with Roundup Ready canola. Mr. Schmeiser, in his testimony and through the numerous photographs he has taken (Exhibit D-32), has painstakingly documented the contamination of the Rural Municipality of Bayne by the Monsanto gene since 1998. His photographs of surviving canola plants where he has sprayed Roundup in many different locations in the town of Bruno and on his fields nearby establishes the extent of the contamination of the environment. And if canola plants have Roundup resistance it can be safely concluded that it was caused by Monsanto's gene. It was stated by the Plaintiffs' expert, Doris Dixon, that if canola is found to be resistant to Roundup, it is likely the Monsanto gene that is causing such resistance. (Cross-examination of Doris Dixon June 6, 2000, Page 88 Line 18 – Page 89 Line 3)

> Q So that what you were checking for was to make sure that there wasn't some other gene that may be responsible for the glyphosate resistance, it was your gene?
>
> A To confirm that, correct. I would like to add, there is no other commercial variety that could confer that glyphosate tolerance.
>
> Q To your knowledge?

A Other than that product.

Q To your knowledge?

A That is correct.

Q What you're saying, if a plant has glyphosate resistance, a canola plant, it's likely was it has your gene in it?

A That is correct.

176. It is clear that the Plaintiffs are incapable of controlling the spread of their invention. They have failed to control its spread in the Rural Municipality of Bayne. The assertion of any exclusive rights where there has been such an extensive environmental release is approbating and reprobating. The right can be taken to have been waived.

177. It is established law that a party can, by its conduct, implicitly waive a statutory right - whether procedural, substantive or proprietary - that has been enacted for its benefit. This is the meaning of the maxim: "Quilibet licet renuntiare juri pro se intoducto." In *Re The Farm Implement Act and The Arbitration Act (In Re Gray Tractor Co. of Canada Limited and Van Troyen)*, [1925] 1 W.W.R. 513 (Sask. K.B.) (Book of Authorities, Tab 19) at p. 516 approved the following passage from Halsbury's Laws of England:

> Waiver is the abandonment of a right, and is either express or implied from conduct. A person who is entitled to the benefit of a stipulation in a contract or of a statutory provision may waive it...Where the waiver is not express, it may be implied from conduct which is inconsistent with the continuance of the right.

See also:

> Bennion, FAR, Statutory Interpretation (3d ed.) (London: Butterworths, 1997) (Book of Authorities, Tab 20) at pp. 38-41;
>
> Côté, Pierre-André, The Interpretation of Legislation in Canada (2d ed.) (Cowansville: Les Édition Yvon Blais Inc., 1991) (Book of Authorities, Tab 21) at pp. 207-209.

178. *Re Toronto College Street Centre Ltd. and City of Toronto et al.* [1986] O.J. No. 962 (C.A.) (Book of Authorities, Tab 22) held, at p. 15 that "waiver" is synonymous with "estoppel" since both principles bar a party from making a claim inconsistent with a

previous action or claim. For instance, in the field of intellectual property rights, a patent licensee cannot challenge the validity of the patent, since this would be inconsistent with his previous "approbation" or "election" to recognize the patent.

> Halsbury's Laws Of England, vol. 44(1), 4th ed. (London: Butterworths 4th) at 840, para. 951 fwd. (Book of Authorities, Tab 23)
>
> Halsbury's Laws Of England, *supra* at 947, para. 1091 (Book of Authorities, Tab 24).
>
> *Copeland-Chatterson Co. v. Paquette* (1907), 38 S.C.R. 451 (Book of Authorities, Tab 25).

179. One should not lament that Monsanto may lose its exclusive rights over technology in which it invested heavily. Parliament carefully considered the area of biotechnological inventions such as Monsanto's when it passed the *Plant Breeders' Rights Act,* S.C. 1990, c.P-14.6 (Book of Authorities, Tab 26). This legislation was intended to delineate the rights as between those who develop such technology and those who use it. The Act prohibits the practice of brown-bagging, yet preserves the fundamental right of farmers to save and reuse their own seed. This gives the plant breeder some measure of protection, while recognizing that farmers have rights. Monsanto looked at this regime and thumbed their nose at it. This is clear from Keith MacMillan's answers from his discovery that were read into evidence:

> 114 Q Was there any discussion about the Plant Breeders' Rights Act gives farmers the right to use their own seed?
>
> A Yes.
>
> 115 Q And the discussion was that that was undesirable from the point of view of Monsanto Canada?
>
> A Yes. With our patented technology.
>
> 116 Q Whereas the patent gives it stronger protection, in Monsanto Canada's view?
>
> A Yes.

