

Syllabus

BONITO BOATS, INC. v. THUNDER CRAFT
BOATS, INC.

CERTIORARI TO THE SUPREME COURT OF FLORIDA

No. 87-1346. Argued December 5, 1988—Decided February 21, 1989

Petitioner developed a hull design for a fiberglass recreational boat that it marketed under the trade name Bonito Boat Model 5VBR. The manufacturing process involved creating a hardwood model that was then sprayed with fiberglass to create a mold. The mold then served to produce the finished fiberglass boats for sale. No patent application was filed to protect the utilitarian or design aspects of the hull or the manufacturing process by which the finished boats were produced. After the Bonito 5VBR had been on the market for six years, the Florida Legislature enacted a statute that prohibits the use of a direct molding process to duplicate unpatented boat hulls, and forbids the knowing sale of hulls so duplicated. Petitioner subsequently filed an action in a Florida Circuit Court, alleging that respondent had violated the statute by using the direct molding process to duplicate the Bonito 5VBR fiberglass hull and by knowingly selling such duplicates. Petitioner sought damages, injunctive relief, and an award of attorney's fees under the Florida law. The trial court granted respondent's motion to dismiss the complaint on the ground that the statute conflicted with federal patent law and was therefore invalid under the Supremacy Clause of the Federal Constitution. The Florida Court of Appeals and the Florida Supreme Court affirmed.

Held: The Florida statute is pre-empted by the Supremacy Clause. Pp. 146-168.

(a) This Court's decisions have made clear that state regulation of intellectual property must yield to the extent that it clashes with the federal patent statute's balance between public right and private monopoly designed to promote certain creative activity. The efficient operation of the federal patent system depends upon substantially free trade in publicly known, unpatented design and utilitarian conceptions. *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U. S. 225; *Compeco Corp. v. Day-Brite Lighting, Inc.*, 376 U. S. 234. A state law that interferes with the enjoyment of such a conception contravenes the ultimate goal of public disclosure and use that is the centerpiece of federal patent policy. Moreover, through the creation of patent-like rights, the States could essentially redirect inventive efforts away from the careful criteria of patentability developed by Congress over the last 200 years. Pp. 146-157.

(b) By offering patent-like protection for ideas deemed unprotected under the federal patent scheme, the Florida statute conflicts with the "strong federal policy favoring free competition in ideas which do not merit patent protection." *Lear, Inc. v. Adkins*, 395 U. S. 653, 656. The Florida statute does not prohibit "unfair competition" in the usual sense of that term, but rather is aimed at promoting inventive effort by preventing the efficient exploitation of the design and utilitarian conceptions embodied in the product itself. It endows the original boat manufacturer with rights against the world, similar in scope and operation to the rights accorded the federal patentee. This protection is made available for an unlimited number of years to all boat hulls and their component parts. Protection is available for subject matter for which patent protection has been denied or has expired, as well as for designs which have been freely revealed to the consuming public by their creators. In this case, the statute operates to allow petitioner to assert a substantial property right in a design idea which has already been available to the public for over six years. Pp. 157-160.

(c) That the Florida statute does not restrict all means of reproduction does not eliminate the conflict with the federal patent scheme. In essence, the statute grants the original manufacturer the right to prohibit a form of reverse engineering of a product in general circulation. This is one of the rights granted to the federal patent holder, but has never been part of state protection under the law of unfair competition or trade secrets. The study and recomposition of unpatented articles available to the public at large may lead to significant advances in technology and design. Moreover, the threat of reverse engineering of unpatented articles creates a significant spur to the achievement of the rigorous standards of patentability established by Congress. By substantially altering this competitive reality, the Florida statute and similar state laws may erect themselves as substantial competitors to the federal patent scheme. Such a result would contravene the congressional intent to create a uniform system for determining the boundaries of public and private right in utilitarian and design ideas. *Kewanee Oil Co. v. Bicron Corp.*, 416 U. S. 470, distinguished. Pp. 160-165.

(d) The Patent and Copyright Clauses of the Federal Constitution do not by their own force, or by negative implication, deprive the States of the power to adopt rules to promote intellectual creation within their own jurisdictions where Congress has left the field free of federal regulation. *Goldstein v. California*, 412 U. S. 546. Even as to design and utilitarian conceptions within the subject matter of the patent laws, the States may place limited regulations on the exploitation of unpatented ideas to prevent consumer confusion as to source or the tortious appropriation of trade secrets. Both the law of unfair competition and state trade secret law have coexisted harmoniously with federal patent protec-

tion for almost 200 years, and Congress has demonstrated its full awareness of the operation of state law in these areas without any indication of disapproval. *Silkwood v. Kerr-McGee Corp.*, 464 U. S. 238. The same cannot be said of the Florida scheme at issue here, where Congress has explicitly considered the need for additional protections for industrial designs and declined to act. By according patent-like protection to the otherwise unprotected design and utilitarian aspects of products in general circulation, the Florida statute enters a field of regulation which the patent laws have reserved to Congress and is therefore pre-empted by the Supremacy Clause of the Federal Constitution. Pp. 165-168.

515 So. 2d 220, affirmed.

O'CONNOR, J., delivered the opinion for a unanimous Court.

Tomas Morgan Russell argued the cause for petitioner. With him on the briefs were *Granger Cook, Jr.*, and *John S. Schoene*.

Charles E. Lipsey, by appointment of the Court, 487 U. S. 1231, argued the cause as *amicus curiae* in support of the judgment below. With him on the brief was *Donald R. Dunner*.*

JUSTICE O'CONNOR delivered the opinion of the Court.

We must decide today what limits the operation of the federal patent system places on the States' ability to offer substantial protection to utilitarian and design ideas which the patent laws leave otherwise unprotected. In *Interpart*

*Briefs of *amici curiae* urging reversal were filed for Boston Whaler, Inc., by *Geoffrey S. Stewart*, *James L. Quarles III*, and *William F. Lee*; for Intellectual Property Owners, Inc., by *Donald W. Banner* and *Herbert C. Wamsley*; for the Marine Industries Association of South Florida et al. by *Julius F. Parker, Jr.*, *Jack M. Skelding, Jr.*, *James W. York*, Deputy Attorney General of Florida, and *Robert A. Butterworth*, Attorney General, *pro se*; and for the Orange County Patent Law Association et al. by *Randall Glenn Wick* and *J. Thomas McCarthy*.

