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Collaborative R&D and the Cooperative Research and Technology Enhancement (CREATE) Act

Wendy H. Schacht
Specialist in Science and Technology
Resources, Science, and Industry Division

Summary

The Cooperative Research and Technology Enhancement (CREATE) Act, P.L. 108-453, was signed into law on December 10, 2004. Reflecting congressional interest in encouraging cooperative research and development among universities, industry, and government, this legislation addresses issues of patent ownership under collaborative ventures. The act amends 35 U.S.C. section 103 to permit the patenting of inventions made through joint research among multiple partners if certain conditions are met. The change is in response to a 1997 decision of the Federal Court of Appeals in *OddzOn Products, Inc., v Just Toys, Inc*. which stated that absent an assignment of rights to a single entity prior to the start of a research endeavor, the sharing of information among members of a research team could render any resulting invention unpatentable because it does not meet the "nonobvious" requirements of the law. (To be nonobvious an invention must not have been readily within the ordinary skills of a competent artisan at the time the invention was made.) This Court decision was seen by some observers to be an impediment to joint public-private research endeavors and contrary to the intent of congressional policy facilitating such activities. This report will be updated as events warrant.

Congress has had a long-standing interest in cooperative research and development (R&D) and its connection to technological advance. It is now widely accepted that technological advancement accounts for up to one-half of the Nation's economic growth over time. Joint ventures are an attempt to facilitate technological development within the industrial community. Academia, industry, and government are often seen as playing complementary roles in bringing new products, processes, and services to the marketplace. While opponents argue that collaborative activities stifle competition, proponents assert that they are designed to accommodate the strengths and responsibilities of these sectors. Cooperative projects are intended to utilize and integrate what the participants do best and direct these efforts to the goal of generating new technologies. Proponents note that they allow for shared costs, shared risks, shared facilities, and shared expertise.

A major emphasis of legislative activity has been to augment research in the private sector. This focus is reflected in executive branch and congressional efforts to encourage companies to undertake cooperative R&D arrangements and to expand the opportunities available for research. Various laws have created an environment conducive to joint ventures between government and industry, or between industry and universities, as well as among companies. Beginning in 1980 with the passage of legislation mandating the transfer of technology from government laboratories and allowing certain contractors to retain title to inventions made under federal funding, Congress has demonstrated its support for facilitating innovation through cooperative R&D. This approach continues today in laws designed to make additional alterations to policies regarding government-owned intellectual property.[1]

A series of laws use patent ownership to foster collaboration between parties in the research and development enterprise. Among these are P.L. 96-418, the Stevenson-Wydler Technology Innovation Act; P.L. 96-517, Amendments to the Patent and Trademark Act (commonly referred to as the "Bayh-Dole Act"); and P.L. 98-622, Amendments to the Patent Act.[2] Patents protect the inventor's investments in generating the knowledge that is the basis for innovation and serve as an incentive to the commercialization of new ideas. As R&D has become more expensive, ownership of title to inventions has been used as a means to encourage collaborative work among the different players in the research enterprise.

The patent system is grounded in Article I, Section 8, Clause 8 of the Constitution and is intended to stimulate new discoveries and their reduction to practice, commonly known as innovation. The grant of a patent provides the inventor with a means to capture returns to his invention through exclusive rights on its practice for (generally) 20 years from date of filing. This is designed to encourage those additional investments necessary to further develop an idea and generate a marketable technology. At the same time, the process of obtaining a patent makes available to the public the concepts on which it is based. In return for a monopoly right to specific applications of the knowledge generated, the inventor must publish the ideas covered in the patent. As a disclosure system, the patent can, and often does, stimulate others to invent "around" existing patents to provide for parallel technical developments or to meet similar and expanded demands in the marketplace.

To be patentable, an invention must be useful, novel and nonobvious. The requirement of usefulness, or utility, is satisfied if the invention is operable and provides a tangible benefit.[3] To be judged novel, the invention must not be fully anticipated by an earlier patent, publication, or other knowledge within the public domain, typically referred

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[1] For additional information see *Cooperative R&D: Federal Efforts to Promote Industrial Competitiveness*, by Wendy H. Schacht, CRS Issue Brief IB89056 and *R&D Partnership and Intellectual Property: Implications for U.S. Policy*, by Wendy H. Schacht, CRS Report 98-862.

[2] For a detailed discussion of the first two laws see *The Bayh-Dole Act: Selected Issues in Patent Policy and the Commercialization of Technology*, by Wendy H. Schacht, CRS Report RL32076 and *Patent Ownership and Federal Research and Development: A Discussion on the Bayh-Dole Act and the Stevenson-Wyder Act*, by Wendy H. Schacht, CRS Report RL30320.

