

PIONEER HI-BRED INTERNATIONAL V. J.E.M. AG SUPPLY: PATENT PROTECTION OF PLANTS GROWS UNDER THE SUPREME COURT'S LATEST DECISION

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I. INTRODUCTION

In *Pioneer Hi-Bred International v. J.E.M. Ag Supply*,¹ the United States Supreme Court upheld the validity of sexually reproduced plants as statutory subject matter for patent protection under 35 U.S.C. § 101. In doing so, the Court rejected the argument that the 1930 Plant Patent Act² (“PPA”) and the 1970 Plant Variety Protection Act³ (“PVPA”) precluded the patenting of plants under section 101 and were, thus, the exclusive federal statutory regimes for protection of plants. The Court further held that these three federal statutes could peacefully co-exist and provide overlapping intellectual property protection for plants.

II. FACTUAL AND PROCEDURAL BACKGROUND OF THE CASE

Plaintiff Pioneer Hi-Bred International, Inc. (“Pioneer”) is the world’s largest seed corn producer. Pioneer holds seventeen utility patents claiming sexually reproduced hybrid and inbred corn seed products. Pioneer is in the business of selling corn products covered by these seventeen patents under limited label licenses. These licenses are “granted solely to produce grain and/or forage.”⁴ The licenses do not allow licensees to either repackaging or resell Pioneer’s product. In selling its patented products, Pioneer placed all required statutory notices on each of its bags and containers containing its patented hybrid seeds.

Defendants J.E.M Ag Supply, Inc., doing business as Farm Advantage, Inc., were accused of infringing one or more of Pioneer’s patents by making, using, selling, or offering to sell plaintiff’s patented

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1. *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int’l, Inc.*, 122 S. Ct. 593 (2001).

2. 35 U.S.C. §§ 161-64 (1999) (codification of the Townsend-Purnell Plant Patent Act of 1930).

3. 7 U.S.C. §§ 2321-2583 (2000).

4. *J.E.M. Ag Supply, Inc.*, 122 S. Ct at 597.

seed corn products. Defendants were not authorized Pioneer Sales Representatives and did not claim to have any contract with Pioneer to sell Pioneer's products. However, Farm Advantage purchased patented hybrid seeds from Pioneer and resold them. Defendants never repackaged or altered Pioneer's seed containers prior to reselling the seed to customers.

In response to defendants' actions, Pioneer filed suit for patent infringement in the United States District Court for the Northern District of Iowa asserting its seventeen patents.⁵ The defendants answered denying Pioneer's allegations and asserted, among other defenses, patent invalidity. Additionally, defendants counterclaimed asking the court for a judgment declaring all of Pioneer's patents-in-suit invalid. In their counterclaim, defendants asserted, *inter alia*, that sexually reproduced plants, such as plaintiff's patent-in-suit, were not patentable subject matter under section 101 of the 1952 Patent Act.⁶ Defendants claimed that the United States Patent and Trademark Office ("PTO") granted Pioneer's patents on the basis of an erroneous understanding of applicable law.⁷ Defendants then moved for summary judgment on their counterclaim.

III. THE FEDERAL DISTRICT COURT DECISION

In *Pioneer Hi-Bred International v. J.E.M. Ag Supply*,⁸ the District Court denied defendants' motion for summary judgment on their counterclaim. Judge O'Brien squarely addressed the issue of "whether 35 U.S.C. § 101 confers upon the [PTO] statutory authority to grant patents on sexually reproducing plants, or whether the [PVPA] provides exclusive federal statutory mechanism for granting patent-like protection for sexually reproducing plants."⁹ The defendants advanced three main arguments for denying utility patent protection to sexually reproducing plants. First, defendants argued that sexually reproducing plants were not covered by section 101.¹⁰ Next, it was argued that the PPA and the PVPA were the exclusive federal statutory mechanisms for plants covered under those acts.¹¹ Finally, defendants argued that there was an implicit narrowing of 35 U.S.C. section 101 because of an irreconcilable conflict between the 1952 Patent Act and the PVPA.¹² The District Court addressed each argument in turn.