Briefs of *amici curiae* urging affirmance were filed for the Aftermarket Body Parts Association et al. by *James F. Fitzpatrick*, *Melvin C. Garbow*, and *Peter T. Grossi, Jr.*; for the Certified Automobile Parts Association by Messrs. *Garbow* and *Fitzpatrick*; and for Xenetics Biomedical, Inc., by *Edward S. Irons*.

Alex Devience, Jr., filed a brief for Imos Italia and Torino Industries, Ltd., as *amicus curiae*.

Corp. v. Italia, 777 F. 2d 678 (1985), the Court of Appeals for the Federal Circuit concluded that a California law prohibiting the use of the "direct molding process" to duplicate unpatented articles posed no threat to the policies behind the federal patent laws. In this case, the Florida Supreme Court came to a contrary conclusion. It struck down a Florida statute which prohibits the use of the direct molding process to duplicate unpatented boat hulls, finding that the protection offered by the Florida law conflicted with the balance struck by Congress in the federal patent statute between the encouragement of invention and free competition in unpatented ideas. 515 So. 2d 220 (1987). We granted certiorari to resolve the conflict, 486 U. S. 1004 (1988), and we now affirm the judgment of the Florida Supreme Court.

I

In September 1976, petitioner Bonito Boats, Inc. (Bonito), a Florida corporation, developed a hull design for a fiberglass recreational boat which it marketed under the trade name Bonito Boat Model 5VBR. App. 5. Designing the boat hull required substantial effort on the part of Bonito. A set of engineering drawings was prepared, from which a hardwood model was created. The hardwood model was then sprayed with fiberglass to create a mold, which then served to produce the finished fiberglass boats for sale. The 5VBR was placed on the market sometime in September 1976. There is no indication in the record that a patent application was ever filed for protection of the utilitarian or design aspects of the hull, or for the process by which the hull was manufactured. The 5VBR was favorably received by the boating public, and "a broad interstate market" developed for its sale. *Ibid.*

In May 1983, after the Bonito 5VBR had been available to the public for over six years, the Florida Legislature enacted Fla. Stat. § 559.94 (1987). The statute makes "[i]t . . . unlawful for any person to use the direct molding process to du-

plicate for the purpose of sale any manufactured vessel hull or component part of a vessel made by another without the written permission of that other person." § 559.94(2). The statute also makes it unlawful for a person to "knowingly sell a vessel hull or component part of a vessel duplicated in violation of subsection (2)." § 559.94(3). Damages, injunctive relief, and attorney's fees are made available to "[a]ny person who suffers injury or damage as the result of a violation" of the statute. § 559.94(4). The statute was made applicable to vessel hulls or component parts duplicated through the use of direct molding after July 1, 1983. § 559.94(5).

On December 21, 1984, Bonito filed this action in the Circuit Court of Orange County, Florida. The complaint alleged that respondent here, Thunder Craft Boats, Inc. (Thunder Craft), a Tennessee corporation, had violated the Florida statute by using the direct molding process to duplicate the Bonito 5VBR fiberglass hull, and had knowingly sold such duplicates in violation of the Florida statute. Bonito sought "a temporary and permanent injunction prohibiting [Thunder Craft] from continuing to unlawfully duplicate and sell Bonito Boat hulls or components," as well as an accounting of profits, treble damages, punitive damages, and attorney's fees. App. 6, 7. Respondent filed a motion to dismiss the complaint, arguing that under this Court's decisions in *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U. S. 225 (1964), and *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U. S. 234 (1964), the Florida statute conflicted with federal patent law and was therefore invalid under the Supremacy Clause of the Federal Constitution. App. 8-9. The trial court granted respondent's motion, *id.*, at 10-11, and a divided Court of Appeals affirmed the dismissal of petitioner's complaint. 487 So. 2d 395 (1986).

On appeal, a sharply divided Florida Supreme Court agreed with the lower courts' conclusion that the Florida law impermissibly interfered with the scheme established by the federal patent laws. See 515 So. 2d 220 (1987). The major-

ity read our decisions in *Sears* and *Compro* for the proposition that "when an article is introduced into the public domain, only a patent can eliminate the inherent risk of competition and then but for a limited time." 515 So. 2d, at 222. Relying on the Federal Circuit's decision in the *Interpart* case, the three dissenting judges argued that the Florida antidirect molding provision "does not prohibit the copying of an unpatented item. It prohibits one method of copying; the item remains in the public domain." 515 So. 2d, at 223 (Shaw, J., dissenting).

II

Article I, § 8, cl. 8, of the Constitution gives Congress the power "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." The Patent Clause itself reflects a balance between the need to encourage innovation and the avoidance of monopolies which stifle competition without any concomitant advance in the "Progress of Science and useful Arts." As we have noted in the past, the Clause contains both a grant of power and certain limitations upon the exercise of that power. Congress may not create patent monopolies of unlimited duration, nor may it "authorize the issuance of patents whose effects are to remove existent knowledge from the public domain, or to restrict free access to materials already available." *Graham v. John Deere Co. of Kansas City*, 383 U. S. 1, 6 (1966).

