

Opinion of the Court

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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 THOMAS delivered the opinion of the Court.

This case presents the question whether utility patents may be issued for plants under 35 U. S. C. §101 (1994 ed.), or whether the Plant Variety Protection Act, 84 Stat. 1542, as amended, 7 U. S. C. §2321 *et seq.*, and the Plant Patent Act of 1930, 35 U. S. C. §§161–164 (1994 ed. and Supp. V), are the exclusive means of obtaining a federal statutory right to exclude others from reproducing, selling, or using plants or plant varieties. We hold that utility patents may be issued for plants.

I

The United States Patent and Trademark Office (PTO) has issued some 1,800 utility patents for plants, plant parts, and seeds pursuant to 35 U. S. C. §101. Seventeen of these patents are held by respondent Pioneer Hi-Bred International, Inc. (Pioneer). Pioneer’s patents cover the manufacture, use, sale, and offer for sale of the company’s inbred and hybrid corn seed products. A patent for an inbred corn line protects both the seeds and plants of the inbred line and the hybrids produced by crossing the

protected inbred line with another corn line. See, *e.g.*, U. S. Patent No. 5,506,367, col. 3, App. 42. A hybrid plant patent protects the plant, its seeds, variants, mutants, and trivial modifications of the hybrid. See U. S. Patent No. 5,491,295, cols. 2–3, *id.*, at 29–30.

Pedigree inbred corn plants are developed by crossing corn plants with desirable characteristics and then inbreeding the resulting plants for several generations until the resulting plant line is homogenous. Inbreds are often weak and have a low yield; their value lies primarily in their use for making hybrids. See, *e.g.*, U. S. Patent No. 5,506,367, col. 6, *id.*, at 43 (describing the traits and applications of the inbred corn line PHP38 by reference to the qualities exhibited in hybrid plants created with PHP38).

Hybrid seeds are produced by crossing two inbred corn plants and are especially valuable because they produce strong and vibrant hybrid plants with selected highly desirable characteristics. For instance, Pioneer’s hybrid corn plant 3394 is “characterized by superior yield for maturity, excellent seedling vigor, very good roots and stalks, and exceptional stay green.” U. S. Patent No. 5,491,295, cols. 2–3, *id.*, at 29–30. Hybrid plants, however, generally do not reproduce true-to-type, *i.e.*, seeds produced by a hybrid plant do not reliably yield plants with the same hybrid characteristics. Thus, a farmer who wishes to continue growing hybrid plants generally needs to buy more hybrid seed.

Pioneer sells its patented hybrid seeds under a limited label license that provides: “License is granted solely to produce grain and/or forage.” *Id.*, at 51. The license “does not extend to the use of seed from such crop or the progeny thereof for propagation or seed multiplication.” *Ibid.* It strictly prohibits “the use of such seed or the progeny thereof for propagation or seed multiplication or for production or development of a hybrid or different variety of seed.” *Ibid.*

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Petitioner J. E. M. Ag Supply, Inc., doing business as Farm Advantage, Inc., purchased patented hybrid seeds from Pioneer in bags bearing this license agreement. Although not a licensed sales representative of Pioneer, Farm Advantage resold these bags. Pioneer subsequently brought a complaint for patent infringement against Farm Advantage and several other corporations and residents of the State of Iowa who are distributors and customers for Farm Advantage (referred to collectively as Farm Advantage or petitioners). Pioneer alleged that Farm Advantage has “for a long-time past been and still [is] infringing one or more [Pioneer patents] by making, using, selling, or offering for sale corn seed of the . . . hybrids in infringement of these patents-in-suit.” *Id.*, at 10.

