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SUPREME COURT OF THE UNITED STATES

No. 09–1159

BOARD OF TRUSTEES OF THE LELAND STANFORD
JUNIOR UNIVERSITY, PETITIONER *v.* ROCHE
MOLECULAR SYSTEMS, INC., ET AL.

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

[June 6, 2011]

CHIEF JUSTICE ROBERTS delivered the opinion of the Court.

Since 1790, the patent law has operated on the premise that rights in an invention belong to the inventor. The question here is whether the University and Small Business Patent Procedures Act of 1980—commonly referred to as the Bayh-Dole Act—displaces that norm and automatically vests title to federally funded inventions in federal contractors. We hold that it does not.

I
A

In 1985, a small California research company called Cetus began to develop methods for quantifying blood-borne levels of human immunodeficiency virus (HIV), the virus that causes AIDS. A Nobel Prize winning technique developed at Cetus—polymerase chain reaction, or PCR—was an integral part of these efforts. PCR allows billions of copies of DNA sequences to be made from a small initial blood sample.

In 1988, Cetus began to collaborate with scientists at

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Stanford University's Department of Infectious Diseases to test the efficacy of new AIDS drugs. Dr. Mark Holodniy joined Stanford as a research fellow in the department around that time. When he did so, he signed a Copyright and Patent Agreement (CPA) stating that he "agree[d] to assign" to Stanford his "right, title and interest in" inventions resulting from his employment at the University. App. to Pet. for Cert. 118a–119a.

At Stanford Holodniy undertook to develop an improved method for quantifying HIV levels in patient blood samples, using PCR. Because Holodniy was largely unfamiliar with PCR, his supervisor arranged for him to conduct research at Cetus. As a condition of gaining access to Cetus, Holodniy signed a Visitor's Confidentiality Agreement (VCA). That agreement stated that Holodniy "will assign and do[es] hereby assign" to Cetus his "right, title and interest in each of the ideas, inventions and improvements" made "as a consequence of [his] access" to Cetus. *Id.*, at 122a–124a.

For the next nine months, Holodniy conducted research at Cetus. Working with Cetus employees, Holodniy devised a PCR-based procedure for calculating the amount of HIV in a patient's blood. That technique allowed doctors to determine whether a patient was benefiting from HIV therapy.

Holodniy then returned to Stanford where he and other University employees tested the HIV measurement technique. Over the next few years, Stanford obtained written assignments of rights from the Stanford employees involved in refinement of the technique, including Holodniy, and filed several patent applications related to the procedure. Stanford secured three patents to the HIV measurement process.

In 1991, Roche Molecular Systems, a company that specializes in diagnostic blood screening, acquired Cetus's PCR-related assets, including all rights Cetus had ob-

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tained through agreements like the VCA signed by Holodniy. After conducting clinical trials on the HIV quantification method developed at Cetus, Roche commercialized the procedure. Today, Roche’s HIV test “kits are used in hospitals and AIDS clinics worldwide.” Brief for Respondents 10–11.

B

In 1980, Congress passed the Bayh-Dole Act to “promote the utilization of inventions arising from federally supported research,” “promote collaboration between commercial concerns and nonprofit organizations,” and “ensure that the Government obtains sufficient rights in federally supported inventions.” 35 U. S. C. §200. To achieve these aims, the Act allocates rights in federally funded “subject invention[s]” between the Federal Government and federal contractors (“any person, small business firm, or nonprofit organization that is a party to a funding agreement”). §§201(e), (c), 202(a). The Act defines “subject invention” as “any invention of the contractor conceived or first actually reduced to practice in the performance of work under a funding agreement.” §201(e).