From their inception, the federal patent laws have embodied a careful balance between the need to promote innovation and the recognition that imitation and refinement through imitation are both necessary to invention itself and the very lifeblood of a competitive economy. Soon after the adoption of the Constitution, the First Congress enacted the Patent Act of 1790, which allowed the grant of a limited monopoly of 14 years to any applicant that "hath . . . invented or discov-

ered any useful art, manufacture, . . . or device, or any improvement therein not before known or used." 1 Stat. 109, 110. In addition to novelty, the 1790 Act required that the invention be "sufficiently useful and important" to merit the 14-year right of exclusion. *Ibid.* Section 2 of the Act required that the patentee deposit with the Secretary of State, a specification and if possible a model of the new invention, "which specification shall be so particular, and said models so exact, as not only to distinguish the invention or discovery from other things before known and used, but also to enable a workman or other person skilled in the art or manufacture . . . to make, construct, or use the same, to the end that the public may have the full benefit thereof, after the expiration of the patent term." *Ibid.*

The first Patent Act established an agency known by self-designation as the "Commissioners for the promotion of Useful Arts," composed of the Secretary of State, the Secretary of the Department of War, and the Attorney General, any two of whom could grant a patent. Thomas Jefferson was the first Secretary of State, and the driving force behind early federal patent policy. For Jefferson, a central tenet of the patent system in a free market economy was that "a machine of which we were possessed, might be applied by every man to any use of which it is susceptible." 13 Writings of Thomas Jefferson 335 (Memorial ed. 1904). He viewed a grant of patent rights in an idea already disclosed to the public as akin to an *ex post facto* law, "obstruct[ing] others in the use of what they possessed before." *Id.*, at 326-327. Jefferson also played a large role in the drafting of our Nation's second Patent Act, which became law in 1793. The Patent Act of 1793 carried over the requirement that the subject of a patent application be "not known or used before the application." Ch. 11, 1 Stat. 318, 319. A defense to an infringement action was created where "the thing, thus secured by patent, was not originally discovered by the patentee, but had been in use, or had been described in some public work

anterior to the supposed discovery of the patentee.” *Id.*, at 322. Thus, from the outset, federal patent law has been about the difficult business “of drawing a line between the things which are worth to the public the embarrassment of an exclusive patent, and those which are not.” 13 Writings of Thomas Jefferson, *supra*, at 335.

Today’s patent statute is remarkably similar to the law as known to Jefferson in 1793. Protection is offered to “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” 35 U. S. C. § 101. Since 1842, Congress has also made protection available for “any new, original and ornamental design for an article of manufacture.” 35 U. S. C. § 171. To qualify for protection, a design must present an aesthetically pleasing appearance that is not dictated by function alone, and must satisfy the other criteria of patentability. The novelty requirement of patentability is presently expressed in 35 U. S. C. §§ 102(a) and (b), which provide:

“A person shall be entitled to a patent unless —

“(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or

“(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country more than one year prior to the date of application for patent in the United States”

Sections 102(a) and (b) operate in tandem to exclude from consideration for patent protection knowledge that is already available to the public. They express a congressional determination that the creation of a monopoly in such information would not only serve no socially useful purpose, but would in fact injure the public by removing existing knowledge from public use. From the Patent Act of 1790 to the present day,

the public sale of an unpatented article has acted as a complete bar to federal protection of the idea embodied in the article thus placed in public commerce.

In the case of *Pennock v. Dialogue*, 2 Pet. 1 (1829), Justice Story applied these principles under the patent law of 1800. The patentee had developed a new technique for the manufacture of rubber hose for the conveyance of air and fluids. The invention was reduced to practice in 1811, but letters patent were not sought and granted until 1818. In the interval, the patentee had licensed a third party to market the hose, and over 13,000 feet of the new product had been sold in the city of Philadelphia alone. The Court concluded that the patent was invalid due to the prior public sale, indicating that, "if [an inventor] suffers the thing he invented to go into public use, or to be publicly sold for use" "[h]is voluntary act or acquiescence in the public sale and use is an abandonment of his right." *Id.*, at 23-24. The Court noted that under the common law of England, letters patent were unavailable for the protection of articles in public commerce at the time of the application, *id.*, at 20, and that this same doctrine was immediately embodied in the first patent laws passed in this country. *Id.*, at 21-22.

As the holding of *Pennock* makes clear, the federal patent scheme creates a limited opportunity to obtain a property right in an idea. Once an inventor has decided to lift the veil of secrecy from his work, he must choose the protection of a federal patent or the dedication of his idea to the public at large. As Judge Learned Hand once put it: "[I]t is a condition upon the inventor's right to a patent that he shall not exploit his discovery competitively after it is ready for patenting; he must content himself with either secrecy or legal monopoly." *Metallizing Engineering Co. v. Kenyon Bearing & Auto Parts Co.*, 153 F. 2d 516, 520 (CA2), cert. denied, 328 U. S. 840 (1946).

In addition to the requirements of novelty and utility, the federal patent law has long required that an innovation not be

anticipated by the prior art in the field. Even if a particular combination of elements is "novel" in the literal sense of the term, it will not qualify for federal patent protection if its contours are so traced by the existing technology in the field that the "improvement is the work of the skillful mechanic, not that of the inventor." *Hotchkiss v. Greenwood*, 11 How. 248, 267 (1851). In 1952, Congress codified this judicially developed requirement in 35 U. S. C. § 103, which refuses protection to new developments where "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person of ordinary skill in the art to which said subject matter pertains." The nonobviousness requirement extends the field of unpatentable material beyond that which is known to the public under § 102, to include that which could readily be deduced from publicly available material by a person of ordinary skill in the pertinent field of endeavor. See *Graham*, 383 U. S., at 15. Taken together, the novelty and nonobviousness requirements express a congressional determination that the purposes behind the Patent Clause are best served by free competition and exploitation of either that which is already available to the public or that which may be readily discerned from publicly available material. See *Aronson v. Quick Point Pencil Co.*, 440 U. S. 257, 262 (1979) ("[T]he stringent requirements for patent protection seek to ensure that ideas in the public domain remain there for the use of the public").

