Breyer, J., dissenting

SUPREME COURT OF THE UNITED STATES

No. 99-1996

J. E. M. AG SUPPLY, INC., DBA FARM ADVANTAGE, INC., ET AL, PETITIONERS v. PIONEER HI-BRED INTERNATIONAL, INC.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

[December 10, 2001]

JUSTICE BREYER, with whom JUSTICE STEVENS joins, dissenting.

The question before us is whether the words "manufacture" or "compositions of matter" contained in the utility patent statute, 35 U.S.C. §101 (1994 ed.) (Utility Patent Statute), cover plants that also fall within the scope of two more specific statutes, the Plant Patent Act of 1930 (PPA), 35 U. S. C. §161 et seq. (1994 ed. and Supp. V), and the Plant Variety Protection Act (PVPA), 7 U. S. C. §2321 et seq. I believe that the words "manufacture" or "composition of matter" do not cover these plants. That is because Congress intended the two more specific statutes to exclude patent protection under the Utility Patent Statute for the plants to which the more specific Acts directly refer. And, as the Court implicitly recognizes, this Court neither considered, nor decided, this question in Diamond v. Chakrabarty, 447 U.S. 303 (1980). Consequently, I dissent.

T

Respondent and the Government claim that *Chakrabarty* controls the outcome in this case. This is incorrect, for *Chakrabarty* said nothing about the specific issue before us. *Chakrabarty*, in considering the scope of the

Utility Patent Statute's language "manufacture, or composition of matter," 35 U.S.C. §101 (1994 ed.), asked whether those words included such living things as bacteria—a substance to which neither of the two specific plant Acts refers. 447 U.S., at 313–314. The Court held that the Utility Patent Statute language included a "new" bacterium because it was "a nonnaturally occurring manufacture or composition of matter" that was "not nature's handiwork." Id., at 309-310. It quoted language from a congressional Committee Report indicating that "Congress intended statutory subject matter to 'include anything under the sun that is made by man." Id., at 309 (quoting S. Rep. No. 1979, 82d Cong., 2d Sess., 5 (1952); H. R. Rep. No. 1923, 82d Cong., 2d Sess., 6 (1952)). But it nowhere said or implied that this Utility Patent Statute language also includes the very subject-matter with which the two specific statutes deal, namely plants. Whether a bacterium technically speaking is, or is not, a plant, the Court considered it a "life form," and not the kind of "plant" that the two specific statutes had in mind. 447 U.S., at 314 (noting that the PVPA specifically excluded bacteria, and that the Court of Customs and Patent Appeals had held that bacteria were not plants for purposes of the PPA).

The Court did consider a complicated argument that sought indirectly to relate the two specific plant statutes to the issue before it. That argument went roughly as follows: (1) Congress enacted two special statutes related to plants. (2) Even though those two statutes do not cover bacteria, the fact that Congress enacted them shows that Congress thought the Utility Patent Statute's language ("manufacture, or composition of matter") did not cover any living thing, including bacteria. (3) Congress consequently must have intended the two special Acts to provide exclusive protection for all forms of "life" whether they do, or do not, count as the kinds of "plants" to which the specific statutes refer.

The Court, in reply, wrote that Congress, when enacting the specific statutes, might have (wrongly) believed that the Utility Patent Statute did not apply to plants, probably because Congress thought that plants were "natural products," not human products. Id., at 311. It added that Congress also might have believed that it was too difficult for plant inventors to meet patent law's ordinary "written description" requirement. Id., at 312. In addition, the Court pointed out that the relevant distinction between unpatentable and patentable subject matter was not between living and inanimate things, but rather between products of nature and human-made inventions. Id., at 312–313. As such, the bacteria at issue were patentable because they were products of human invention. And the Court concluded that "nothing" in Congress' decision to exclude bacteria from the PVPA supported "petitioner's position," namely that Congress intended no utility patent protection for any living thing. Id., at 313–314.