5. See *Pioneer Hi-Bred Int'l, Inc. v. J.E.M. Ag Supply, Inc.*, 49 U.S.P.Q.2d 1813 (N.D. Iowa 1998).

6. 35 U.S.C. § 101 (1999).

7. *Pioneer Hi-Bred Int'l*, 49 U.S.P.Q.2d at 1815.

8. *Id.* at 1822.

9. *Id.* at 1815.

10. *Id.*

11. *Id.* at 1817.

12. *Id.* at 1819.

In ruling on the first argument presented by the defendants, the District Court noted the broad statutory language of section 101 and its liberal construction by the U.S. Supreme Court.¹³ In particular, Judge O'Brien relied on the Supreme Court's landmark decision in *Diamond v. Chakrabarty*.¹⁴ In *Chakrabarty*, the Supreme Court held that under the broad language of section 101, living things were patentable and genetically modified bacteria were an example of patentable statutory subject matter.¹⁵ Citing *Chakrabarty*, the court quickly rejected the defendants' first argument and concluded that "it appears clear that the scope of Section 101 includes man-made life forms, including plant life."¹⁶

Next, the District Court examined the effects of the enactment of the PPA and the PVPA.¹⁷ Defendants argued that by enacting the PPA and the PVPA, both of which came after section 101 and are more specific, Congress intentionally carved out from section 101 the subject matter covered by each Act.¹⁸ Thus, the plant specific Acts were the "sole exclusive federal statutory mechanisms for plants covered by those acts."¹⁹ In ruling on this argument, the court first looked at the literal language of each statute at issue. In reference to language in the *Chakrabarty* decision, the court stated that section 101 is meant to include "everything under the sun made by man."²⁰ The court then concluded that there was no specific statutory language in either the PPA or the PVPA that expressly excluded plant subject matter from protection under section 101.²¹ In the absence of any specific statutory language, the court turned to the legislative history of the PPA and the PVPA to determine if Congress clearly intended to exclude plant protection from section 101.

Judge O'Brien began by examining a Senate Report dealing with the PVPA.²² The defendants argued that the language in this report

13. *Id.* at 1817. 35 U.S.C. § 101 (1999) states, "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title."

14. 447 U.S. 303 (1980).

15. *Id.* at 308-10.

16. *Pioneer Hi-Bred Int'l*, 49 U.S.P.Q.2d at 1817.

17. *Id.*

18. *Id.*

19. *Id.*

20. *Id.* (citing *Diamond v. Chakrabarty*, 447 U.S. 303 (1980)).

21. *Id.*

22. S. Rep. No. 91-1246, at 2-3 (1970) stating:

This bill as amended provides for the issuance of 'certificates of plant variety protection' assuring the developers of novel varieties of sexually reproduced plants of exclusive rights to sell, reproduce, import, or export such varieties, or use them in the production (as distinguished from the development) of hybrids or different varieties for a period of 17 years. A Plant Variety Protection Office would be established in the Department of Agriculture to administer the law. Similar protection provided for sexually [sic: asexually] reproduced varieties patents issued by the Patent Office [U]nder the patent law, patent protection is limited to those varieties of plants which reproduce sexually [sic: asexually], that is by such methods as grafting and budding. *No protection is available to those varieties of plant which reproduce sexually, that is, generally, by seeds.*

(emphasis added).

made it clear that the 1952 Patent Act did not provide protection for sexually reproducing plants, which is why enactment of the PVPA was necessary.²³ The court conceded that the language of the Senate Report appeared to indicate that there was no protection available for sexually reproducing plants; however, it noted that the PTO had been issuing patents for sexually reproducing plants prior to the enactment of the PVPA.²⁴

The court also examined another Congressional Report dealing with the PVPA with similar language as the Senate Report.²⁵ However, Judge O'Brien again rejected the defendants' arguments that this language removed from section 101 protection for plants.²⁶ The court relied on the Supreme Court's analysis in *Chakrabarty* of the legislative history and purpose of the PPA and the PVPA.²⁷ The District Court concluded that Congress's intention in enacting the PPA and the PVPA was to extend protection to an area not often able to meet the more stringent requirements of 35 U.S.C. § 112 of the 1952 Patent Act.²⁸ However, where inventors could define a plant that met the limits of section 112, Congress intended that utility patents for plants could be issued under section 101.²⁹