The Bayh-Dole Act provides that contractors may “elect to retain title to any subject invention.” §202(a). To be able to retain title, a contractor must fulfill a number of obligations imposed by the statute. The contractor must “disclose each subject invention to the [relevant] Federal agency within a reasonable time”; it must “make a written election within two years after disclosure” stating that the contractor opts to retain title to the invention; and the contractor must “file a patent application prior to any statutory bar date.” §§202(c)(1)–(3). The “Federal Government may receive title” to a subject invention if a contractor fails to comply with any of these obligations. *Ibid.*

The Government has several rights in federally funded

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subject inventions under the Bayh-Dole Act. The agency that granted the federal funds receives from the contractor “a nonexclusive, nontransferable, irrevocable, paid-up license to practice . . . [the] subject invention.” §202(c)(4). The agency also possesses “[m]arch-in rights,” which permit the agency to grant a license to a responsible third party under certain circumstances, such as when the contractor fails to take “effective steps to achieve practical application” of the invention. §203. The Act further provides that when the contractor does not elect to retain title to a subject invention, the Government “may consider and after consultation with the contractor grant requests for retention of rights by the inventor.” §202(d).

Some of Stanford’s research related to the HIV measurement technique was funded by the National Institutes of Health (NIH), thereby subjecting the invention to the Bayh-Dole Act. Accordingly, Stanford disclosed the invention, conferred on the Government a nonexclusive, nontransferable, paid-up license to use the patented procedure, and formally notified NIH that it elected to retain title to the invention.

C

In 2005, the Board of Trustees of Stanford University filed suit against Roche Molecular Systems, Inc., Roche Diagnostics Corporation, and Roche Diagnostics Operations, Inc. (collectively Roche), contending that Roche’s HIV test kits infringed Stanford’s patents. As relevant here, Roche responded by asserting that it was a co-owner of the HIV quantification procedure, based on Holodniy’s assignment of his rights in the Visitor’s Confidentiality Agreement. As a result, Roche argued, Stanford lacked standing to sue it for patent infringement. 487 F. Supp. 2d 1099, 1111, 1115 (ND Cal. 2007). Stanford claimed that Holodniy had no rights to assign because the University’s HIV research was federally funded, giving the school

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superior rights in the invention under the Bayh-Dole Act. *Ibid.*¹

The District Court held that the “VCA effectively assigned any rights that Holodniy had in the patented invention to Cetus,” and thus to Roche. *Id.*, at 1117. But because of the operation of the Bayh-Dole Act, “Holodniy had no interest to assign.” *Id.*, at 1117, 1119. The court concluded that the Bayh-Dole Act “provides that the individual inventor may obtain title” to a federally funded invention “only after the government and the contracting party have declined to do so.” *Id.*, at 1118.

The Court of Appeals for the Federal Circuit disagreed. First, the court concluded that Holodniy’s initial agreement with Stanford in the Copyright and Patent Agreement constituted a mere promise to assign rights in the future, unlike Holodniy’s agreement with Cetus in the Visitor’s Confidentiality Agreement, which itself assigned Holodniy’s rights in the invention to Cetus. See 583 F. 3d 832, 841–842 (2009). Therefore, as a matter of contract law, Cetus obtained Holodniy’s rights in the HIV quantification technique through the VCA.² Next, the court explained that the Bayh-Dole Act “does not automatically void ab initio the inventors’ rights in government-funded inventions” and that the “statutory scheme did not automatically void the patent rights that Cetus received from Holodniy.” *Id.*, at 844–845. The court held that “Roche possesse[d] an ownership interest in the patents-in-suit”

¹ Roche submitted a host of other claims to the District Court, including that it had “shop rights” to the patents and was entitled to a license to use the patents. See 583 F. 3d 832, 838 (CA Fed. 2009). None of those claims is now before us; we deal only with Roche’s claim to co-ownership to rebut Stanford’s standing to bring an infringement action.

² Because the Federal Circuit’s interpretation of the relevant assignment agreements is not an issue on which we granted certiorari, we have no occasion to pass on the validity of the lower court’s construction of those agreements.

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that was not extinguished by the Bayh-Dole Act, “depriv[ing] Stanford of standing.” *Id.*, at 836–837. The Court of Appeals then remanded the case with instructions to dismiss Stanford’s infringement claim. *Id.*, at 849.