Neither this refutation nor the argument itself decides the question here. That question is *not* about general coverage for matters that the special statutes *do not* mention (namely, nonplant life forms such as bacteria). It *is* about general coverage for matters to which the special plant statutes do refer (namely, plants). *Chakrabarty* neither asked, nor answered, this latter question, the question now before us. And nothing in the Court's opinion indicates the contrary.

II

The critical question, as I have said, is whether the two specific plant statutes embody a legislative intent to deny coverage under the Utility Patent Statute to those plants to which the specific plant statutes refer. In my view, the first of these statutes, the PPA, reveals precisely that intent. And nothing in the later history of either the Utility Patent Statute or the PVPA suggests the contrary.

As initially enacted in 1930, the PPA began by amending the Utility Patent Statute to read as follows:

"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 . . . may . . . obtain a patent therefor[e]." Rev. Stat. §4886, as amended by Act of May 23, 1930, §1, 46 Stat. 376. (language added by the PPA italicized).

This language refers to *all* plants. It says that an inventor—in principle—can obtain a patent on *any* plant (the subject matter of the patent) that meets three requirements. It must be distinct; it must be new; and on one or more occasions it must have been "asexually reproduced," *e.g.*, reproduced by means of a graft.

This last-mentioned "graft" requirement does not separate (1) those plants that can reproduce through grafting from (2) those plants that can reproduce by seed. The two categories are not mutually exclusive. P. Raven, R. Evert, & S. Eichhorn, Biology of Plants 179–180, 255 (6th ed. 1999). Many plants—perhaps virtually any plant—can be reproduced "asexually" as well as by seed. S. Rep. No. 315, 71st Cong., 2d Sess., 5 (1930). Rather, the "asexual reproduction" requirement sought to ensure that the inventor was capable of reproducing the new variety "asexually" (through a graft) because that fact would guarantee that the variety's new characteristics had genetic (rather that, say, environmental) causes and would prove genetically stable over time. See *ibid*. ("A plant patent covers only the exclusive right of asexual reproduction, and obviously it would be futile to grant a patent for a new and distinct variety unless the variety had been demonstrated to be susceptible to asexual reproduction");

cf. Dunn v. Ragin, 50 USPQ 472, 474 (1941) (noting that asexual reproduction "determine[s] that the progeny in fact possess the characteristic or characteristics which distinguish it as a new variety").

Although the section defining the PPA's coverage does not limit its scope to plants that reproduce primarily through grafting, a later section does so limit the protection that it offers. That section specifies that the patent holder will receive "the exclusive right to asexually reproduce the plant," e.g., the right to reproduce it through grafting, but he will not receive an exclusive right to reproduce the plant sexually, i.e., the right to reproduce it through seeds. 46 Stat. 376. And this is true regardless of whether the patent holder could reproduce true to type offspring through seeds. See S. Rep. No. 315, at 4 ("On the other hand, [the PPA] does not give any patent protection to the right of propagation of the new variety by seed, irrespective of the degree to which the seedlings come true to type"). This was a significant limitation because, the Court's contrary claim notwithstanding, ante, at 10, and n. 7, it was readily apparent in 1930 that a plant's desirable characteristics *could* be preserved through reproduction by seed. See Fowler, The Plant Patent Act of 1930: A Sociological History of its Creation, 82 J. Pat. & Tm. Off. Soc. 621, 635, 644 (2000).

In sum, the PPA permits patenting of new and distinct varieties of (1) plants that breeders primarily reproduce through grafts (say, apple trees), (2) plants that breeders primarily reproduce through seeds (say, corn), and (3) plants that reproduce both ways (say, violets). See C. Chong, Plant Propagation, reprinted in 1 CRC Handbook of Plant Science in Agriculture 91–92, 94, 104 (B. Christie & A. Hanson eds., 1987); Raven, Evert, & Eichhorn, *supra*, at 179. But, because that statute left plant buyers free to keep, to reproduce, and to sell seeds, the statute likely proved helpful *only* to those in the first category. Both the

PPA's legislative history and the earliest patents granted under the Act fully support this interpretation. See S. Rep. No. 315, at 3 (explaining that varieties that "resul[t] from seedlings of cross pollenization of two species" were patentable under the Act); Plant Patent Nos. 1–2, 5–6, 8–11 (roses); Plant Patent Nos. 7, 15 (peach trees).