The applicant whose invention satisfies the requirements of novelty, nonobviousness, and utility, and who is willing to reveal to the public the substance of his discovery and "the best mode . . . of carrying out his invention," 35 U. S. C. § 112, is granted "the right to exclude others from making, using, or selling the invention throughout the United States," for a period of 17 years. 35 U. S. C. § 154. The federal patent system thus embodies a carefully crafted bargain for en-

couraging the creation and disclosure of new, useful, and non-obvious advances in technology and design in return for the exclusive right to practice the invention for a period of years. “[The inventor] may keep his invention secret and reap its fruits indefinitely. In consideration of its disclosure and the consequent benefit to the community, the patent is granted. An exclusive enjoyment is guaranteed him for seventeen years, but upon expiration of that period, the knowledge of the invention inures to the people, who are thus enabled without restriction to practice it and profit by its use.” *United States v. Dubilier Condenser Corp.*, 289 U. S. 178, 186–187 (1933).

The attractiveness of such a bargain, and its effectiveness in inducing creative effort and disclosure of the results of that effort, depend almost entirely on a backdrop of free competition in the exploitation of unpatented designs and innovations. The novelty and nonobviousness requirements of patentability embody a congressional understanding, implicit in the Patent Clause itself, that free exploitation of ideas will be the rule, to which the protection of a federal patent is the exception. Moreover, the ultimate goal of the patent system is to bring new designs and technologies into the public domain through disclosure. State law protection for techniques and designs whose disclosure has already been induced by market rewards may conflict with the very purpose of the patent laws by decreasing the range of ideas available as the building blocks of further innovation. The offer of federal protection from competitive exploitation of intellectual property would be rendered meaningless in a world where substantially similar state law protections were readily available. To a limited extent, the federal patent laws must determine not only what is protected, but also what is free for all to use. Cf. *Arkansas Electric Cooperative Corp. v. Arkansas Public Service Comm’n*, 461 U. S. 375, 384 (1983) (“[A] federal decision to forgo regulation in a given area may imply an authoritative federal determination that the area is best left unregu-

lated, and in that event would have as much pre-emptive force as a decision *to regulate*") (emphasis in original).

Thus our past decisions have made clear that state regulation of intellectual property must yield to the extent that it clashes with the balance struck by Congress in our patent laws. The tension between the desire to freely exploit the full potential of our inventive resources and the need to create an incentive to deploy those resources is constant. Where it is clear how the patent laws strike that balance in a particular circumstance, that is not a judgment the States may second-guess. We have long held that after the expiration of a federal patent, the subject matter of the patent passes to the free use of the public as a matter of federal law. See *Coats v. Merrick Thread Co.*, 149 U. S. 562, 572 (1893) ("[P]laintiffs' right to the use of the embossed periphery expired with their patent, and the public had the same right to make use of it as if it had never been patented"); *Kellogg Co. v. National Biscuit Co.*, 305 U. S. 111 (1938); *Singer Mfg. Co. v. June Mfg. Co.*, 163 U. S. 169 (1896). Where the public has paid the congressionally mandated price for disclosure, the States may not render the exchange fruitless by offering patent-like protection to the subject matter of the expired patent. "It is self-evident that on the expiration of a patent the monopoly created by it ceases to exist, and the right to make the thing formerly covered by the patent becomes public property." *Singer, supra*, at 185.

In our decisions in *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U. S. 225 (1964), and *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U. S. 234 (1964), we found that publicly known design and utilitarian ideas which were unprotected by patent occupied much the same position as the subject matter of an expired patent. The *Sears* case involved a pole lamp originally designed by the plaintiff Stiffel, who had secured both design and mechanical patents on the lamp. Sears purchased unauthorized copies of the lamps, and was able to sell them at a retail price practically equivalent to the wholesale

price of the original manufacturer. *Sears, supra*, at 226. Stiffel brought an action against Sears in Federal District Court, alleging infringement of the two federal patents and unfair competition under Illinois law. The District Court found that Stiffel's patents were invalid due to anticipation in the prior art, but nonetheless enjoined Sears from further sales of the duplicate lamps based on a finding of consumer confusion under the Illinois law of unfair competition. The Court of Appeals affirmed, coming to the conclusion that the Illinois law of unfair competition prohibited product simulation even in the absence of evidence that the defendant took some further action to induce confusion as to source.

This Court reversed, finding that the unlimited protection against copying which the Illinois law accorded an unpatentable item whose design had been fully disclosed through public sales conflicted with the federal policy embodied in the patent laws. The Court stated:

"In the present case the 'pole lamp' sold by Stiffel has been held not to be entitled to the protection of either a mechanical or a design patent. An unpatentable article, like an article on which the patent has expired, is in the public domain and may be made and sold by whoever chooses to do so. What Sears did was to copy Stiffel's design and sell lamps almost identical to those sold by Stiffel. This it had every right to do under the federal patent laws." 376 U. S., at 231.

A similar conclusion was reached in *Compco*, where the District Court had extended the protection of Illinois' unfair competition law to the functional aspects of an unpatented fluorescent lighting system. The injunction against copying of an unpatented article, freely available to the public, impermissibly "interfere[d] with the federal policy, found in Art. I, § 8, cl. 8, of the Constitution and in the implementing federal statutes, of allowing free access to copy whatever the federal patent and copyright laws leave in the public domain." *Compco, supra*, at 237.

The pre-emptive sweep of our decisions in *Sears* and *Compro* has been the subject of heated scholarly and judicial debate. See, e. g., Symposium, Product Simulation: A Right or a Wrong?, 64 Colum. L. Rev. 1178 (1964); *Lear, Inc. v. Adkins*, 395 U. S. 653, 676 (1969) (Black, J., concurring in part and dissenting in part). Read at their highest level of generality, the two decisions could be taken to stand for the proposition that the States are completely disabled from offering any form of protection to articles or processes which fall within the broad scope of patentable subject matter. See *id.*, at 677. Since the potentially patentable includes "anything under the sun that is made by man," *Diamond v. Chakrabarty*, 447 U. S. 303, 309 (1980) (citation omitted), the broadest reading of *Sears* would prohibit the States from regulating the deceptive simulation of trade dress or the tortious appropriation of private information.

