Calendar No. 1329

98TH CONGRESS
2d Session

SENATE

REPORT
98-662

AMENDING TITLE 35 OF THE UNITED STATES CODE FOR THE PURPOSE OF CREATING A UNIFORM POLICY AND PROCEDURE CONCERNING PATENT RIGHTS IN INVENTIONS DEVELOPED WITH FEDERAL ASSISTANCE, AND FOR OTHER PURPOSES

OCTOBER 5 (legislative day, SEPTEMBER 24), 1984.—Ordered to be printed

Mr. THURMOND, from the Committee on the Judiciary, submitted the following

REPORT

[To accompany S. 2171]

The Committee on the Judiciary, to which was referred the bill (S. 2171) to amend title 35 of the United States Code for the purpose of creating a uniform policy and procedure concerning patent rights in inventions developed with Federal assistance, and for other purposes having considered same, reports favorably thereon with an amendment (in the nature of a substitute) and recommends that the bill as amended do pass.

I. PURPOSE OF THE BILL

The purpose of S. 2171, as amended by the Committee, is to make certain changes in Public Law 96-517, and further amendments to Part II of Title 35, United States Code. The amendments are designed to improve the functioning of the 1980 Act and to further extend the principles of that Act to the operations of Government laboratories.

II. HISTORY OF S. 2171

On December 12, 1980, the Congress enacted the Patent Law Amendments Act of 1980 (P.L. 96-517), dealing with patent rights in inventions made with Federal assistance. In the main, this Act establishes a uniform policy that allows all small business and nonprofit organizations to own inventions they may produce with Federal research and development funding. The Act also contains provisions to protect the interests of the public, the Government, and the inventing organizations. The Act authorizes agency licensing of

51-010 O

Government-owned inventions and establishes policies for agencies to follow in such licensing.

After nearly four years of experience with P.L. 96-517, it is clear that the Act is accomplishing what it was intended to do. All of the major research universities appear to agree that the assurance of clear title to Government-funded inventions provided by the Act has led directly to increased patent licensing. Even more important, this assurance has been a major factor in allowing increased business support and collaboration in university research. Universities can negotiate with businesses and reach agreements over who will have what rights to inventions that come from joint efforts when the universities own the basic patents. Experience has shown, however, that some minor improvements are needed to make P.L. 96-517 work even better.

For example, Congress in enacting P.L. 96-517 placed limitations on universities licensing with big business. At that time, many universities did not have experience licensing patent portfolios, and Congress was concerned that they might be unduly dominated by large companies. The past four years have shown this to be an unnecessary fear as illustrated by the actions of Stanford University which deliberately licensed its revolutionary bio-technology inventions to many small, emerging firms. Thus a whole new generation of companies sprang out of university research. Many other universities have exhibited a high level of sophistication in handling their patent portfolios while maintaining their traditional academic freedom. The United States is now the envy of the world in its university/industry relationships, and by removing the present licensing cap, this progress should accelerate.

As another example, the Congress opened the door to allowing nonprofit contractors of Government-owned laboratories to own the inventions they produce. Several Federal agencies have used this authority successfully. The Packard report and the testimony of managers of two Government-owned, contractor-operated laboratories indicates that improved national productivity requires this authority to be used by all agencies to fully integrate the Government-owned laboratories operated by nonprofit organizations into the economy by removing all question about their ability to own and license patents.

On November 18, 1983, Senator Robert Dole introduced S. 2171, the Uniform Patent Procedures Act of 1983, which was referred to the Committee on the Judiciary. The purpose of the bill was to amend P.L. 96-517 to eliminate provisions that have proven to inhibit accomplishment of the law's objectives, and to apply its principles to larger government contractors. On March 27, 1984, the Subcommittee on Patents, Copyrights, and Trademarks held hearings.

III. History of the Committee Amendment

On September 28, 1984, the Committee on the Judiciary with a quorum present, by voice vote and without objection, ordered S. 2171 favorably reported with an amendment in the nature of a substitute offered by Senator Charles Mathias. The amendment narrows the focus of the bill to concentrate on refining the 1980 law as

it relates to university and government-owned and operated laboratories. As a result, provisions of the original bill that would have established new rules for major private sector contractors have been removed.

SCOPE OF COMMITTEE AMENDMENT

S. 2171, as amended, addresses two principal areas of patent procurement and licensing policy: first, the need for refinements of P.L. 96-517 as it governs the rights of universities to own and license patents; and second, the need for amendments to laws which govern the patent policies followed by government-owned and operated laboratories.