We granted certiorari. 562 U. S. ____ (2010).

II

A

Congress has the authority “[t]o promote the Progress of Science and useful Arts, by securing . . . to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” U. S. Const. Art. I, §8, cl. 8. The first Congress put that power to use by enacting the Patent Act of 1790. That Act provided “[t]hat upon the petition of any person or persons . . . setting forth, that he, she, or they, hath or have invented or discovered” an invention, a patent could be granted to “such petitioner or petitioners” or “their heirs, administrators or assigns.” Act of Apr. 10, 1790, §1, 1 Stat. 109–110. Under that law, the first patent was granted in 1790 to Samuel Hopkins, who had devised an improved method for making potash, America’s first industrial chemical. U. S. Patent No. 1 (issued July 31, 1790).³

Although much in intellectual property law has changed in the 220 years since the first Patent Act, the basic idea that inventors have the right to patent their inventions has not. Under the law in its current form, “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter . . . may obtain a patent therefor.” 35 U. S. C. §101. The inventor must attest that “he believes himself to be the original and first inventor of the [invention] for which he solicits a patent.”

³The patent was signed by President George Washington, Secretary of State Thomas Jefferson, and Attorney General Edmund Randolph. See Maxey, Samuel Hopkins, The Holder of the First U. S. Patent: A Study of Failure, 122 Pa. Magazine of Hist. and Biography 6 (1998).

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§115. In most cases, a patent may be issued only to an applying inventor, or—because an inventor’s interest in his invention is “assignable in law by an instrument in writing”—an inventor’s assignee. §§151, 152, 261.

Our precedents confirm the general rule that rights in an invention belong to the inventor. See, e.g., *Gayler v. Wilder*, 10 How. 477, 493 (1851) (“the discoverer of a new and useful improvement is vested by law with an inchoate right to its exclusive use, which he may perfect and make absolute by proceeding in the manner which the law requires”); *Solomons v. United States*, 137 U. S. 342, 346 (1890) (“whatever invention [an inventor] may thus conceive and perfect is his individual property”); *United States v. Dubilier Condenser Corp.*, 289 U. S. 178, 188 (1933) (an inventor owns “the product of [his] original thought”). The treatises are to the same effect. See, e.g., 8 Chisum on Patents §22.01, p. 22–2 (2011) (“The presumptive owner of the property right in a patentable invention is the single human inventor”).

It is equally well established that an inventor can assign his rights in an invention to a third party. See *Dubilier Condenser Corp.*, *supra*, at 187 (“A patent is property and title to it can pass only by assignment”); 8 Chisum on Patents, *supra*, §22.01, at 22–2 (“The inventor . . . [may] transfer ownership interests by written assignment to anyone”). Thus, although others may acquire an interest in an invention, any such interest—as a general rule—must trace back to the inventor.

In accordance with these principles, we have recognized that unless there is an agreement to the contrary, an employer does not have rights in an invention “which is the original conception of the employee alone.” *Dubilier Condenser Corp.*, 289 U. S., at 189. Such an invention “remains the property of him who conceived it.” *Ibid.* In most circumstances, an inventor must expressly grant his rights in an invention to his employer if the employer is to

obtain those rights. See *id.*, at 187 (“The respective rights and obligations of employer and employee, touching an invention conceived by the latter, spring from the contract of employment”).

B

Stanford and the United States as *amicus curiae* contend that the Bayh-Dole Act reorders the normal priority of rights in an invention when the invention is conceived or first reduced to practice with the support of federal funds. In their view, the Act moves inventors from the front of the line to the back by vesting title to federally funded inventions in the inventor’s employer—the federal contractor. See Brief for Petitioner 26–27; Brief for United States as *Amicus Curiae* 6.