Farm Advantage answered with a general denial of patent infringement and entered a counterclaim of patent invalidity, arguing that patents that purport to confer protection for corn plants are invalid because sexually reproducing plants are not patentable subject matter within the scope of 35 U. S. C. §101 (1994 ed.). App. 12–13, 17. Farm Advantage maintained that the Plant Patent Act of 1930 (PPA) and the Plant Variety Protection Act (PVPA) set forth the exclusive statutory means for the protection of plant life because these statutes are more specific than §101, and thus each carves out subject matter from §101 for special treatment.¹

The District Court granted summary judgment to Pioneer. Relying on this Court’s broad construction of §101 in

¹Petitioners favor a holding that the PVPA is the only means of protecting these corn plants primarily because the PVPA’s coverage is generally less extensive and the hybrid seeds at issue do not have PVPA protection. App. 14. Most notably, the PVPA provides exemptions for research and for farmers to save seed from their crops for replanting. See, *infra*, at 14. Utility patents issued for plants do not contain such exemptions.

Diamond v. Chakrabarty, 447 U. S. 303 (1980), the District Court held that the subject matter covered by §101 clearly includes plant life. 49 USPQ 2d 1813, 1817 (ND Iowa 1998). It further concluded that in enacting the PPA and the PVPA Congress neither expressly nor implicitly removed plants from §101's subject matter. *Id.*, at 1819. In particular, the District Court noted that Congress did not implicitly repeal §101 by passing the more specific PVPA because there was no irreconcilable conflict between the PVPA and §101. *Id.*, at 1821.

The United States Court of Appeals for the Federal Circuit affirmed the judgment and reasoning of the District Court. 200 F. 3d 1374 (2000). We granted certiorari, 531 U. S. 1143 (2001), and now affirm.

II

The question before us is whether utility patents may be issued for plants pursuant to 35 U. S. C. §101 (1994 ed.). The text of §101 provides:

“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 therefor, subject to the conditions and requirements of this title.”

As this Court recognized over 20 years ago in *Chakrabarty*, 447 U. S., at 308, the language of §101 is extremely broad. “In choosing such expansive terms as ‘manufacture’ and ‘composition of matter,’ modified by the comprehensive ‘any,’ Congress plainly contemplated that the patent laws would be given wide scope.” *Ibid.* This Court thus concluded in *Chakrabarty* that living things were patentable under §101, and held that a manmade micro-organism fell within the scope of the statute. As Congress recognized, “the relevant distinction was not between living and inanimate things, but between products of nature, whether

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living or not, and human-made inventions.” *Id.*, at 313.

In *Chakrabarty*, the Court also rejected the argument that Congress must expressly authorize protection for new patentable subject matter:

“It is, of course, correct that Congress, not the courts, must define the limits of patentability; but it is equally true that once Congress has spoken it is ‘the province and duty of the judicial department to say what the law is.’ *Marbury v. Madison*, 1 Cranch 137, 177 (1803). Congress has performed its constitutional role in defining patentable subject matter in §101; we perform ours in construing the language Congress has employed. . . . The subject-matter provisions of the patent law have been cast in broad terms to fulfill the constitutional and statutory goal of promoting ‘the Progress of Science and the useful Arts’ with all that means for the social and economic benefits envisioned by Jefferson.” *Id.*, at 315.

Thus, in approaching the question presented by this case, we are mindful that this Court has already spoken clearly concerning the broad scope and applicability of §101.²

Several years after *Chakrabarty*, the PTO Board of Patent Appeals and Interferences held that plants were within the understood meaning of “manufacture” or “composition of matter” and therefore were within the subject

²JUSTICE BREYER argues that *Diamond v. Chakrabarty*, 447 U. S. 303, 315 (1980), cannot determine the outcome of this case because it did not answer the precise question presented. See *post*, at 1–3 (dissenting opinion). But this simply misses the mark. *Chakrabarty* broadly interpreted the reach of §101. This interpretation is surely germane to the question whether sexually reproduced plants fall within the subject matter of §101. In addition, *Chakrabarty*’s discussion of the PPA and the PVPA is relevant to petitioners’ primary arguments against utility patent protection for sexually reproduced plants. See 447 U. S., at 310–314; see also *infra*, at 8–9.

matter of §101. *In re Hibberd*, 227 USPQ 443, 444 (1985). It has been the unbroken practice of the PTO since that time to confer utility patents for plants. To obtain utility patent protection, a plant breeder must show that the plant he has developed is new, useful, and non-obvious. 35 U. S. C. §§101–103 (1994 ed. and Supp. V). In addition, the plant must meet the specifications of §112, which require a written description of the plant and a deposit of seed that is publicly accessible. See 37 CFR §§1.801–1.809 (2001).