Finally, the court considered the defendants' third argument that there was an implicit narrowing of 35 U.S.C. § 101 because of an irreconcilable conflict between the 1952 Patent Act and the PVPA.³⁰ The thrust of the defendants' argument was that because the PVPA was much more specific than section 101 and the PVPA would not allow certain practices allowed under section 101, the two were in conflict and, thus, effect must be given to the later arising and more specific PVPA.³¹ However, Judge O'Brien stated two reasons for rejecting the defendants' argument. First, he concluded that the defendants' argument merely pointed out the differences in the scope of protection offered by the two statutes.³² Second, he stated that the defendants' argument ignored the important differences in the legal standards necessary for protection under each Act.³³ The court noted that the standards to obtain a patent under section 101 are significantly higher and more difficult to achieve than the standards for receiving a certificate under the PVPA. Judge O'Brien concluded that these two forms of protection were different and

23. *Pioneer Hi-Bred Int'l*, 49 U.S.P.Q. 2d at 1818.

24. *Id.*

25. *Id.* at 1818-19.

26. *Id.* at 1819.

27. *Id.*

28. *Id.*

29. *Id.*

30. *Id.*

31. *See id.* at 1820.

32. *Id.*

33. *Id.*

“the availability of one form of statutory protection does not preclude the availability of protection under another form.”³⁴

Additionally, the court noted that since the Board of Patent Appeals and Interference’s 1985 decision in *In re Hibberd*,³⁵ the law has recognized plant patents as statutory subject matter.³⁶ Judge O’Brien commented that since 1980 the PVPA has been amended 18 times and Congress has never added any specific language limiting the application of section 101 with regard to sexually reproduced plants.³⁷ As such, Congress has had over 15 years to address this issue legislatively if it disagreed. Finally, the District Court recognized Justice Brennan’s dissent in *Chakrabarty* as the best argument for the proposition that the PVPA is the sole avenue for the protection of sexually reproducing plants.³⁸ However, Judge O’Brien conceded that Justice Brennan’s opinion was a dissent and not the law.³⁹

After rejecting each of the defendants’ arguments, the District Court denied defendants’ motion for summary judgment. Defendant J.E.M. Ag Supply then submitted a motion for an interlocutory appeal to the Court of Appeals for the Federal Circuit which was granted.

IV. THE FEDERAL CIRCUIT AFFIRMS THE DISTRICT COURT

On appeal, the Court of Appeals for the Federal Circuit (“CAFC”) issued a brief four page opinion affirming the District Court’s ruling.⁴⁰ At the Federal Circuit, the defendants proffered the same arguments rejected by the District Court. In the opinion, Judge Newman simply outlined the defendants’ arguments and approvingly recited the District Court’s rejection of each argument.⁴¹ Ultimately, the CAFC concluded that the defendants failed to show any error in the District Court’s decision and held that “patentable subject matter under 35 U.S.C. § 101 includes seeds and seed-grown plants.”⁴² After a motion for rehearing *en banc* was denied by the CAFC, the defendants filed a writ of certiorari which was granted by the United States Supreme Court.⁴³

V. THE U.S. SUPREME COURT VALIDATES UTILITY PATENT PROTECTION FOR PLANTS

In *Pioneer Hi-Bred International v. J.E.M Ag Supply*,⁴⁴ the Supreme Court, in a 6-2 split, affirmed the decision of the Federal Circuit. Justice Thomas delivered the majority opinion of the Court. At the outset,

34. *Id.* at 1820-21.

35. 227 U.S.P.Q. 443 (Bd.Pat.App. & Interf. 1985).

36. *Pioneer Hi-Bred Int’l*, 49 U.S.P.Q.2d at 1821. (In fact, to date over 1800 utility patents have been issued for plants).