180. In other words, Monsanto believed it could make more money by using the patent system than the legislation specifically passed for such technology. It is the author of any misfortune that should befall it from losing its patent rights.

(4) If the Defendants, in these circumstances, are found to have infringed the Plaintiffs' patent, will farmers in western Canada lose their rights to save and re-use their seed?

181. Throughout the course of this Trial, Mr. Schmeiser was referred to as a "seed saver". This term describes growers who save seed from one year's crop, and save it to be used to plant the next year's crop.

182. The right to save seeds from one's own crop is a right which has been enjoyed by growers for years, and is a right which has not been limited by legislation such as the *Plant Breeders' Rights Act, supra.*

183. The implications of patent law upon a grower's right to save and re-use his seed have been discussed by Carla R.D. Bourne in her article, "Will s. 101 Patents have Utility for Plants?" (1993) 3 SANJLR 155 (Book of Authorities, Tab 27). At p. 7 of the on-line report, the author comments as follows:

> Unlike the (Plant Variety Protection Act), utility patents provide no saved seed exemption. Therefore, when farmers use patented varieties, they will not have the legal right to save seed from one year's crop to replant the following year.

184. The fact that a farmer who purchases Roundup Ready canola seed has no right to save and re-plant it may make sense if Monsanto were able to control the spread of its invention. But what about those farmers who do not purchase the seed, but simply find it invading their land? Should they too be denied the right to save and re-use their seed?

185. Monsanto is suing the Defendants for patent infringement. By implication, they are saying that by reason of the fact that their gene found its way into the Defendants' canola, he was prevented from saving his seeds and planting his crop. It was this act that caused the alleged infringement.

186. The implications of a ruling that makes saving and re-using seed that has been contaminated by this gene patent infringement are far reaching. Will canola growers who chose to save and re-use their seed not be affected? Because this gene is everywhere, even a grower who takes every precaution such as the seed grower that Dr. Downey testified about may find their seed supply contaminated by a hungry bee.

187. If the right of Mr. Schmeiser to save and re-use his canola seed is taken away from him, any other seed saver is not far behind. Perhaps this is a benefit that Monsanto hoped to achieve by releasing their product into the environment without any control.

188. The evidence is clear that Roundup Ready canola can blow in the wind, fall off trucks, and have its pollen carried on the wind or by insects, finding its way onto fields where it was never intended to be grown. It can never be said with certainty that Monsanto's gene will not soon be present on any canola field in western Canada. Accordingly, no farmer who saves and re-uses his seeds can be sure the Monsanto gene is not present in his seed supply. If Mr. Schmeiser is a patent infringer, so are all these others.

(5) Are the Plaintiffs claiming a patent over unpatentable subject- matter?

189. The Patent Manual states that the Patent Office's practice is to regard as non-patentable "subject matter for a process for producing a new genetic strain or variety of plant or animal, or the production thereof..." (Section 12.03.01(a)).

190. In the decision of *Pioneer Hi-Bred Ltd. v. Canada (Commissioner of Patents)* (1987), 14 C.P.R. (3d) 491 (F.C.A.); (1989), 25 C.P.R. (3d) 257 (S.C.C.), cited by the Plaintiffs, the Federal Court of Appeal considered whether a new variety of soybean produced by selective breeding is patentable subject matter. The Court held:

> I have not been convinced. Even if those definitions were held to be applicable to a micro-organism obtained as a result of a laboratory process, I am unable to go further and accept that they can also adapt to a plant variety produced by cross-breeding. Such a plant cannot really be said, other than on the most metaphorical level, to have been produced from raw materials or to be a combination or two or more substances united by chemical or mechanical means. it seems to me that the common ordinary meaning of the words "manufacture" and "composition of matter" would be distorted if a

> unique but simple variety of soybean were to be included within their scope.
>
> ...
>
> ... Besides, speaking of the intention of Parliament, given that plant breeding was well established when the Act was passed, it seems to me that the inclusion of plants within the purview of the legislation would have led first to a definition of invention in which words such as "strain", "variety" or "hybrid" would have appeared, and second to the enactment of special provisions capable of better adapting the whole scheme to a subject matter, the essential characteristic of which is that it reproduces itself as a necessary result of its growth and maturity. I do not dispute the Appellant's contention that those who develop new types of plants by cross-breeding should receive in this country, as they do elsewhere, some kind of protection and reward for their efforts but it seems to me that, to assure such result, the legislator will have to adopt special legislation, as was done a long time ago in the United States and in many other industrialized countries.