[3] 35 U.S.C. section 101.

to as "prior art".[4] A nonobvious invention must not have been readily within the ordinary skills of a competent artisan at the time the invention was made.[5]

In 1984, Congress enacted P.L. 98-622, Amendments to the Patent Act, as a response to several court decisions which appeared to make the results of collaborative research activities "nonobvious" because earlier discoveries of individual research team members were considered "prior art" making the new inventions unpatentable.[6] The 1984 legislation amended 35 U.S. C. section 103 to provide that background information shared within an organization as part of a cooperative effort was *not* to be considered "prior art" which would have prevented patenting of the resulting innovation. As stated in a section-by-section analysis of H.R. 6286 (the bill which became law):

> New technology often is developed by using background scientific or technical information known within an organization but unknown to the public. The bill, by disqualifying such background information from prior art, will encourage communication among members of research teams, and patenting, and consequently public dissemination, of the results of "team research."[7]

The concept of what constituted an organization within which research was performed was intended to be broad according to the House Committee on the Judiciary in the 108th Congress:

> In amending [section] 103 to promote collaborative research, Congress did not expressly limit the benefit of the new law to circumstances in which the collaboration involved researchers from within a single organization. Instead, it provided that researchers from different organizations who had commonly assigned their rights to a single entity could also benefit from the "safe harbor" created by the law.[8]

However, this interpretation was called into question in the Federal Court of Appeals 1997 decision in *OddzOn Products, Inc., v. Just Toys, Inc*. The Court found that the sharing of information among research team members could result in the invention being deemed "obvious" and therefore not subject to a patent if the participants had not previously assigned intellectual property rights to a *single* entity prior to generating the invention. Thus, if a structured research agreement specifying patent ownership had not been implemented before work commenced, otherwise patentable products or processes could be rendered unpatentable if, in the collaborative R&D process, the partners shared information, even on a confidential basis.

The Federal Court decision has been seen by some observers as an impediment to cooperative public-private research endeavors. This was thought to be contrary to the

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[4] 35 U.S.C. section 102.

[5] 35 U.S.C. section 103.

[6] House of Representatives, House Committee on the Judiciary, *Cooperative Research and Technology Enhancement (CREATE) Act of 2003*, House Report 108-425, 108th Cong, 2d sess., February 24, 2004, 3.

[7] *Section-by-Section Analysis: Patent Law Amendments of 1984*, 130 Congressional Record, H 10525, October 1, 1984.

[8] *Cooperative Research and Technology Enhancement (CREATE) Act of 2003*, op.cit., 3.

intent of established congressional policy facilitating such activities. "Many states and the Federal Government operate under laws and practices that tend to prohibit the assignment of inventive rights to a private sector collaborative partner, as *Oddzon* [stet] putatively requires."[9] In undertaking government-industry cooperative research, the federal departments and agencies may keep title to inventions made by government employees, while the private sector party retains the intellectual property generated by its staff. These rights may not be amenable to the transfer to a single commercial entity prior to the start of the R&D enterprise because of existing law and current government policies.

Universities are also restricted in what they are allowed to do with certain types of intellectual property arising from cooperative R&D. Under the Bayh-Dole Act (35 U.S.C. section 202(c)(7)) nonprofit organizations (including universities) are prohibited from assigning to another institution the rights to an invention resulting from federally funded R&D without the approval of the federal agency financing the research. According to June 10, 2003 testimony before the House Committee on the Judiciary, Subcommittee on Courts, the Internet, and Intellectual Property, Jeffrey Kushan argued that "... universities cannot create the legal structures that will qualify them for the safe harbor of section 103(c) for their external research collaborations." This, he maintains, results in a situation where only certain institutions can protect their inventions under joint ventures while other organizations involved in the innovation process are unable to do so.

Responding to these concerns, P.L. 108-453, the Cooperative Research and Technology Enhancement (CREATE) Act allows for patenting of inventions made through cooperative R&D with multiple parties if certain conditions are met. Under the new law, inventions generated in the process of collaborative research are treated as if they were made by a single inventor if a written cooperative agreement has been signed prior to the development of the discovery. According to the House Committee on the Judiciary, "the CREATE Act provides a simple means of extending the 'safe harbor' provisions of current law that treats inventions of a common owner similarly to inventions made by a single person."[10] No longer would title to inventions need to be assigned to a single entity before research commences in order to be deemed "nonobvious" under a joint research endeavor. These provisions are prescriptive and do not apply retroactively.

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[9] Ibid, 5.

[10] Ibid, 5.