That the extrapolation of such a broad pre-emptive principle from *Sears* is inappropriate is clear from the balance struck in *Sears* itself. The *Sears* Court made it plain that the States "may protect businesses in the use of their trademarks, labels, or distinctive dress in the packaging of goods so as to prevent others, by imitating such markings, from misleading purchasers as to the source of the goods." *Sears, supra*, at 232 (footnote omitted). Trade dress is, of course, potentially the subject matter of design patents. See *W. T. Rogers Co. v. Keene*, 778 F. 2d 334, 337 (CA7 1985). Yet our decision in *Sears* clearly indicates that the States may place limited regulations on the circumstances in which such designs are used in order to prevent consumer confusion as to source. Thus, while *Sears* speaks in absolutist terms, its conclusion that the States may place some conditions on the use of trade dress indicates an implicit recognition that all state regulation of potentially patentable but unpatented subject matter is not *ipso facto* pre-empted by the federal patent laws.

What was implicit in our decision in *Sears*, we have made explicit in our subsequent decisions concerning the scope of federal pre-emption of state regulation of the subject matter of patent. Thus, in *Kewanee Oil Co. v. Bicron Corp.*, 416 U. S. 470 (1974), we held that state protection of trade secrets did not operate to frustrate the achievement of the congressional objectives served by the patent laws. Despite the fact that state law protection was available for ideas which clearly fell within the subject matter of patent, the Court concluded that the nature and degree of state protection did not conflict with the federal policies of encouragement of patentable invention and the prompt disclosure of such innovations.

Several factors were critical to this conclusion. First, because the public awareness of a trade secret is by definition limited, the Court noted that "the policy that matter once in the public domain must remain in the public domain is not incompatible with the existence of trade secret protection." *Id.*, at 484. Second, the *Kewanee* Court emphasized that "[t]rade secret law provides far weaker protection in many respects than the patent law." *Id.*, at 489-490. This point was central to the Court's conclusion that trade secret protection did not conflict with either the encouragement or disclosure policies of the federal patent law. The public at large remained free to discover and exploit the trade secret through reverse engineering of products in the public domain or by independent creation. *Id.*, at 490. Thus, the possibility that trade secret protection would divert inventors from the creative effort necessary to satisfy the rigorous demands of patent protection was remote indeed. *Ibid.* Finally, certain aspects of trade secret law operated to protect non-economic interests outside the sphere of congressional concern in the patent laws. As the Court noted, "[A] most fundamental human right, that of privacy, is threatened when industrial espionage is condoned or is made profitable." *Id.*, at 487 (footnote omitted). There was no indication that Con-

gress had considered this interest in the balance struck by the patent laws, or that state protection for it would interfere with the policies behind the patent system.

We have since reaffirmed the pragmatic approach which *Kewanee* takes to the pre-emption of state laws dealing with the protection of intellectual property. See *Aronson*, 440 U. S., at 262 ("State law is not displaced merely because the contract relates to intellectual property which may or may not be patentable; the states are free to regulate the use of such intellectual property in any manner not inconsistent with federal law"). At the same time, we have consistently reiterated the teaching of *Sears* and *Compco* that ideas once placed before the public without the protection of a valid patent are subject to appropriation without significant restraint. *Aronson*, *supra*, at 263.

At the heart of *Sears* and *Compco* is the conclusion that the efficient operation of the federal patent system depends upon substantially free trade in publicly known, unpatented design and utilitarian conceptions. In *Sears*, the state law offered "the equivalent of a patent monopoly," 376 U. S., at 233, in the functional aspects of a product which had been placed in public commerce absent the protection of a valid patent. While, as noted above, our decisions since *Sears* have taken a decidedly less rigid view of the scope of federal pre-emption under the patent laws, *e. g.*, *Kewanee*, *supra*, at 479-480, we believe that the *Sears* Court correctly concluded that the States may not offer patent-like protection to intellectual creations which would otherwise remain unprotected as a matter of federal law. Both the novelty and the nonobviousness requirements of federal patent law are grounded in the notion that concepts within the public grasp, or those so obvious that they readily could be, are the tools of creation available to all. They provide the baseline of free competition upon which the patent system's incentive to creative effort depends. A state law that substantially interferes with the enjoyment of an unpatented utilitarian or design conception

which has been freely disclosed by its author to the public at large impermissibly contravenes the ultimate goal of public disclosure and use which is the centerpiece of federal patent policy. Moreover, through the creation of patent-like rights, the States could essentially redirect inventive efforts away from the careful criteria of patentability developed by Congress over the last 200 years. We understand this to be the reasoning at the core of our decisions in *Sears* and *Compco*, and we reaffirm that reasoning today.

III

We believe that the Florida statute at issue in this case so substantially impedes the public use of the otherwise unprotected design and utilitarian ideas embodied in unpatented boat hulls as to run afoul of the teaching of our decisions in *Sears* and *Compco*. It is readily apparent that the Florida statute does not operate to prohibit "unfair competition" in the usual sense that the term is understood. The law of unfair competition has its roots in the common-law tort of deceit: its general concern is with protecting consumers from confusion as to source. While that concern may result in the creation of "quasi-property rights" in communicative symbols, the focus is on the protection of consumers, not the protection of producers as an incentive to product innovation. Judge Hand captured the distinction well in *Crescent Tool Co. v. Kilborn & Bishop Co.*, 247 F. 299, 301 (CA2 1917), where he wrote:

"[T]he plaintiff has the right not to lose his customers through false representations that those are his wares which in fact are not, but he may not monopolize any design or pattern, however trifling. The defendant, on the other hand, may copy plaintiff's goods slavishly down to the minutest detail: but he may not represent himself as the plaintiff in their sale."

With some notable exceptions, including the interpretation of the Illinois law of unfair competition at issue in *Sears* and

Compro, see *Sears*, *supra*, at 227–228, n. 2, the common-law tort of unfair competition has been limited to protection against copying of nonfunctional aspects of consumer products which have acquired secondary meaning such that they operate as a designation of source. See generally P. Kaufmann, *Passing Off and Misappropriation*, in 9 *International Review of Industrial Property and Copyright Law, Studies in Industrial Property and Copyright Law* 100–109 (1986). The “protection” granted a particular design under the law of unfair competition is thus limited to one context where consumer confusion is likely to result; the design “idea” itself may be freely exploited in all other contexts.