37. *Id.* at 1822.

38. *Id.* See *Diamond v. Chakrabarty*, 447 U.S. 303 (1980) (Brennan, J., dissenting).

39. *Pioneer Hi-Bred Int’l*, 49 U.S.P.Q. 2d at 1822.

Justice Thomas clearly and succinctly framed the issue being decided as “whether utility patents may be issued for plants pursuant to 35 U.S.C. § 101.”⁴⁵ The Court began by recognizing its previous decision in *Chakrabarty* stating, “we are mindful that this Court has already spoken clearly concerning the broad scope and applicability of § 101.”⁴⁶ It also noted the PTO’s practice of issuing utility patents under section 101 since the *In re Hibberd* decision.⁴⁷

On appeal, the petitioners (J.E.M. Ag Supply) did not dispute that plants did fall within the broad language of section 101. Nor did they allege that Pioneer’s patents-in-suit failed to meet the requirements for a utility patent. Instead, the petitioners advanced three arguments that the PPA and the PVPA were the exclusive means of protecting plants.⁴⁸ First, the petitioners argued that plants were not covered by the general patent statute prior to 1930.⁴⁹ Next, it was argued that the “PPA’s limitation to asexually reproduced plants would make no sense if Congress intended § 101 to authorize patents on sexually reproduced plants.”⁵⁰ Finally, the petitioners argued that if Congress had intended section 101 to allow for protection of plants, it would not have moved plants out of the utility patent provision and into section 161 in 1952.⁵¹ In addressing these arguments, the Court examined each statute in turn.

The Court first examined the PPA. Justice Thomas began by discussing the enactment and history of the PPA.⁵² He stated that under 35 U.S.C. §§ 161-164, the PPA conferred patent protection to asexually reproduced plants and that the PPA’s coverage was very limited and less stringent than that of section 101 utility patents.⁵³ More importantly, Justice Thomas illustrated that nowhere in the PPA was it stated that

40. *Pioneer Hi-Bred Int’l, Inc. v. J.E.M. Ag Supply, Inc.*, 200 F.3d 1374 (Fed. Cir. 2000).

41. *See Id.*

42. *Id.* at 1378.

43. 531 U.S. 1143 (2001).

44. *Pioneer Hi-Bred Int’l, Inc. v. J.E.M. Ag Supply, Inc.*, 122 S. Ct. 593 (2001).

45. *Id.* at 597.

46. *Id.* at 598.

47. *Id.*

48. *Id.* at 598-99.

49. *Id.* at 599.

50. *Id.* at 600.

51. *Id.* at 602.

52. *Id.* at 599. The 1930 PPA conferred patent protection to asexually reproduced plants under the general utility patent provision. The general utility provision read,

Any person who has invented or discovered any new and useful art, machine, manufacture or composition of matter, or any new and useful improvements thereof, or who has invented or discovered and asexually reproduced any distinct and new variety of plant, other than a tuber propagated plant, not known or used by others in this country, before his invention or discovery thereof, . . . may . . . obtain a patent therefore.

Id. (citing Act of May 23, 1930, § 1, 46 Stat. 376). However, in 1952, Congress revised the patent statute taking protection for plants outside of the general utility patent provision and created 35 U.S.C. §§ 161-164, “Patents for plants.” *Id.*

53. *Pioneer Hi-Bred Int’l*, 122 S. Ct. at 599.

plant patents under section 161 were the exclusive means for granting intellectual property protection to plants.⁵⁴