A. University rights

This bill has several important effects on all universities that conduct Federally-funded research. It eliminates the existing limit on the duration of exclusive licenses they can grant to large businesses. This factor is particularly important with technologies such as pharmaceuticals, where long development times and major investments are usually required prior to commercialization.

The current invention reporting requirements that are included in Office of Management and Budget regulations are scheduled to sunset in February, 1985. These requirements were developed after extensive negotiations with the universities and they are working well. The bill codified them to ensure they continue without interruption when the OMB regulations are reconsidered.

The bill also makes it easier for universities to collaborate with Federal laboratories by giving the labs new authorities and incentives to enter into joint research similar to those provided to the universities under P.L. 96-517. In the past, such collaboration has been hindered by the inability of the directors and staffs of Federal laboratories, which may have unique capabilities and equipment, to work directly with the private sector.

For universities that perform agricultural research, the bill expands the definition of the term invention to include novel plant varieties. This ensures that these universities have the same rights of ownership with these inventions that they have with other types of inventions under P.L. 96-517.

The bill has particular value to the universities that run Federally-owned research facilities under contract to the Government by ensuring that these universities will have the same rights to own inventions that they have under other Federal funding agreements. The bill places limits on the amount of royalties that the universities can keep from the licensing of inventions created in the Government-owned facilities, but ensures that there will always be an incentive for invention and technology transfer. These provisions will allow a much greater flow of technology from Government-owned, university-operated laboratories, while ensuring that the taxpayers participate in the rewards, should any truly large discoveries result.

B. Federal laboratory amendments

There is broad agreement that with about $17 billion going to the Federal laboratories, which employ about one-sixth of the nation's research workers, ways must be found to increase the flow of technology from these laboratories to the private sector.

A recent report published by the National Governors' Association states:

> National laboratories and federal mission-oriented agency R&D facilities, which are located in many areas of the country, represent the very highest order scientific and technical capability. It is surprising, therefore, that their involvement in promoting closer research linkages with industry and the universities is so indirect.* * *
>
> The fact remains that these national laboratories are far from having begun to realizse their full potential as catalysts for close industry-university research cooperation or as collaborators in joint university/industry research.[1]

Governor Dick Thornburgh of Pennsylvania, and Co-Chairman of the Subcommittee on International Competitiveness of the NGA Committee on International Trade and Foreign Relations, testified in favor of the Uniform Patent Procedures Act of 1983 (S. 2171) at the Subcommittee hearings on this legislation on March 27, 1984. In this testimony, Governor Thornburgh said:

> There are over 380 federal laboratories in the United States. The eight in Pennsylvania are performing research in areas ranging from coal and forestry to food quality. We should be certain that we are taking maximum advantage of their resources and results to stimulate economic growth in this country. Although these laboratories perform a significant amount of the research taking place in our nation today, they have not always been as aggressive as they might in transferring their technology from the laboratory to the private sector.

The Stevenson-Wydler Technology Innovation Act was a good beginning toward a solution to this problem. It required agencies to establish offices in each of the larger laboratories to evaluate new technologies and promote the transfer of those with commerical potential. But the Secretary of Commerce, in his February 1984, report to the President and Congress on the operations under the Act stated:

> It appears to be no accident that technology complexes such as Silicon Valley, Route 128, Research Triangle, and Princeton's Forrestal Center have evolved around major universities. Direct access to the university and the university's right to transfer the results of its research on an exclusive basis is an important incentive for business to invest in the further development and commercialization of new technologies. In contrast, Federal laboratories gen-

---

[1] *Technology and Growth, State Initiatives in Technological Innovation,* National Governors' Association, Sharwin Cowan, (Washington, D.C.), 1983.

erally have not served as nuclei for similar arrangements. They often perceive themselves as unable to enter into cooperative development arrangements because of organizational and legal restraints. This is one reason why national reviews of Federal laboratories have concluded that too little of the results of laboratory research is used in the private sector.[2]

The problems, disincentives and potential opportunities facing the laboratories were also brought out in testimony on S. 2171.[3] Dr. Jerome Hudis, Assistant Director of the Brookhaven National Laboratory provided several examples of why laboratories need decentralized authorities to manage and promote the results their research.