Petitioners do not allege that Pioneer’s patents are invalid for failure to meet the requirements for a utility patent. Nor do they dispute that plants otherwise fall within the terms of §101’s broad language that includes “manufacture” or “composition of matter.” Rather, petitioners argue that the PPA and the PVPA provide the exclusive means of protecting new varieties of plants, and so awarding utility patents for plants upsets the scheme contemplated by Congress. Brief for Petitioners 11. We disagree. Considering the two plant specific statutes in turn, we find that neither forecloses utility patent coverage for plants.

A

The 1930 PPA conferred patent protection to asexually reproduced plants. Significantly, nothing within either the original 1930 text of the statute or its recodified version in 1952 indicates that the PPA’s protection for asexually reproduced plants was intended to be exclusive.

Plants were first explicitly brought within the scope of patent protection in 1930 when the PPA included “plants” among the useful things subject to patents. Thus the 1930 PPA amended the general utility patent provision, Rev. Stat. §4886, to provide:

“Any person who has invented or discovered any new and useful art, machine, manufacture or compo-

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sition 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 therefor.” Act of May 23, 1930, §1, 46 Stat. 376.

This provision limited protection to the asexual reproduction of the plant. Asexual reproduction occurs by grafting, budding, or the like, and produces an offspring with a genetic combination identical to that of the single parent—essentially a clone.³ The PPA also amended Revised Statutes §4888 by adding, “No plant patent shall be declared invalid on the ground of noncompliance with this section if the description is made as complete as is reasonably possible.” *Id.*, §2, 46 Stat. 376.

In 1952, Congress revised the patent statute and placed the plant patents into a separate chapter 15 of Title 35 entitled, “Patents for plants.” 35 U. S. C. §§161–164.⁴ This was merely a housekeeping measure that did nothing to change the substantive rights or requirements for a plant patent. A “plant patent”⁵ continued to provide only the exclusive right to asexually reproduce a protected plant, §163, and the description requirement remained

³By contrast, sexual reproduction occurs by seed and sometimes involves two different plants.

⁴The PPA, as amended, provides: “Whoever invents or discovers and asexually reproduces any distinct and new variety of plant, including cultivated sports, mutants, hybrids, and newly found seedlings, other than a tuber propagated plant or a plant found in an uncultivated state, may obtain a patent therefor, subject to the conditions and requirements of this title.” 35 U. S. C. §161.

⁵Patents issued under §161 are referred to as “plant patents,” which are distinguished from §101 utility patents and §171 design patents.

relaxed, §162.⁶ Plant patents under the PPA thus have very limited coverage and less stringent requirements than §101 utility patents.

Importantly, chapter 15 nowhere states that plant patents are the exclusive means of granting intellectual property protection to plants. Although unable to point to any language that requires, or even suggests, that Congress intended the PPA's protections to be exclusive, petitioners advance three reasons why the PPA should preclude assigning utility patents for plants. We find none of these arguments to be persuasive.

First, petitioners argue that plants were not covered by the general utility patent statute prior to 1930. Brief for Petitioners 19 (“If the patent laws before 1930 allowed patents on ‘plants’ then there would have been no reason for Congress to have passed the 1930 PPA . . .”). In advancing this argument, petitioners overlook the state of patent law and plant breeding at the time of the PPA's enactment. The Court in *Chakrabarty* explained the realities of patent law and plant breeding at the time the PPA was enacted: “Prior to 1930, two factors were thought to remove plants from patent protection. The first was the belief that plants, even those artificially bred, were products of nature for purposes of the patent law. . . . The second obstacle to patent protection for plants was the fact that plants were thought not amenable to the ‘written description’ requirement of the patent law.” 447 U. S., at 311–312. Congress addressed these concerns with the 1930 PPA, which recognized that the work of a plant breeder was a patentable invention and relaxed the writ-

⁶ To obtain a plant patent under §161 a breeder must meet all of the requirements for §101, except for the description requirement. See §162 (“No plant patent shall be declared invalid for noncompliance with section 112 [providing for written description] of this title if the description is as complete as is reasonably possible”).