191. The decision was appealed to the Supreme Court of Canada. Rather than deciding whether the subject matter of the patent claim was capable of supporting a patent, Mr. Justice Lamer, who wrote the decision for the Court, decided the case on the basis that the patent had not been described in a manner that would allow someone to duplicate it.

192. *In President and Fellows of Harvard College v. Canada (Commissioner of Patents)* (1998), 79 C.P.R. (3d) 98 (Fed. T.D.), also cited by the Plaintiffs, the applicants sought to obtain a patent for a new mouse that was created by the introduction of a gene. The mouse was to be used for the testing of carcinogens. As with the *Pioneer Hi-Bred* case, the patent was denied by the Patent Office, and appealed to the Federal Court. In the *Harvard College* case, the Court was prepared to extend patent protection only to the process for introducing the gene into the mouse, and would neither protect the mouse itself nor its progeny. The Court held:

> A mouse is a complex life form and thus there are many features of the mice which are not under the control of the inventors. They have created a method to inject eggs with a myc gene but they have not invented the mouse. It is not necessary for the inventor to directly control all aspects of the natural process leading to the creation of the end product. One need only think of the chemical or bio-chemical reactions which produce many different patented end products to know the truth of this statement. However, the ultimate product

> which will result from the process is completely unknown and unknowable.

193. The Court concluded:

> A complex life form does not fit within the current parameters of the Patent Act without stretching the meaning of the words to the breaking point, which I am not prepared to do. However, if Parliament so wishes, it clearly can alter the legislation so that mammals can be patented.

194. In the latter regard, the Court expressly adopted the minority decision of an American case that allowed a plant variety to be patented. That case was *Diamond, Commissioner of Patents and Trademarks v. Chakrabarty*, 447 U.S. 303 (1980). In the minority decision the judges felt that it was not intended that the Patent Act would cover a new plant variety. Furthermore, the existence of legislation such as the Plant Patent Act and the Plant Variety Protection Act in the United States indicated to the minority that policy decisions, such as whether and how far to extend the patent privileges into areas where the common understanding was that patents were not available, were up to Congress and not the courts.

195. The law as stated in the *Harvard College* decision remains the law in Canada.

196. The introduction in Canada of the *Plant Breeders Rights Act* is a clear indication of legislative intent that intellectual property rights pertaining to new plant varieties are to be governed by legislation other than the *Patent Act* and only to the extent permitted under the *Plant Breeders Rights Act*. As stated, the *Plant Breeders Rights Act* preserves the right of farmers to save and reuse seed. Monsanto has admitted in this action that the reason that it sought protection under the *Patent Act* rather than the *Plant Breeders Rights Act* was to preclude farmers from saving and re-using seed.

197. The gene that Monsanto claims patent protection for has been inserted into many different registered varieties of canola. Each canola plant is potentially different. The replication of the gene is also not being caused by human intervention but by natural means. It is submitted that a gene that cannot be contained or controlled is not the proper subject matter for a patent, and the Plaintiff's patent should be declared invalid.

(6) Are the Plaintiffs seeking excessive amounts?

198. The Plaintiffs have made it abundantly clear that they are seeking to make a public example of Percy Schmeiser.

199. The Plaintiffs have named Mr. Schmeiser as a defendant in this action, notwithstanding the overwhelming evidence that all the farming activities in question were conducted through Schmeiser's Enterprises Ltd. The cases cited by the Plaintiffs do not support piercing the corporate veil. Mr. Schmeiser did nothing that would not be within the ordinary course of business for his company. He farmed. They are clearly after him personally.

200. Furthermore, they have persisted in suggesting that Mr. Schmeiser committed a quasi-fraudulent act without any proof, and even after having withdrawn this allegation from their claim. They have not shied away from calling him a liar and a person without any credibility.