In turning to the petitioners' first argument, the Court stated that the petitioners overlooked the state of patent law and plant breeding at the time of the PPA's enactment in 1930.⁵⁵ Citing *Chakrabarty*, the Court explained that there were two reasons prior to 1930 that plants were thought to be ineligible for patent protection under section 101.⁵⁶ First was the belief that plants were products of nature. Second, plants were not amenable to the written description requirement of the patent law.⁵⁷ Justice Thomas noted that Congress' reaction to these concerns was the enactment of the PPA in 1930.⁵⁸ The PPA gave plant breeders, who were previously unable to overcome these two obstacles, an avenue to protect their intellectual property. However, the Court stated that the enactment of the PPA did not mean that prior to 1930 plants could not have fallen within section 101, it just meant that Congress believed that plants were unpatentable under section 101 at the time.⁵⁹ Justice Thomas noted that since 1930, advances in biological knowledge and plant breeding techniques have allowed plant breeders to satisfy section 101's description requirement.⁶⁰ As such, plants have always had the potential to fall within the scope of section 101, which was designed to "encompass new and unforeseen inventions."⁶¹ The Court summed up the petitioners' argument as essentially asking "to deny utility patent protection for sexually reproduced plants because it was unforeseen in 1930 that such plants could receive protection under § 101."⁶² This argument was rejected by the Court as "inconsistent with the forward-looking perspective of the utility patent statute".⁶³

Next, the Court turned to the petitioners' second argument that the PPA's limitation to asexually reproduced plants would make no sense if Congress intended section 101 to authorize patents on sexually reproduced plants. Justice Thomas iterated that this argument "once again merely reflects the reality of plant breeding in 1930."⁶⁴ The Court noted that in 1930, the primary means of successfully reproducing plants was through asexual reproduction.⁶⁵ Sexual reproduction of plants was thought to be unstable by Congress at the time, so it made sense that

54. *Id.*

55. *Id.* at 600. Petitioners argued, "If the patent laws before 1930 allowed patents of 'plants' then there would have been no reason for Congress to have passed the 1930 PPA . . ." *Id.* at 599-600 (quoting Brief for Petitioners 19).

56. *Id.* at 600.

57. *Id.*

58. *Id.*

59. *Id.*

60. *Id.*

61. *Id.*

62. *Id.*

63. *Id.*

64. *Id.*

65. *Id.*

Congress only decided to protect asexual methods at the time.⁶⁶ Therefore, given the context of the plant industry in 1930, the Court concluded that the petitioners failed to present any evidence, let alone the overwhelming evidence required to establish repeal by implication, that Congress, through the PPA, intended to preclude utility patent protections for sexually reproduced plants.

Finally, the Court addressed the petitioners' third argument that if Congress had intended section 101 to allow for protection of plants, it would not have moved plants out of the utility patent provision and into section 161 in 1952. This argument was also rejected in view of the fact that "§ 101 can protect different attributes and has more stringent requirements than does § 161".⁶⁷ Additionally, Justice Thomas noted that Congress's change in 1952 did nothing to the substantive rights or requirements for obtaining a plant patent; it was "essentially a housekeeping measure."⁶⁸

The Court then examined the petitioners' position that the enactment of the PVPA evidenced Congress' intention to deny section 101 protection to sexually reproduced plants. Justice Thomas dismissed this argument for two reasons. First, there is no language in the PVPA that purports that the PVPA is the exclusive statutory means for protecting sexually reproduced plants.⁶⁹ Second, the Court concluded that section 101 and the PVPA could easily be reconciled due to the fact that it is significantly more difficult to qualify for a utility patent under section 101 than a certificate under the PVPA.⁷⁰ Thus, Justice Thomas concluded, "it only makes sense that utility patents would confer a greater scope of protection."⁷¹ The Court also noted, as did the District Court, that it had been a regular practice at the PTO since *In re Hibberd* to grant utility patents for sexually reproduced plants, reaffirming the fact that such material was within the scope of section 101.⁷²

Finally, since it was concluded that section 101 and the PVPA could be reconciled, the Court rejected the petitioners' assertion that the PVPA repealed part of section 101 by implication. Pointing to the differences in requirements and the scope of protection between each statutory scheme, Justice Thomas concluded it was clear that there was

66. *Id.* at 600-01. Additionally, the Court also noted that in the 1930's, the Government had an extensive program providing free seeds to farmers. Thus, seed companies were not concerned with protection because there were few markets for seed. *Id.* Moreover, seed scientists at the time lacked the scientific knowledge to engage in controlled breeding and point out new varieties of seeds. *Id.* at 601. However, plants were being successfully asexually produced by nurseries, thus, this is where the focus of protection was at the time. *Id.*

67. *Id.* at 602.