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ten description requirement. See §§1–2, 46 Stat. 376. The PPA thus gave patent protection to breeders who were previously unable to overcome the obstacles described in *Chakrabarty*.

This does not mean, however, that prior to 1930 plants could not have fallen within the subject matter of §101. Rather, it illustrates only that in 1930 Congress *believed* that plants were not patentable under §101, both because they were living things and because in practice they could not meet the stringent description requirement. Yet these premises were disproved over time. As this Court held in *Chakrabarty*, “the relevant distinction” for purposes of §101 is not “between living and inanimate things, but between products of nature, whether living or not, and human-made inventions.” 447 U. S., at 313. In addition, advances in biological knowledge and breeding expertise have allowed plant breeders to satisfy §101’s demanding description requirement.

Whatever Congress may have believed about the state of patent law and the science of plant breeding in 1930, plants have always had the *potential* to fall within the general subject matter of §101, which is a dynamic provision designed to encompass new and unforeseen inventions. “A rule that unanticipated inventions are without protection would conflict with the core concept of the patent law that anticipation undermines patentability.” *Id.*, at 316.

Petitioners essentially ask us to deny utility patent protection for sexually reproduced plants because it was unforeseen in 1930 that such plants could receive protection under §101. Denying patent protection under §101 simply because such coverage was thought technologically infeasible in 1930, however, would be inconsistent with the forward-looking perspective of the utility patent statute. As we noted in *Chakrabarty*, “Congress employed broad general language in drafting §101 precisely because

[new types of] inventions are often unforeseeable.” *Ibid.*

Second, petitioners maintain that the PPA’s limitation to asexually reproduced plants would make no sense if Congress intended §101 to authorize patents on plant varieties that were sexually reproduced. But this limitation once again merely reflects the reality of plant breeding in 1930. At that time, the primary means of reproducing bred plants true-to-type was through asexual reproduction. Congress thought that sexual reproduction through seeds was not a stable way to maintain desirable bred characteristics.⁷ Thus, it is hardly surprising that plant patents would protect only asexual reproduction, since this was the most reliable type of reproduction for preserving the desirable characteristics of breeding. See generally E. Sinnott, *Botany Principles and Problems* 266–267 (1935); J. Priestley & L. Scott, *Introduction to Botany* 530 (1938).

Furthermore, like other laws protecting intellectual property, the plant patent provision must be understood in its proper context. Until 1924, farmers received seed from

⁷The Senate Report accompanying the bill notes: “All such plants must be asexually reproduced in order to have their identity preserved. This is necessary since seedlings either of chance or self-pollination from any of these would not preserve the character of the individual.” S. Rep. No. 315, 71st Cong., 2d Sess., 3 (1930) (hereinafter S. Rep.).

This report, like the text, indicates Congress’ intent to limit plant patent coverage to asexual reproduction, but explains that this limitation “recognizes a practical situation”—*i.e.*, that propagation by seeds does not preserve the character of the original. See *id.*, at 4 (“[T]he patent right granted is a right to propagate the new variety by asexual reproduction. It does not include the right to propagate by seeds. This limitation in the right granted recognizes a practical situation and greatly narrows the scope of the bill”). The limitation to asexual reproduction was a recognition of the “practical situation” that seedlings did not reproduce true-to-type. An exclusive right to asexual reproduction was the only type of coverage needed and thought possible given the state of plant breeding at the time.

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the Government's extensive free seed program that distributed millions of packages of seed annually. See Fowler, *The Plant Patent Act of 1930: A Sociological History of its Creation*, 82 J. Pat. & Tm. Off. Soc. 621, 623, 632 (2000).⁸ In 1930, seed companies were not primarily concerned with varietal protection, but were still trying to successfully commodify seeds. There was no need to protect seed breeding because there were few markets for seeds. See Kloppenburg 71 ("Seed companies' first priority was simply to establish a market, and they continued to view the congressional distribution as a principal constraint").