201. Monsanto also seeks the profits from the Defendants' 1998 canola crop, not the $15 per acre license fee. This, notwithstanding the fact that it was their gene that invaded the Defendants' crops. They claim this invasion entitles them to the ownership of the profits from the 1998 crop.

202. The Defendants did not make a penny more because Monsanto's gene contaminated their seed supply. The canola seed was sold at the same price as conventional canola. The Defendants sold their canola to a crushing plant, not to another farmer to be used. If they did not in-crop spray with Roundup, they received no benefit from the Plaintiffs' gene being in their fields. The Defendants did not and could not have profited from it. Nonetheless, the Plaintiffs are claiming the entire profit the Defendants made from the sale of *their* canola in 1998 merely because the Monsanto gene attached itself to the Defendants' property. Their gene invaded the Defendants' seed supply, and now they must turn over their canola to Monsanto because the gene cannot be returned. The Plaintiffs do not even wish to compensate Mr. Schmeiser for the labour he put into growing this crop.

203. Monsanto is claiming $105,000 in profits based solely on having Mr. Schmeiser's charted accountant agree that numbers submitted to him add up to that amount, without first establishing that the numbers submitted to him were arrived at in a correct and reasonable manner. If the Plaintiffs intended to present evidence supporting their claim for profits, in the amount which they have asked for, determined according to the assumptions they contend are appropriate, they should have called their own chartered accountant to support that claim. They had ample notice of Mr. Kunaman's report well before trial, and a right of discovery if they disagreed with it.

204. The have also attempted to double up on their relief by having the parent company elect profits, and the subsidiary elect damages in the same action. They were jointly named as Plaintiffs claiming joint relief, but now are purporting to avoid having to elect damages or profits by saying one can elect one and one can elect the other.

205. Monsanto has also claimed punitive damages against the Defendants. This claim is unwarranted: what has Mr. Schmeiser done that was arrogant, high-handed or shocking warranting punitive damages?

206. It is clear that, in cases of alleged patent infringement, punitive or exemplary damages are awarded to punish a defendant, to make an example of him, and to deter extreme conduct: see *Lubrizol Corp. v. Imperial Oil Ltd.* (1996), 67 C.P.R. (3d) 1 (F.C.A.) (Book of Authorities, Tab 28) at p. 18:

> Exemplary damages are necessary, for, according to Cory J., without them the wealthy and powerful might regard awards of general damages as a "licence fee" to continue harming "vulnerable victims"... In the words of La Forest J., punitive or exemplary damages are "awarded to punish the defendant and to make an example of him or her in order to deter others." Exemplary damages are meant to "teach a wrongdoer that tort does not pay."
>
> McIntyre J. has listed the adjectives describing the type of conduct that would warrant punitive damages as "harsh, vindictive, reprehensible and malicious"; in other words, the conduct must be so "extreme in its nature and such that by any reasonable standard it is deserving of full condemnation and punishment". Cory J. felt that the conduct has to be so "malicious, oppressive and high-handed that it offends the court's sense of decency." Another common word used to identify the state of mind of the wrongdoer is "callousness".

207. Mr. Schmeiser has done no act which would warrant an award of punitive damages. He simply followed his farming practices as he has done for the past 50 years. Monsanto says his maintaining his innocence is such that it "offends the court's sense of decency".

208. Finally, Monsanto seeks an injunction to restrain the Defendants from growing Roundup Ready canola. This is an injunction which is impossible to comply with. As noted above, no farmer can be sure he is not in possession of the Monsanto gene. The only manner in which the Defendants could comply with this injunction would be to stop farming. One hungry bee is all that it would take to put Mr. Schmeiser off-side. He has seen contamination in his fields all over again, even though he bought an entirely new seed supply in 1999. If Monsanto is successful, if he saves and re-uses any of his seed now, he will be a patent infringer and in contempt of court.

209. The Plaintiffs are not out to protect the interests of farmers as they have claimed. They are seeking to destroy Mr. Schmeiser's reputation and ruin him financially in order to make an example of him.

IV. CONCLUSION

210. In summary, the Defendants have not infringed the Plaintiffs' patent. The Defendants therefore maintain that the Plaintiffs' claim as against them should be dismissed with costs. The Defendants would like the opportunity to speak to costs after a decision is rendered.

Respectfully Submitted:

Priel, Stevenson, Hood & Thornton
Solicitors for the Defendants

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