In contrast to the operation of unfair competition law, the Florida statute is aimed directly at preventing the exploitation of the design and utilitarian conceptions embodied in the product itself. The sparse legislative history surrounding its enactment indicates that it was intended to create an inducement for the improvement of boat hull designs. See *Tr. of Meeting of Transportation Committee, Florida House of Representatives*, May 3, 1983, reprinted at App. 22 (“[T]here is no inducement for [a] quality boat manufacturer to improve these designs and secondly, if he does, it is immediately copied. This would prevent that and allow him recourse in circuit court”). To accomplish this goal, the Florida statute endows the original boat hull manufacturer with rights against the world, similar in scope and operation to the rights accorded a federal patentee. Like the patentee, the beneficiary of the Florida statute may prevent a competitor from “making” the product in what is evidently the most efficient manner available and from “selling” the product when it is produced in that fashion. Compare 35 U. S. C. § 154.*

*In some respects, the protection accorded by the Florida statute resembles that of a so-called “product-by-process” patent. Such a claim “is one in which the product is defined at least in part in terms of the method or process by which it is made.” D. Chisum, *Patents* § 8.05, p. 8–67 (1988). As long as the end product of the process is adequately defined

The Florida scheme offers this protection for an unlimited number of years to all boat hulls and their component parts, without regard to their ornamental or technological merit. Protection is available for subject matter for which patent protection has been denied or has expired, as well as for designs which have been freely revealed to the consuming public by their creators.

In this case, the Bonito 5VBR fiberglass hull has been freely exposed to the public for a period in excess of six years. For purposes of federal law, it stands in the same stead as an item for which a patent has expired or been denied: it is unpatented and unpatentable. See 35 U. S. C. § 102(b). Whether because of a determination of unpatentability or other commercial concerns, petitioner chose to expose its hull design to the public in the marketplace, eschewing the bargain held out by the federal patent system of disclosure in exchange for exclusive use. Yet, the Florida statute allows petitioner to reassert a substantial property right in the idea, thereby constricting the spectrum of useful public knowledge. Moreover, it does so without the careful protections of high standards of innovation and limited monopoly contained in the federal scheme. We think it clear that such protection conflicts with the federal policy "that all ideas in general circulation be dedicated to the common good

and novel and nonobvious, a patent in the process may support a patent in the resulting product. See U. S. Patent and Trademark Office, Manual of Patent Examining Procedure § 706.03(e) (5th rev. ed. 1986) ("An article may be claimed by a process of making it provided it is definite"). The Florida statute at issue here grants boat hull manufacturers substantial control over the use of a particular process and the sale of an article created by that process without regard to the novelty or nonobviousness of either the end product or the process by which it was created. Under federal law, this type of protection would be unavailable to petitioner absent satisfaction of the requirements of patentability. See *In re Thorpe*, 777 F. 2d 695, 697 (CA Fed. 1985) (product-by-process patent properly denied where end result was indistinguishable from prior art).

unless they are protected by a valid patent.” *Lear, Inc. v. Adkins*, 395 U. S., at 668.

That the Florida statute does not remove all means of reproduction and sale does not eliminate the conflict with the federal scheme. See *Kellogg*, 305 U. S., at 122. In essence, the Florida law prohibits the entire public from engaging in a form of reverse engineering of a product in the public domain. This is clearly one of the rights vested in the federal patent holder, but has never been a part of state protection under the law of unfair competition or trade secrets. See *Kewanee*, 416 U. S., at 476 (“A trade secret law, however, does not offer protection against discovery by . . . so-called reverse engineering, that is by starting with the known product and working backward to divine the process which aided in its development or manufacture”); see also *Chicago Lock Co. v. Fanberg*, 676 F. 2d 400, 405 (CA9 1982) (“A lock purchaser’s own reverse-engineering of his own lock, and subsequent publication of the serial number-key code correlation, is an example of the independent invention and reverse engineering expressly allowed by trade secret doctrine”). The duplication of boat hulls and their component parts may be an essential part of innovation in the field of hydrodynamic design. Variations as to size and combination of various elements may lead to significant advances in the field. Reverse engineering of chemical and mechanical articles in the public domain often leads to significant advances in technology. If Florida may prohibit this particular method of study and recomposition of an unpatented article, we fail to see the principle that would prohibit a State from banning the use of chromatography in the reconstitution of unpatented chemical compounds, or the use of robotics in the duplication of machinery in the public domain.

Moreover, as we noted in *Kewanee*, the competitive reality of reverse engineering may act as a spur to the inventor, creating an incentive to develop inventions that meet the rigorous requirements of patentability. 416 U. S., at 489–490.

The Florida statute substantially reduces this competitive incentive, thus eroding the general rule of free competition upon which the attractiveness of the federal patent bargain depends. The protections of state trade secret law are most effective at the developmental stage, before a product has been marketed and the threat of reverse engineering becomes real. During this period, patentability will often be an uncertain prospect, and to a certain extent, the protection offered by trade secret law may "dovetail" with the incentives created by the federal patent monopoly. See *Goldstein, Kewanee Oil Co. v. Bicon Corp.*: Notes on a Closing Circle, 1974 S. Ct. Rev. 81, 92. In contrast, under the Florida scheme, the would-be inventor is aware from the outset of his efforts that rights against the public are available regardless of his ability to satisfy the rigorous standards of patentability. Indeed, it appears that even the most mundane and obvious changes in the design of a boat hull will trigger the protections of the statute. See Fla. Stat. § 559.94(2) (1987) (protecting "any manufactured vessel hull or component part"). Given the substantial protection offered by the Florida scheme, we cannot dismiss as hypothetical the possibility that it will become a significant competitor to the federal patent laws, offering investors similar protection without the *quid pro quo* of substantial creative effort required by the federal statute. The prospect of all 50 States establishing similar protections for preferred industries without the rigorous requirements of patentability prescribed by Congress could pose a substantial threat to the patent system's ability to accomplish its mission of promoting progress in the useful arts.