By contrast, nurseries at the time had successfully commercialized asexually reproduced fruit trees and flowers. These plants were regularly copied, draining profits from those who discovered or bred new varieties. Nurseries were the primary subjects of agricultural marketing and so it is not surprising that they were the specific focus of the PPA. See Fowler, *supra*, at 634–635; Kneen, *Patent Plants Enrich Our World*, *National Geographic* 357, 363 (1948).

Moreover, seed companies at the time could not point to genuinely new varieties and lacked the scientific knowledge to engage in formal breeding that would increase agricultural productivity. See Kloppenburg 77; Fowler, *supra*, at 633 ("Absent significant numbers of distinct new varieties being produced by seed companies, variety protection through something like a patent law would hardly have been considered a business necessity"). In short,

⁸At its high point in 1897, over 20 million packages of seed were distributed to farmers. See N. Klose, *America's Crop Heritage* 98 (1950). Even at the time the program was eliminated in 1924, it was the third largest line item in the Department of Agriculture's budget. See J. Kloppenburg, *First the Seed: The Political Economy of Plant Biotechnology 1492–2000*, p. 71 (1988) (hereinafter Kloppenburg).

there is simply no evidence, let alone the overwhelming evidence needed to establish repeal by implication, see *Matsushita Elec. Industrial Co. v. Epstein*, 516 U. S. 367, 381 (1996), that Congress, by specifically protecting asexually reproduced plants through the PPA, intended to preclude utility patent protection for sexually reproduced plants.⁹

Third, petitioners argue that in 1952 Congress would not have moved plants out of the utility patent provision and into §161 if it had intended §101 to allow for protection of plants. Brief for Petitioners 20. Petitioners again rely on negative inference because they cannot point to any express indication that Congress intended §161 to be the exclusive means of patenting plants. But this negative inference simply does not support carving out subject matter that otherwise fits comfortably within the expansive language of §101, especially when §101 can protect different attributes and has more stringent requirements than does §161.

This is especially true given that Congress in 1952 did nothing to change the substantive rights or requirements for obtaining a plant patent. Absent a clear intent to the

⁹The dissent relies on *United States v. Estate of Romani*, 523 U. S. 517 (1998), for the proposition that “a later, more specific statute trumps an earlier, more general one.” See *post*, at 10. Yet in *Estate of Romani* this purported rule was applied because the meaning of the earlier statute was “unresolved.” 523 U. S., at 530. The Court noted that “despite the age of the statute, and despite the fact that it has been the subject of a great deal of litigation,” its meaning had not been definitively established. *Id.*, at 529. By contrast, the statutory terms “manufacture or composition of matter” were not similarly unresolved at the time the PPA was passed. In addition, these subject matter terms have been interpreted broadly to evolve with developments in science and technology. See *Chakrabarty*, 447 U. S., at 315. Moreover, even in *Estate of Romani*, the Court considered that there was no “plain inconsistency” between the earlier and later statutes. 523 U. S., at 533.

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contrary, we are loath to interpret what was essentially a housekeeping measure as an affirmative decision by Congress to deny sexually reproduced plants patent protection under §101.

B

By passing the PVPA in 1970, Congress specifically authorized limited patent-like protection for certain sexually reproduced plants. Petitioners therefore argue that this legislation evidences Congress' intent to deny broader §101 utility patent protection for such plants. Petitioners' argument, however, is unavailing for two reasons. First, nowhere does the PVPA purport to provide the exclusive statutory means of protecting sexually reproduced plants. Second, the PVPA and §101 can easily be reconciled. Because it is harder to qualify for a utility patent than for a Plant Variety Protection (PVP) certificate, it only makes sense that utility patents would confer a greater scope of protection.

1

The PVPA provides plant variety protection for:

“The breeder of any sexually reproduced or tuber propagated plant variety (other than fungi or bacteria) who has so reproduced the variety” 7 U. S. C. §2402(a).