He stated that the Department of Energy has eased its rules on agreements with private sector organizations allowing them to own the results of research which they fund when it is to be performed in DOE labs. In the fourteen months since this change, Brookhaven has been able to participate in thirteen such agreements with a total private sector funding level of $2,068,177. But he then went on to explain how the requirement to go to DOE headquarters for approval of other types of industry collaborative arrangements and patent licensing agreements has effectively prevented them. He gave numerous examples of how lengthy headquarters approval delays have caused business firms to lose interest in developing important new technologies. His testimony can be summarized as a request for decentralized authority to determine which technologies have commercial potential and to enter into a range of relationships with industry to move the technologies to the market.

During the testimony on S. 2171, several witnesses, including Governor Thornburg,[4] described how State and local governments are promoting economic growth in high technology industries. Dr. John Toll,[5] President of the University of Maryland, described how the University, Montgomery County, and the National Bureau of Standards are establishing the nation's first Biotechnology Research Park. He described the benefits that are anticipated from this leading example of cooperation between industry, local government, a major State university, and a Federal laboratory.

It is significant, that while the contributions of the Bureau of Standards are a key to this project, few other Federal laboratories have the authorities or policies which encourage them to enter into such arrangements. A goal of Congress is to provide all Federal laboratories with the authority and incentives necessary to work with the private sector in ways that support both the labs' missions and the National economy.

S. 1535, The Patent Law Amendments of 1984, which was ordered reported by the Senate Judiciary Committee on September 28, 1984, provides a major step toward this goal. This bill would require the labs to identify and seek regular patents for inventions

---

[2] *The Stevenson-Wydler Technology Innovation Act;* Report to the President and Congress from the Secretary of Commerce; February 1984, p. 24.

[3] Hearings before the Subcommittee on Patents, Copyrights and Trademarks, Committee on the Judiciary, United States, Senate, March 27, 1984.

[4] Ibid.

[5] Ibid.

with commercial potential. Before the goal can be attained, however, several present obstacles and disincentives to laboratory/industry cooperation must be removed.

The Federal Laboratory amendment to S. 2171 is intended to remove these obstacles and disincentives. It is based in large measure, on the successful experience of major research universities after they received the right to own and manage inventions they make with Federal funding. Often, an invention requires additional development before it can be used, and the Federal laboratory where the invention was originally made may be the best place to do follow-on work. This amendment allows the heads of Federal agencies to authorize their Government operated laboratories to undertake the type of joint research that may be necessary for effective follow-on work. The amendment authorizes a broad range of cooperative research and development arrangements where there is a mutual interest between the laboratory mission and other levels of government or private sector organizations. The amendment also allows the laboratories both to accept funds, services, and property under such arrangements. While a few laboratories do this today, many do not believe they have the necessary authorities.

The amendment authorizes laboratories to negotiate and assign or issue patent licenses on inventions the Government owns. In many cases, industrial firms may be first attracted to a laboratory by interest in an existing invention, and the labs need the authority to negotiate directly with firms that may desire to enter into cooperative arrangements to further develop the invention.

Notwithstanding the fact that these cooperative research and development arrangements must be consistent with the missions of the laboratories, the primary purpose of the agreements is to stimulate or support development and commercialization of technologies that originate in the labs. For this reason, most of the cooperative arrangements and patent assignments are expected to be forms of cooperative agreements as established by 41 U.S.C. 505.

Often, collaboration between a laboratory and some other organization can be expected to lead to future inventions. All parties shoud be clear on who will have what rights to future inventions when the work begins. This amendment allows Federal laboratories to assign rights in future inventions to the cooperating, outside parties. It is anticipated that agencies will normally retain for the Government, a paid up license to use or have future inventions used in the Government's behalf.

The amendment allows agencies to require outside parties to pay royalties for the right to use Government inventions, and provides for a direct payment of at least fifteen percent of royalties received to its Federal employee inventor(s). The universities have found royalty sharing with their inventors to be a powerful incentive that increases in the number of inventions initially reported and encourages inventors to contribute to commercialization efforts. This provision is to accomplish the same end in Federal laboratories.

Under the amendment, the laboratories would be allowed to keep, for their discretionary use, royalties they receive after making payments to inventors and other licensing costs. This is to serve as an incentive to laboratory managers who may otherwise

view various proposals for outside collaboration as diversions from their laboratories' missions. The laboratory may keep all royalties (after payment of inventors and costs), up to five percent of its annual budget, and 25 percent of royalties in excess of the five-percent limit. In most cases, the opportunity to accept outside funding and assistance to perform mission related work will serve as a stronger incentive for cooperative projects than this royalty provision is to ensure mutual rather than conflicting incentives between inventors and their managers.