Finally, allowing the States to create patent-like rights in various products in public circulation would lead to administrative problems of no small dimension. The federal patent scheme provides a basis for the public to ascertain the status of the intellectual property embodied in any article in general circulation. Through the application process, detailed in-

formation concerning the claims of the patent holder is compiled in a central location. See 35 U. S. C. §§ 111-114. The availability of damages in an infringement action is made contingent upon affixing a notice of patent to the protected article. 35 U. S. C. § 287. The notice requirement is designed "for the information of the public," *Wine Railway Appliance Co. v. Enterprise Railway Equipment Co.*, 297 U. S. 387, 397 (1936), and provides a ready means of discerning the status of the intellectual property embodied in an article of manufacture or design. The public may rely upon the lack of notice in exploiting shapes and designs accessible to all. See *Devices for Medicine, Inc. v. Boehl*, 822 F. 2d 1062, 1066 (CA Fed. 1987) ("Having sold the product unmarked, [the patentee] could hardly maintain entitlement to damages for its use by a purchaser uninformed that such use would violate [the] patent").

The Florida scheme blurs this clear federal demarcation between public and private property. One of the fundamental purposes behind the Patent and Copyright Clauses of the Constitution was to promote national uniformity in the realm of intellectual property. See *The Federalist* No. 43, p. 309 (B. Wright ed. 1961). Since the Patent Act of 1800, Congress has lodged exclusive jurisdiction of actions "arising under" the patent laws in the federal courts, thus allowing for the development of a uniform body of law in resolving the constant tension between private right and public access. See 28 U. S. C. § 1338; see also Chisum, *The Allocation of Jurisdiction Between State and Federal Courts in Patent Litigation*, 46 Wash. L. Rev. 633, 636 (1971). Recently, Congress conferred exclusive jurisdiction of all patent appeals on the Court of Appeals for the Federal Circuit, in order to "provide nationwide uniformity in patent law." H. R. Rep. No. 97-312, p. 20 (1981). This purpose is frustrated by the Florida scheme, which renders the status of the design and utilitarian "ideas" embodied in the boat hulls it protects uncertain. Given the inherently ephemeral nature

of property in ideas, and the great power such property has to cause harm to the competitive policies which underlay the federal patent laws, the demarcation of broad zones of public and private right is "the type of regulation that demands a uniform national rule." *Ray v. Atlantic Richfield Co.*, 435 U. S. 151, 179 (1978). Absent such a federal rule, each State could afford patent-like protection to particularly favored home industries, effectively insulating them from competition from outside the State.

Petitioner and its supporting *amici* place great weight on the contrary decision of the Court of Appeals for the Federal Circuit in *Interpart Corp. v. Italia*. In upholding the application of the California "antidirect molding" statute to the duplication of unpatented automobile mirrors, the Federal Circuit stated: "The statute prevents unscrupulous competitors from obtaining a product and using it as the 'plug' for making a mold. The statute does not prohibit copying the design of the product in any other way; the latter if in the public domain, is free for anyone to make, use or sell." 777 F. 2d, at 685. The court went on to indicate that "the patent laws 'say nothing about the right to copy or the right to use, they speak only in terms of the right to exclude.'" *Ibid.*, quoting *Mine Safety Appliances Co. v. Electric Storage Battery Co.*, 56 C. C. P. A. (Pat.) 863, 864, n. 2, 405 F. 2d 901, 902, n. 2 (1969).

We find this reasoning defective in several respects. The Federal Circuit apparently viewed the direct molding statute at issue in *Interpart* as a mere regulation of the use of chattels. Yet, the very purpose of antidirect molding statutes is to "reward" the "inventor" by offering substantial protection against public exploitation of his or her idea embodied in the product. Such statutes would be an exercise in futility if they did not have precisely the effect of substantially limiting the ability of the public to exploit an otherwise unprotected idea. As *amicus* points out, the direct molding process itself has been in use since the early 1950's. See Brief for Charles

E. Lipsey as *Amicus Curiae* 3, n. 2. Indeed, U. S. Patent No. 3,419,646, issued to Robert L. Smith in 1968, explicitly discloses and claims a method for the direct molding of boat hulls. The specifications of the Smith Patent indicate that "[i]t is a major object of the present invention to provide a method for making large molded boat hull molds at very low cost, once a prototype hull has been provided." App. to Brief for Charles E. Lipsey as *Amicus Curiae* 15a. In fact, it appears that Bonito employed a similar process in the creation of its own production mold. See *supra*, at 144. It is difficult to conceive of a more effective method of creating substantial property rights in an intellectual creation than to eliminate the most efficient method for its exploitation. *Sears* and *Compro* protect more than the right of the public to contemplate the abstract beauty of an otherwise unprotected intellectual creation—they assure its efficient reduction to practice and sale in the marketplace.

Appending the conclusionary label "unscrupulous" to such competitive behavior merely endorses a policy judgment which the patent laws do not leave the States free to make. Where an item in general circulation is unprotected by patent, "[r]eproduction of a functional attribute is legitimate competitive activity." *Inwood Laboratories, Inc. v. Ives Laboratories, Inc.*, 456 U. S. 844, 863 (1982) (WHITE, J., concurring in result). See also *Bailey v. Logan Square Typographers, Inc.*, 441 F. 2d 47, 51 (CA7 1971) (Stevens, J.) ("[T]hat which is published may be freely copied as a matter of federal right").