68. *Id.*

69. *Id.*

70. *Id.*

71. *Id.* The Court then enumerated the differences between § 101 and the PVPA for obtaining protection, and the differences in the scope of protection available under each regime.

72. *Id.* at 605. The court noted that since 1985 the PTO has issued over 1800 utility patents for sexually reproduced plants.

no “positive repugnancy” between the issuance of utility patents and PVPA coverage for plants that would be required for a repeal by implication.⁷³ The Court noted that it had not previously hesitated to give effect to two statutes that overlapped. It recognized that dual protection of intellectual property had been allowed in other intellectual property cases.⁷⁴

In summary, the Court stated that in the face of these developments, not only has Congress failed to pass legislation indicating that it disagrees with the PTO’s interpretation of section 101, but it has actually recognized the availability of utility patent protection for plants through its amendment of 35 U.S.C. § 119.⁷⁵ Of note to the Court was the fact that section 119 is part of the general provision of Title 35, not the specific chapter of the PPA, which further suggests a recognition by Congress that plants are patentable under section 101.⁷⁶ For the above reasons, the Court held “that newly developed plant breeds fall within the terms of § 101, and that neither the PPA nor the PVPA limits the scope of § 101’s coverage.”⁷⁷

In addition to the majority opinion, Justice Scalia also issued a brief concurring opinion. In his opinion, Justice Scalia focused on the issues of statutory construction. He stated that this case “seemingly [pitted] against each other two perfectly valid canons of interpretation: (1) that statutes must be considered in their entirety, so that the meaning of one provision sheds light upon the meaning of another; and (2) that repeals by implication are not favored.”⁷⁸ Justice Scalia reasoned that these canons could only be reconciled if the first was limited by the second. He concluded that in regard to the present case, the enactment of the PPA invited the conclusion that the term “composition of matter” in section 101 did not include living things since this was the only way the PPA language could be interpreted as clarifying the ambiguous language of section 101.⁷⁹ However, since *Chakrabarty*, *stare decisis* prevented the Court from considering as ambiguous whether “composition of matter” includes living things. Thus, Scalia concluded that if the language of the PPA was going to have any effect on the outcome of this case, Congress “must do so by amending what we have held to be a statute that covers living things (and hence covers plants).”⁸⁰ He then stated that the canon

73. *Id.*

74. *Id.*

75. *Id.* at 606. Congress provided: “Applications for plant breeder’s rights filed in a WTO [World Trade Organization] member country . . . shall have the same effect for the purpose of the right of priority . . . as applications for patents, subject to the same conditions and requirements of this section as apply to applications for patents.” *Id.* (quoting 35 U.S.C. § 119(f) (1999)).

76. *Id.*

77. *Id.*

78. *Id.*

79. *Id.*

80. *Id.*

against repeal by implication comes into play and results in the outcome reached by the majority.

As in the *Chakrabarty* case, Justice Breyer filed a substantial dissenting opinion, which was joined by Justice Stevens. Justice Breyer framed the issue before the Court as “whether the words ‘manufacture’ or ‘compositions of matter’ . . . cover plants that also fall within the scope of two more specific statutes, the [PPA] and the [PVPA]”⁸¹ In deciding this issue, the dissenters concluded that the words “manufacture” and “composition of matter” do not cover plants because Congress intended the two more specific statutes to exclude plants from section 101.⁸² Furthermore, Justice Breyer was not convinced that *Chakrabarty* was controlling in the present case.

The dissent first argued that *Chakrabarty* says nothing about the issue that was presently before the Court. Its position was that *Chakrabarty* dealt with the issue of the patentability of bacteria under section 101 and that plants are distinct from bacteria.⁸³ In fact, the *Chakrabarty* decision nowhere stated or implied that section 101 covered plants, which are the subject of two more specific statutes.⁸⁴ Justice Breyer noted that the PVPA specifically excluded bacteria and that the Court of Customs and Patent Appeals has held that bacteria were not plants for purposes of the PPA.⁸⁵ Thus, the dissenters concluded that the *Chakrabarty* decision was not dispositive in this case.