Infringement of plant variety protection occurs, *inter alia*, if someone sells or markets the protected variety, sexually multiplies the variety as a step in marketing, uses the variety in producing a hybrid, or dispenses the variety without notice that the variety is protected.¹⁰

¹⁰7 U. S. C. § 2541(a), which provides in full:

“(a) Acts constituting infringement

“Except as otherwise provided in this subchapter, it shall be an infringement of the rights of the owner of a protected variety to perform

Since the 1994 amendments, the PVPA also protects “any variety that is essentially derived from a protected variety,” §2541(c)(1), and “any variety whose production requires the repeated use of a protected variety,” §2541(c)(3). See Plant Variety Protection Act Amendments of 1994, §9, 108 Stat. 3142. Practically, this means that hybrids created from protected plant varieties are also protected; however, it is not infringement to use a protected variety for the development of a hybrid. See 7

without authority, any of the following acts in the United States, or in commerce which can be regulated by Congress or affecting such commerce, prior to expiration of the right to plant variety protection but after either the issue of the certificate or the distribution of a protected plant variety with the notice under section 2567 of this title:

“(1) sell or market the protected variety, or offer it or expose it for sale, deliver it, ship it, consign it, exchange it, or solicit an offer to buy it, or any other transfer of title or possession of it;

“(2) import the variety into, or export it from, the United States;

“(3) sexually multiply, or propagate by a tuber or part of a tuber, the variety as a step in marketing (for growing purposes) the variety;

“(4) use the variety in producing (as distinguished from developing) a hybrid or different variety therefrom;

“(5) use seed which had been marked ‘Unauthorized Propagation Prohibited’ or ‘Unauthorized Seed Multiplication Prohibited’ or progeny thereof to propagate the variety;

“(6) dispense the variety to another, in a form which can be propagated, without notice as to being a protected variety under which it was received;

“(7) condition the variety for the purpose of propagation, except to the extent that the conditioning is related to the activities permitted under section 2543 of this title;

“(8) stock the variety for any of the purposes referred to in paragraphs (1) through (7);

“(9) perform any of the foregoing acts even in instances in which the variety is multiplied other than sexually, except in pursuance of a valid United States plant patent; or

“(10) instigate or actively induce performance of any of the foregoing acts.”

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U. S. C. §2541(a)(4).¹¹

The PVPA also contains exemptions for saving seed and for research. A farmer who legally purchases and plants a protected variety can save the seed from these plants for replanting on his own farm. See §2543 (“[I]t shall not infringe any right hereunder for a person to save seed produced by the person from seed obtained, or descended from seed obtained, by authority of the owner of the variety for seeding purposes and use such saved seed in the production of a crop for use on the farm of the person . . .”); see also *Asgrow Seed Co. v. Winterboer*, 513 U.S. 179 (1995). In addition, a protected variety may be used for research. See 7 U. S. C. §2544 (“The use and reproduction of a protected variety for plant breeding or other bona fide research shall not constitute an infringement of the protection provided under this chapter”). The utility patent statute does not contain similar exemptions.¹²

Thus, while the PVPA creates a statutory scheme that is comprehensive with respect to its particular protections and subject matter, giving limited protection to plant varieties that are new, distinct, uniform, and stable, §2402(a), nowhere does it restrict the scope of patentable subject matter under §101. With nothing in the statute to bolster their view that the PVPA provides the exclusive means for protecting sexually reproducing plants, petitioners rely on the legislative history of the PVPA. They

¹¹It is, however, infringement of a utility patent to use a protected plant in the development of another variety. See *infra*, at 18.

¹²The dissent argues that our “reading would destroy” the PVPA’s exemptions. *Post*, at 9. Yet such bold predictions are belied by the facts. According to the Government, over 5,000 PVP certificates have been issued, as compared to about 1,800 utility patents for plants. Tr. of Oral Arg. 41. Since 1985 the PTO has interpreted §101 to include utility patents for plants and there is no evidence that the availability of such patents has rendered the PVPA and its specific exemptions obsolete.

argue that this history shows the PVPA was enacted because sexually reproducing plant varieties and their seeds were not and had never been intended by Congress to be included within the classes of things patentable under Title 35.¹³

The PVPA itself, however, contains no statement that plant variety certificates were to be the exclusive means of protecting sexually reproducing plants. The relevant statements in the legislative history reveal nothing more than the limited view of plant breeding taken by some Members of Congress who believed that patent protection was unavailable for sexually reproduced plants. This view stems from a lack of awareness concerning scientific possibilities.