Congress has in the past divested inventors of their rights in inventions by providing unambiguously that inventions created pursuant to specified federal contracts become the property of the United States. For example, with respect to certain contracts dealing with nuclear material and atomic energy, Congress provided that title to such inventions “shall be vested in, and be the property of, the [Atomic Energy] Commission.” 42 U. S. C. §2182. Congress has also enacted laws requiring that title to certain inventions made pursuant to contracts with the National Aeronautics and Space Administration “shall be the exclusive property of the United States,” Pub. L. 111–314, §3, 124 Stat. 3339, 51 U. S. C. §20135(b)(1), and that title to certain inventions under contracts with the Department of Energy “shall vest in the United States.” 42 U. S. C. §5908.

Such language is notably absent from the Bayh-Dole Act. Nowhere in the Act is title expressly vested in contractors or anyone else; nowhere in the Act are inventors expressly deprived of their interest in federally funded inventions. Instead, the Act provides that contractors may

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“elect to retain title to any subject invention.” 35 U. S. C. §202(a). A “subject invention” is defined as “any invention of the contractor conceived or first actually reduced to practice in the performance of work under a funding agreement.” §201(e).

Stanford asserts that the phrase “invention of the contractor” in this provision “is naturally read to include all inventions made by the contractor’s employees with the aid of federal funding.” Brief for Petitioner 32 (footnote omitted). That reading assumes that Congress subtly set aside two centuries of patent law in a statutory definition. It also renders the phrase “of the contractor” superfluous. If the phrase “of the contractor” were deleted from the definition of “subject invention,” the definition would cover “any invention . . . conceived or first actually reduced to practice in the performance of work under a funding agreement.” Reading “of the contractor” to mean “all inventions made by the contractor’s employees with the aid of federal funding,” as Stanford would, adds nothing that is not already in the definition, since the definition already covers inventions made under the funding agreement. That is contrary to our general “reluctan[ce] to treat statutory terms as surplusage.” *Duncan v. Walker*, 533 U. S. 167, 174 (2001) (internal quotation marks omitted).

Construing the phrase to refer instead to a particular category of inventions conceived or reduced to practice under a funding agreement—inventions “of the contractor,” that is, those owned by or belonging to the contractor—makes the phrase meaningful in the statutory definition. And “invention owned by the contractor” or “invention belonging to the contractor” are natural readings of the phrase “invention of the contractor.” As we have explained, “[t]he use of the word ‘of’ denotes ownership.” *Poe v. Seaborn*, 282 U. S. 101, 109 (1930); see *Flores-Figueroa v. United States*, 556 U. S. ____, ____, ____

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(2009) (slip op., at 2, 11) (treating the phrase “identification [papers] of another person” as meaning such items belonging to another person (internal quotation marks omitted)); *Ellis v. United States*, 206 U. S. 246, 259 (1907) (interpreting the phrase “works of the United States” to mean “works belonging to the United States” (internal quotation marks omitted)).

That reading follows from a common definition of the word “of.” See Webster’s Third New International Dictionary 1565 (2002) (“of” can be “used as a function word indicating a possessive relationship”); New Oxford American Dictionary 1180 (2d ed. 2005) (defining “of” as “indicating an association between two entities, typically one of belonging”); Webster’s New Twentieth Century Dictionary 1241 (2d ed. 1979) (defining “of” as “belonging to”).

Stanford’s reading of the phrase “invention of the contractor” to mean “all inventions made by the contractor’s employees” is plausible enough in the abstract; it is often the case that whatever an employee produces in the course of his employment belongs to his employer. No one would claim that an autoworker who builds a car while working in a factory owns that car. But, as noted, patent law has always been different: We have rejected the idea that mere employment is sufficient to vest title to an employee’s invention in the employer. Against this background, a contractor’s invention—an “invention of the contractor”—does not automatically include inventions made by the contractor’s employees.⁴

⁴The dissent suggests that “we could interpret the Bayh-Dole Act as ordinarily assuming, and thereby ordinarily requiring, an assignment of patent rights by the federally funded employee to the federally funded employer.” *Post*, at 8. That suggestion is based in large part on Executive Order 10096, which “governs Federal Government employee-to-employer patent right assignments.” *Post*, at 9. Lest there be any doubt, employees of nonfederal entities that have federal funding contracts—like Holodniy—are *not* federal employees. And there is no