Finally, we are somewhat troubled by the *Interpart* court's reference to the *Mine Safety* case for the proposition that the patent laws say "nothing about the right to copy or the right to use." As noted above, the federal standards for patentability, at a minimum, express the congressional determination that patent-like protection is unwarranted as to certain classes of intellectual property. The States are simply not free in this regard to offer equivalent protections to ideas

which Congress has determined should belong to all. For almost 100 years it has been well established that in the case of an expired patent, the federal patent laws *do* create a federal right to "copy and to use." *Sears* and *Compco* extended that rule to potentially patentable ideas which are fully exposed to the public. The *Interpart* court's assertion to the contrary is puzzling and flies in the face of the same court's decisions applying the teaching of *Sears* and *Compco* in other contexts. See *Power Controls Corp. v. Hybrinetics, Inc.*, 806 F. 2d 234, 240 (CA Fed. 1986) ("It is well established . . . that an action for unfair competition cannot be based upon a functional design"); *Gemveto Jewelry Co. v. Jeff Cooper Inc.*, 800 F. 2d 256, 259 (CA Fed. 1986) (vacating injunction against copying of jewelry designs issued under state law of unfair competition "in view of the *Sears* and *Compco* decisions which hold that copying of the article itself that is unprotected by the federal patent and copyright laws cannot be protected by state law").

Our decisions since *Sears* and *Compco* have made it clear that the Patent and Copyright Clauses do not, by their own force or by negative implication, deprive the States of the power to adopt rules for the promotion of intellectual creation within their own jurisdictions. See *Aronson*, 440 U. S., at 262; *Goldstein v. California*, 412 U. S. 546, 552-561 (1973); *Kewanee*, 416 U. S., at 478-479. Thus, where "Congress determines that neither federal protection nor freedom from restraint is required by the national interest," *Goldstein*, *supra*, at 559, the States remain free to promote originality and creativity in their own domains.

Nor does the fact that a particular item lies within the subject matter of the federal patent laws necessarily preclude the States from offering limited protection which does not impermissibly interfere with the federal patent scheme. As *Sears* itself makes clear, States may place limited regulations on the use of unpatented designs in order to prevent consumer confusion as to source. In *Kewanee*, we found that

state protection of trade secrets, as applied to both patentable and unpatentable subject matter, did not conflict with the federal patent laws. In both situations, state protection was not aimed exclusively at the promotion of invention itself, and the state restrictions on the use of unpatented ideas were limited to those necessary to promote goals outside the contemplation of the federal patent scheme. Both the law of unfair competition and state trade secret law have coexisted harmoniously with federal patent protection for almost 200 years, and Congress has given no indication that their operation is inconsistent with the operation of the federal patent laws. See *Florida Lime & Avocado Growers, Inc. v. Paul*, 373 U. S. 132, 144 (1963); *United States v. Bass*, 404 U. S. 336, 349 (1971).

Indeed, there are affirmative indications from Congress that both the law of unfair competition and trade secret protection are consistent with the balance struck by the patent laws. Section 43(a) of the Lanham Act, 60 Stat. 441, 15 U. S. C. §1125(a), creates a federal remedy for making "a false designation of origin, or any false description or representation, including words or other symbols tending falsely to describe or represent the same" Congress has thus given federal recognition to many of the concerns that underlie the state tort of unfair competition, and the application of *Sears* and *Compro* to nonfunctional aspects of a product which have been shown to identify source must take account of competing federal policies in this regard. Similarly, as JUSTICE MARSHALL noted in his concurring opinion in *Kewanee*: "State trade secret laws and the federal patent laws have co-existed for many, many, years. During this time, Congress has repeatedly demonstrated its full awareness of the existence of the trade secret system, without any indication of disapproval. Indeed, Congress has in a number of instances given explicit federal protection to trade secret information provided to federal agencies." *Kewanee, supra*, at 494 (concurring in result) (citation omitted). The case for

federal pre-emption is particularly weak where Congress has indicated its awareness of the operation of state law in a field of federal interest, and has nonetheless decided to "stand by both concepts and to tolerate whatever tension there [is] between them." *Silkwood v. Kerr-McGee Corp.*, 464 U. S. 238, 256 (1984). The same cannot be said of the Florida statute at issue here, which offers protection beyond that available under the law of unfair competition or trade secret, without any showing of consumer confusion, or breach of trust or secrecy.

The Florida statute is aimed directly at the promotion of intellectual creation by substantially restricting the public's ability to exploit ideas that the patent system mandates shall be free for all to use. Like the interpretation of Illinois unfair competition law in *Sears* and *Compco*, the Florida statute represents a break with the tradition of peaceful co-existence between state market regulation and federal patent policy. The Florida law substantially restricts the public's ability to exploit an unpatented design in general circulation, raising the specter of state-created monopolies in a host of useful shapes and processes for which patent protection has been denied or is otherwise unobtainable. It thus enters a field of regulation which the patent laws have reserved to Congress. The patent statute's careful balance between public right and private monopoly to promote certain creative activity is a "scheme of federal regulation . . . so pervasive as to make reasonable the inference that Congress left no room for the States to supplement it." *Rice v. Santa Fe Elevator Corp.*, 331 U. S. 218, 230 (1947).

Congress has considered extending various forms of limited protection to industrial design either through the copyright laws or by relaxing the restrictions on the availability of design patents. See generally Brown, Design Protection: An Overview, 34 UCLA L. Rev. 1341 (1987). Congress explicitly refused to take this step in the copyright laws, see 17 U. S. C. § 101; H. R. Rep. No. 94-1476, p. 55 (1976), and de-

spite sustained criticism for a number of years, it has declined to alter the patent protections presently available for industrial design. See Report of the President's Commission on the Patent System, S. Doc. No. 5, 90th Cong., 1st Sess., 20-21 (1967); Lindgren, *The Sanctity of the Design Patent: Illusion or Reality?*, 10 Okla. City L. Rev. 195 (1985). It is for Congress to determine if the present system of design and utility patents is ineffectual in promoting the useful arts in the context of industrial design. By offering patent-like protection for ideas deemed unprotected under the present federal scheme, the Florida statute conflicts with the "strong federal policy favoring free competition in ideas which do not merit patent protection." *Lear, Inc.*, 395 U. S., at 656. We therefore agree with the majority of the Florida Supreme Court that the Florida statute is preempted by the Supremacy Clause, and the judgment of that court is hereby affirmed.

It is so ordered.