Furthermore, at the time the PVPA was enacted, the PTO had already issued numerous utility patents for hybrid plant processes. Many of these patents, especially since the 1950's, included claims on the products of the patented process, *i.e.*, the hybrid plant itself. See Klopensburg 264. Such plants were protected as part of a hybrid process and not on their own. Nonetheless, these hybrids still enjoyed protection under §101, which reaffirms that such material was within the scope of §101.

2

Petitioners next argue that the PVPA altered the subject-matter coverage of §101 by implication. Brief for Petitioners 33–36. Yet “the only permissible justification for a repeal by implication is when the earlier and later

¹³Petitioners point to a House Report that concluded:

“Under patent law, protection is presently limited to those varieties of plants which reproduce asexually, that is, by such methods as grafting or budding. No protection is available to those varieties of plants which reproduce sexually, that is, generally by seeds.” H. R. Rep. No. 91–1605, p. 1 (1970); Brief for Petitioners 40.

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statutes are irreconcilable.” *Morton v. Mancari*, 417 U. S. 535, 550 (1974). “The rarity with which [the Court has] discovered implied repeals is due to the relatively stringent standard for such findings, namely, that there be an irreconcilable conflict between the two federal statutes at issue.” *Matsushita*, 516 U. S., at 381 (internal quotation marks omitted).

To be sure, there are differences in the requirements for, and coverage of, utility patents and plant variety certificates issued pursuant to the PVPA. These differences, however, do not present irreconcilable conflicts because the requirements for obtaining a utility patent under §101 are more stringent than those for obtaining a PVP certificate, and the protections afforded by a utility patent are greater than those afforded by a PVP certificate. Thus, there is a parallel relationship between the obligations and the level of protection under each statute.

It is much more difficult to obtain a utility patent for a plant than to obtain a plant variety certificate because a utility patentable plant must be new, useful, and nonobvious, 35 U. S. C. §§101–103. In addition, to obtain a utility patent, a breeder must describe the plant with sufficient specificity to enable others to “make and use” the invention after the patent term expires. §112. The disclosure required by the Patent Act is “the *quid pro quo* of the right to exclude.” *Kewanee Oil Co. v. Bicron Corp.*, 416 U. S. 470, 484 (1974). The description requirement for plants includes a deposit of biological material, for example seeds, and mandates that such material be accessible to the public. See 37 CFR §§1.801–1.809 (2001); see also App. 39 (seed deposits for U. S. Patent No. 5,491,295).

By contrast, a plant variety may receive a PVP certificate without a showing of usefulness or nonobviousness. See 7 U. S. C. §2402(a) (requiring that the variety be only new, distinct, uniform, and stable). Nor does the PVPA require a description and disclosure as extensive as those

required under §101. The PVPA requires a “description of the variety setting forth its distinctiveness, uniformity and stability and a description of the genealogy and breeding procedure, when known.” 7 U. S. C. §2422(2). It also requires a deposit of seed in a public depository, §2422(4), but neither the statute nor the applicable regulation mandates that such material be accessible to the general public during the term of the PVP certificate. See 7 CFR §97.6 (2001).