Given these characteristics, the PPA is incompatible with the claim that the Utility Patent Statute's language ("manufacture, or composition of matter") also covers plants. To see why that is so, simply imagine a plant breeder who, in 1931, sought to patent a new, distinct variety of plant that he invented but which he has never been able to reproduce through grafting, i.e., asexually. Because he could not reproduce it through grafting, he could not patent it under the more specific terms of the PPA. Could he nonetheless patent it under the more general Utility Patent Statute language "manufacture, or composition of matter?"

Assume the court that tried to answer that question was prescient, i.e., that it knew that this Court, in Chakrabarty, 447 U.S., at 311–312, would say that the Utility Patent Statute language ("manufacture," or "composition of matter") in principle might cover "anything under the sun," including bacteria. Such a prescient court would have said that the Utility Patent Statute did cover plants had the case reached it in 1929, before Congress enacted the more specific 1930 law. But how could any court decide the case similarly in 1931 after enactment of the 1930 amendment? To do so would virtually nullify the PPA's primary condition—that the breeder have reproduced the new characteristic through a graft—reading it out of the Act. Moreover, since the Utility Patent Statute would cover, and thereby forbid, reproduction by seed, such a holding would also have read out of the statute the PPA's more limited list of exclusive rights. Consequently, even a prescient court would have had to say, as of 1931,

that the 1930 Plant Patent Act had, in amending the Utility Patent Statute, placed the subject matter of the PPA—namely plants—outside the scope of the words "manufacture, or composition of matter." See *United States* v. *Estate of Romani*, 523 U. S. 517, 530–533 (1998) (holding that a later, specific statute trumps an earlier, more general statute).

Nothing that occurred after 1930 changes this conclusion. In 1952, the Utility Patent Statute was recodified, and the PPA language I have quoted was given its own separate place in the Code. See 35 U. S. C. §161 et seq. (1994 ed. and Supp. V). As Pioneer itself concedes, that change was not "substantive." Brief for Respondent 7, see also ante, at 7. Indeed, as recodified the PPA still allows a breeder to obtain a patent when he "invents or discovers and asexually reproduces any distinct and new variety of plant," 35 U. S. C. §161 (1994 ed.) (emphasis added), but it only allows the patent holder to "exclude others from asexually reproducing the plant or selling or using the plant so reproduced," §163 (emphasis added).

Nor does the enactment of the Plant Variety Protection Act of 1970, change the conclusion. The PVPA proved necessary because plant breeders became capable of creating new and distinct varieties of certain crops, corn for example, that were valuable only when reproduced through seeds—a form of reproduction that the earlier Act freely permitted. See S. Rep. No. 91–1246, pp. 2–3 (1970). Just prior to its enactment a special Presidential Commission, noting the special problems that plant protection raised and favoring the development of a totally new plant protection scheme, had recommended that "[a]ll provisions in the patent statute for plant patents be deleted" President's Commission on the Patent System, To Promote the Progress of Useful Arts, S. Doc. No. 5, 90th Cong., 1st Sess., 20–21 (1967) (hereinafter S. Doc.). Instead Congress kept the PPA while adding the PVPA.

PVPA gave patent-like protection (for 20 years) to plants reproduced by seed, and it excluded the PPA's requirement that a breeder have "asexually reproduced" the plant. 7 U. S. C. §§2402, 2483. It imposed certain specific requirements. §2402 (variety must be new, distinct, uniform, and stable). And it provided the breeder with an exclusive right to sell, offer to sell, reproduce, import, or export the variety, including the seeds. §2483.