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The Bayh-Dole Act’s provision stating that contractors may “elect to *retain* title” confirms that the Act does not *vest* title. 35 U. S. C. §202(a) (emphasis added). Stanford reaches the opposite conclusion, but only because it reads “retain” to mean “acquire” and “receive.” Brief for Petitioner 36 (internal quotation marks omitted). That is certainly not the common meaning of “retain.” “[R]etain” means “to hold or continue to hold in possession or use.” Webster’s Third, *supra*, at 1938; see Webster’s New Collegiate Dictionary 980 (1980) (“to keep in possession or use”); American Heritage Dictionary 1109 (1969) (“[t]o keep or hold in one’s possession”). You cannot retain something unless you already have it. See *Alaska v. United States*, 545 U. S. 75, 104 (2005) (interpreting the phrase “the United States shall retain title to all property” to mean that “[t]he United States . . . retained title to *its* property located within Alaska’s borders”) (emphasis added). The Bayh-Dole Act does not confer title to federally funded inventions on contractors or authorize contractors to unilaterally take title to those inventions; it simply assures contractors that they may keep title to whatever it is they already have. Such a provision makes sense in a statute specifying the respective rights and responsibilities of federal contractors and the Government.

The Bayh-Dole Act states that it “take[s] precedence over any other Act which would require a disposition of rights in subject inventions . . . that is inconsistent with” the Act. 35 U. S. C. §210(a). The United States as *amicus curiae* argues that this provision operates to displace the basic principle, codified in the Patent Act, that an inventor owns the rights to his invention. See Brief for United States 21. But because the Bayh-Dole Act, including

equivalent executive order governing invention rights with respect to federally funded research; that issue is of course addressed by the Bayh-Dole Act.

§210(a), applies only to “subject inventions”—“inventions of the contractor”—it does not displace an inventor’s antecedent title to his invention. Only when an invention belongs to the contractor does the Bayh-Dole Act come into play. The Act’s disposition of rights—like much of the rest of the Bayh-Dole Act—serves to clarify the order of priority of rights between the Federal Government and a federal contractor in a federally funded invention that already belongs to the contractor. Nothing more.⁵

The isolated provisions of the Bayh-Dole Act dealing with inventors’ rights in subject inventions are consistent with our construction of the Act. Under the Act, a federal agency may “grant requests for retention of rights by the inventor . . . [i]f a contractor does not elect to retain title to a subject invention.” §202(d). If an employee inventor never had title to his invention because title vested in the contractor by operation of law—as Stanford submits—it would be odd to allow the Government to grant “requests for retention of rights by the inventor.” By using the word “retention,” §202(d) assumes that the inventor had rights in the subject invention at some point, undermining the notion that the Act automatically vests title to federally funded inventions in federal contractors.⁶

⁵ Far from superseding the Patent Act in such a backhanded way, it is clear that §210(a)’s concern is far narrower. That provision specifies 21 different statutory provisions that the Bayh-Dole Act “take[s] precedence over,” the vast majority of which deal with the division of ownership in certain inventions between a contractor and the Government. 35 U. S. C. §§210(a)(1)–(21); see, *e.g.*, §§210(a)(19)–(20) (the Bayh-Dole Act takes precedence over “section 6(b) of the Solar Photovoltaic Energy Research Development and Demonstration Act” and “section 12 of the Native Latex Commercialization and Economic Development Act”).