Because of the more stringent requirements, utility patent holders receive greater rights of exclusion than holders of a PVP certificate. Most notably, there are no exemptions for research or saving seed under a utility patent. Additionally, although Congress increased the level of protection under the PVPA in 1994, a plant variety certificate still does not grant the full range of protections afforded by a utility patent. For instance, a utility patent on an inbred plant line protects that line as well as all hybrids produced by crossing that inbred with another plant line. Similarly, the PVPA now protects “any variety whose production requires the repeated use of a protected variety.” 7 U. S. C. §2541(c)(3). Thus, one cannot use a protected plant variety to produce a hybrid for commercial sale. PVPA protection still falls short of a utility patent, however, because a breeder can use a plant that is protected by a PVP certificate to “develop” a new inbred line while he cannot use a plant patented under §101 for such a purpose. See 7 U. S. C. §2541(a)(4) (infringement includes “use [of] the variety in producing (as distinguished from developing) a hybrid or different variety therefrom”). See also H. R. Rep. No. 91–1605, p. 11 (1970); 1 D. Chisum, *Patents* §1.05[2][d][i], p. 549 (2001).

For all of these reasons, it is clear that there is no “positive repugnancy” between the issuance of utility patents for plants and PVP coverage for plants. *Radzanower v. Touche Ross & Co.*, 426 U. S. 148, 155 (1976). Nor can it

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be said that the two statutes “cannot mutually coexist.” *Ibid.* Indeed, “when two statutes are capable of coexistence, it is the duty of the courts, absent a clearly expressed congressional intention to the contrary, to regard each as effective.” *Morton*, 417 U. S., at 551. Here we can plainly regard each statute as effective because of its different requirements and protections. The plain meaning of §101, as interpreted by this Court in *Chakrabarty*, clearly includes plants within its subject matter. The PPA and the PVPA are not to the contrary and can be read alongside §101 in protecting plants.

3

Petitioners also suggest that even when statutes overlap and purport to protect the same commercially valuable attribute of a thing, such “dual protection” cannot exist. Brief for Petitioners 44–45. Yet this Court has not hesitated to give effect to two statutes that overlap, so long as each reaches some distinct cases. See *Connecticut Nat. Bank v. Germain*, 503 U. S. 249, 253 (1992) (statutes that overlap “do not pose an either-or proposition” where each confers jurisdiction over cases that the other does not reach). Here, while utility patents and PVP certificates do contain some similar protections, as discussed above, the overlap is only partial.

Moreover, this Court has allowed dual protection in other intellectual property cases. “Certainly the patent policy of encouraging invention is not disturbed by the existence of another form of incentive to invention. In this respect the two systems [trade secret protection and patents] are not and never would be in conflict.” *Kewanee Oil*, 416 U. S., at 484; see also *Mazer v. Stein*, 347 U. S. 201, 217 (1954) (the patentability of an object does not preclude the copyright of that object as a work of art). In this case, many plant varieties that are unable to satisfy the stringent requirements of §101 might still qualify for the lesser

protections afforded by the PVPA.

III

We also note that the PTO has assigned utility patents for plants for at least 16 years and there has been no indication from either Congress or agencies with expertise that such coverage is inconsistent with the PVPA or the PPA. The Board of Patent Appeals and Interferences, which has specific expertise in issues of patent law, relied heavily on this Court's decision in *Chakrabarty* when it interpreted the subject matter of §101 to include plants. *In re Hibberd*, 227 USPQ 443 (1985). This highly visible decision has led to the issuance of some 1,800 utility patents for plants. Moreover, the PTO, which administers §101 as well as the PPA, recognizes and regularly issues utility patents for plants. In addition, the Department of Agriculture's Plant Variety Protection Office acknowledges the existence of utility patents for plants.

In the face of these developments, Congress has not only failed to pass legislation indicating that it disagrees with the PTO's interpretation of §101, it has even recognized the availability of utility patents for plants. In a 1999 amendment to 35 U. S. C. §119, which concerns the right of priority for patent rights, 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." 35 U. S. C. §119(f) (1994 ed., Supp. V). Crucially, §119(f) is part of the general provisions of Title 35, not the specific chapter of the PPA, which suggests a recognition on the part of Congress that plants are patentable under §101.

Opinion of the Court

IV

For these reasons, we hold 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. As in *Chakrabarty*, we decline to narrow the reach of §101 where Congress has given us no indication that it intends this result. 447 U. S., at 315–316. Accordingly, we affirm the judgment of the Court of Appeals.

It is so ordered.

JUSTICE O'CONNOR took no part in the consideration or decision of this case.