Next, Justice Breyer examined the PPA and concluded the legislative intent of the PPA was to deny coverage to those plants explicitly covered by the statute. He began by arguing that the language in the PPA refers to all plants, not just those asexually reproduced.⁸⁶ The dissenters argued that the requirement under the PPA that the plant must be “asexually reproduced” does not separate plants that sexually reproduce from plants that asexually reproduce. “The two categories are not mutually exclusive.”⁸⁷ Justice Breyer noted that virtually any plant can be asexually reproduced as well as reproduced sexually. He argued the purpose of the “asexual reproduction” requirement simply sought to ensure the inventor was capable of reproducing the new plant “asexually” since this fact would guarantee that the reproduction would be genetically stable.⁸⁸ The PPA’s protection thus grants the exclusive right to asexually reproduce the plant, but not exclude other from sexually reproducing it since asexual reproduction is the only method available to truly genetically replicate the plant.⁸⁹ The dissent, therefore,

81. *Id.* at 607.

82. *Id.*

83. *Id.*

84. *Id.*

85. *Id.* at 608.

86. *Id.*

87. *Id.*

88. *Id.*

89. *Id.*

concluded that the PPA protects plants that reproduce through grafts (asexually), plants that reproduce through seeds (sexually), and plants that reproduce both ways.⁹⁰ Given this conclusion, Justice Breyer stated that the PPA was therefore incompatible with the claim that section 101 also covered plants.

The dissent then turned to the PVPA, concluding nothing in the PVPA altered the conclusion that section 101 does not cover plants. Justice Breyer argued nothing in the language, history, or purpose of the PVPA suggests an intent to reintroduce plants into the scope of the words “manufacture” or “composition of matter,” subject matter which was removed from section 101 by the PPA.⁹¹ In fact, Breyer stated any such reintroduction would make many provisions of the PVPA meaningless, particularly the exceptions from infringement for planting and research.⁹²

Finally, the dissenters addressed the focus the Court’s opinion, and Justice Scalia’s concurrence, put on the interpretive canon disfavoring repeal by implication. Justice Breyer argued the Court’s reliance on the canon of implied repeal was misplaced.⁹³ This canon is traditionally invoked when a later statute, not actually modifying an earlier statute, implicitly repeals part or all of the earlier legislation. In this case, however, the dissent argued the PPA explicitly “amended the Utility Patent Statute by limiting protection to plants produced by graft.”⁹⁴ As such, the canon of implied repeal had no relevance in this situation. Justice Breyer also noted that even if this were not so, a later more specific statute ordinarily would trump an earlier, more general one.⁹⁵ Additionally, he added canons are not mandatory rules, just guides to help determine legislative intent. The dissent concluded intent is critical and the intent here is “clear that the Utility Patent Statute does not apply to plants.”⁹⁶

VI. CONCLUSION

In *Pioneer*, the United States Supreme Court laid to rest the question of whether sexually reproduced plants were statutory subject matter under section 101. The Court made clear that if inventors of new varieties of plants are able to meet the stringent patentability standards

90. *Id.* at 609.

91. *Id.* at 610.

92. *Id.* The PVPA provides for two key exceptions from infringement of a plant covered by a PVPA certificate. The first exception allows a farmer who uses a PVPA protected plant in his fields, to save the seeds produced and planting them in future years. The second exception allows for the use and reproduction of a protected plant for plant breeding or other bona fide research. 7 U.S.C. §§ 2543, 2544 (2000).

93. *J.E.M. Ag Supply, Inc.*, 122 S. Ct. at 611.

94. *Id.*

95. *Id.*

96. *Id.*

of section 101 and section 112, they will be entitled to utility patent protection. Additionally, the Court clarified that section 101 can also be reconciled with the PPA and the PVPA. In fact, the three statutes may provide overlapping protection and are not mutually exclusive. Thus, inventors of new plant varieties are free to apply for protection under each regime and may benefit from the protection provided by each regime.