⁶ Stanford contends that it cannot be the case “that the contractor can only ‘retain title’ to an invention that it already owns, while an inventor may be considered for ‘retention’ of title only when he has assigned title away.” Reply Brief for Petitioner 8. That argument has some force. But there may be situations where an inventor, by the terms of an

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The limited scope of the Act’s procedural protections also bolsters our conclusion. The Bayh-Dole Act expressly confers on contractors the right to challenge a Government-imposed impediment to retaining title to a subject invention. §202(b)(4). As Roche correctly notes, however, “the Act contains not a single procedural protection for third parties that have neither sought nor received federal funds,” such as cooperating private research institutions. Brief for Respondents 29. Nor does the Bayh-Dole Act allow inventors employed by federal contractors to contest their employer’s claim to a subject invention. The Act, for example, does not expressly permit an interested third party or an inventor to challenge a claim that a particular invention was supported by federal funding. In a world in which there is frequent collaboration between private entities, inventors, and federal contractors, see Brief for Pharmaceutical Research and Manufacturers of America as *Amicus Curiae* 22–23, that absence would be deeply troubling. But the lack of procedures protecting inventor and third-party rights makes perfect sense if the Act applies only when a federal contractor has already acquired title to an inventor’s interest. In that case, there is no need to protect inventor or third-party rights, because the only rights at issue are those of the contractor and the Government.

The Bayh-Dole Act applies to subject inventions “conceived *or* first actually reduced to practice in the performance of work” “funded in whole *or in part* by the Federal Government.” 35 U. S. C. §§201(e), 201(b) (emphasis added). Under Stanford’s construction of the Act, title to

assignment, has subsidiary rights in an invention to which a contractor has title, as §202(d) suggests. Compare §202(d) (“retention of *rights*”) with §202(a) (“retain *title*”) (emphasis added). And at the end of the day, it is Stanford’s contention that “retain” must be “read as a synonym for ‘acquire’ or ‘receive’” that dooms its argument on this point. Brief for Petitioner 37.

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one of its employee’s inventions could vest in the University even if the invention was conceived before the inventor became a University employee, so long as the invention’s reduction to practice was supported by federal funding. What is more, Stanford’s reading suggests that the school would obtain title to one of its employee’s inventions even if only one dollar of federal funding was applied toward the invention’s conception or reduction to practice.

It would be noteworthy enough for Congress to supplant one of the fundamental precepts of patent law and deprive inventors of rights in their own inventions. To do so under such unusual terms would be truly surprising. We are confident that if Congress had intended such a sea change in intellectual property rights it would have said so clearly—not obliquely through an ambiguous definition of “subject invention” and an idiosyncratic use of the word “retain.” Cf. *Whitman v. American Trucking Assns., Inc.*, 531 U. S. 457, 468 (2001) (“Congress . . . does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions”).

Though unnecessary to our conclusion, it is worth noting that our construction of the Bayh-Dole Act is reflected in the common practice among parties operating under the Act. Contractors generally institute policies to obtain assignments from their employees. See Brief for Respondents 34; Brief for Pharmaceutical Research and Manufacturers of America as *Amicus Curiae* 13–18. Agencies that grant funds to federal contractors typically expect those contractors to obtain assignments. So it is with NIH, the agency that granted the federal funds at issue in this case. In guidance documents made available to contractors, NIH has made clear that “[b]y law, an inventor has initial ownership of an invention” and that contractors should therefore “have in place employee agreements requiring an inventor to ‘assign’ or give ownership of an invention to the organization upon acceptance of Federal funds.” NIH

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Policies, Procedures, and Forms, A “20–20” View of Invention Reporting to the National Institutes of Health (Sept. 22, 1995). Such guidance would be unnecessary if Stanford’s reading of the statute were correct.

Stanford contends that reading the Bayh-Dole Act as not vesting title to federally funded inventions in federal contractors “fundamentally undermin[es]” the Act’s framework and severely threatens its continued “successful application.” Brief for Petitioner 45. We do not agree. As just noted, universities typically enter into agreements with their employees requiring the assignment to the university of rights in inventions. With an effective assignment, those inventions—if federally funded—become “subject inventions” under the Act, and the statute as a practical matter works pretty much the way Stanford says it should. The only significant difference is that it does so without violence to the basic principle of patent law that inventors own their inventions.

The judgment of the Court of Appeals for the Federal Circuit is affirmed.

It is so ordered.