At the same time, the PVPA created two important exceptions. The first provided that a farmer who plants his fields with a protected plant "shall not infringe any right hereunder" by saving the seeds and planting them in future years. §2543. The second permitted "use and reproduction of a protected variety for plant breeding or other bona fide research." §2544.

Nothing in the history, language, or purpose of the 1970 statute suggests an intent to reintroduce into the scope of the general words "manufacture, or composition of matter" the subject matter that the PPA had removed, namely plants. To the contrary, any such reintroduction would make meaningless the two exceptions—for planting and for research—that Congress wrote into that Act. It is not surprising that no party argues that passage of the PVPA somehow enlarged the scope of the Utility Patent Statute.

III

The Court replies as follows to the claim that its reading of the Utility Patent Statute nullifies the PPA's limitation of protection to plants produced by graft and the PVPA's exemptions for seeds and research: (1) The Utility Patent Statute applies only to plants that are useful, novel, nonobvious, and for which the inventor provides an enabling written description of the invention. 35 U. S. C. §§101, 102, 103, 112 (1994 ed. and Supp. V). (2) The PVPA applies to plants that are novel, distinct, uniform, and stable. 7 U. S. C. §2402. (3) The second set of criteria

seem slightly easier to meet, as they do not include nonobviousness and a written description (Pioneer does not argue that the "useful" requirement is significant). (4) And Congress could reasonably have intended the planting and research exceptions to apply only to the set of plants that can meet the easier, but not the tougher, criteria.

I do not find this argument convincing. For one thing, it is not clear that the general patent law requirements are significantly tougher. Counsel for Pioneer stated at oral argument that there are many more PVP certificates than there are plant patents. But he added that the major difference in criteria is the difference between the utility patent law's "nonobviousness" requirement and the specific Acts' requirement of "newness"—a difference that may reflect the Patent Office's more "rigorous" examination process. See Tr. of Oral Arg. 26, 30. But see S. Doc., at 20–21 (suggesting little difference because patent office tends to find "nonobviousness" as long as the plant is deemed "new" by the Department of Agriculture).

In any case, there is no relationship between the criteria differences and the exemptions. Why would anyone want to limit the exemptions—related to seedplanting and research—only to those new plant varieties that are slightly less original? Indeed, the research exemption would seem more useful in respect to more original, not less original, innovation. The Court has advanced no sound reason why Congress would want to destroy the exemptions in the PVPA that Congress created. And the Court's reading would destroy those exemptions.

The Court and JUSTICE SCALIA's concurrence also rely upon the interpretive canon that disfavors repeal by implication. The Court, citing *Matsushita Elec. Industrial Co.* v. *Epstein*, 516 U. S. 367 (1996), says that "there is simply no evidence" that the PPA was meant to preclude §101 protection for sexually reproduced plants. *Ante*, at 11–12.

But reliance on the canon of "implied repeal" is misplaced. The canon has traditionally been embraced when a party claims that a later statute—that does not actually modify an earlier statute—implicitly repeals the earlier legislation. E.g., 516 U.S., at 380–381. That canon has no relevance to the PPA—which explicitly amended the Utility Patent Statute by limiting protection to plants produced by graft. Even were that not so, the Court has noted that a later, more specific statute will ordinarily trump the earlier, more general one. See United States v. Estate of Romani, 523 U.S., at 530–533.

Regardless, canons are not mandatory rules. They are guides to help courts determine likely legislative intent. See Chickasaw Nation v. United States, 534 U.S. ___ (2001); see also Circuit City Stores, Inc. v. Adams, 532 U.S. 105, 115 (2001); id., at 137–140 (SOUTER, J., dissenting). And that intent is critical. Those who write statutes seek to solve human problems. Fidelity to their aims requires us to approach an interpretive problem not as if it were a purely logical game, like a Rubik's Cube, but as an effort to divine human intent that underlies the statute. Here that effort calls not for an appeal to canons, but for an analysis of language, structure, history, and purpose. Those factors make clear that the Utility Patent Statute does not apply to plants. Nothing in *Chakrabarty* holds to the contrary.

For these reasons, I dissent