Under S. 1535, agencies would file Statutory Invention Disclosures for inventions they determine to have no commercial potential. In some cases, however, the laboratory inventor may not agree with the determination. This amendment allows the invention to be given to the inventor for patenting and commercial exploitation. It is expected that when this is done, the Government will retain its normal rights to use the invention without paying royalties. A laboratory employee may voluntarily transfer the ownership of an invention he has made apart from his assigned duties to the laboratory for patenting and promotion.

The amendment is permissive, in that it authorizes but does not require agencies to extend these decentralized authorities to their laboratories. It is intended that these authorities be provided to a laboratory altogether and not be selectively authorized. It is the intent of Congress that agencies use this authority to decentralize to the greatest practical degree, though it is recognized that other arrangements may have to be made to serve the smaller laboratories so long as the decision making is reserved for the laboratories.

The Secretary of Commerce is to develop guidelines and a number of aids to help the agencies make best use of these authorities. These aids will include techniques for evaluating the commercial potential of inventions, instruction courses for laboratory employees on the innovation process, model agreements covering the disposition of inventions for use in establishing cooperative arrangements, and advice and assistance to laboratory directors. The Secretary is also to monitor the results of the program and provide annual reports to the President and Congress.

Traditional conflict of interest regulations, which were designed to protect both Federal employees and the public interest, need to be revised to allow direct participation of laboratory employees in the commercialization of inventions in which they may have a personal interest. Personnel regulations must be developed that permit the effective use of the authorities contained in this Amendment. The Director of the Office of Personnel Management is to develop such new regulations in coordination with the Secretary of Commerce and the heads of agencies with Government operated laboratories.

It is expected that these authorities will open an entirely new form of benefit to State and local governments by allowing the Federal laboratories to become active partners and contributors of technologies to promote regional economic development. Where desired, the contributions may be made through foundations or organizations established to advance State or local economic activity.

IV. Summary of Major Provisions Contained in S. 2171, as Amended

1. S. 2171 allows agencies to limit patent ownership by small business or nonprofit organizations that are not located or do not have a place of business in the United States. This will clarify that agencies can control the export of technology in cases where the performer is not a domestic organization.

2. S. 2171 repeals the P.L. 96-517 provision excepting inventions made by nonprofit organizations when operating Government-owned laboratory facilities. This provides for uniform treatment of all domestic nonprofit organizations regardless of where they perform their Federally-funded work and is particularly important to organizations that manage Department of Energy laboratories.

3. As part of the change affecting nonprofit contractors of Government-owned facilities, S. 2171 includes a limit on the amount of royalties that the contract operators are entitled to retain after paying patent administrative expenses and a share of the royalties to inventors. The limit is based on five percent of the annual budget of the laboratory, but includes an incentive provision rather than a simple cap to stimulate continued efforts to transfer technology if royalties ever reach the five percent figure. This provision ensures that Government shares in the results of its research expenditures in the event the contract operator of a Government laboratory makes a major discovery.

4. S. 2171 includes the favorable reporting provisions that were developed in OMB Circular A-124. These provisions have been proven to work. Small business and nonprofit organizations should be assured of their continuance beyond February, 1985, when A-124 is scheduled for sunset expiration.

5. S. 2171 repeals certain conditions placed on licensing of inventions by nonprofit organizations. Among the conditions repealed is the five-year cap on the grant of an exclusive license to an industrial concern (other than a small business). This provision has made the licensing and development of invention that require Food and Drug Administration approval prior to marketing difficult to negotiate. Its repeal will remove a substantial barrier to industry participation in research projects at universities and other nonprofit organizations.

6. The authority to issue regulations under P.L. 96-517 is consolidated by S. 2171 from the General Services Administration and the Office of Management and Budget into the Department of Commerce. This consolidation is consistent with other Commerce responsibilities for creating an environment favorable to the commercialization of the results of Federally-funded research.

7. S. 2171 expands the definition of "invention" in P.L. 96-517 to include—"any novel variety of plant which is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.)." This assures nonprofit organization ownership of some inventions resulting from research in agriculture which were not previously covered by P.L. 96-517.

V. Section-by-Section Analysis

Section 1

Subsections (1) and (2) expand the definition of "invention" in P.L. 96-517 to include "any novel variety of plant which is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.)." This assures nonprofit organizations ownership of some inventions resulting from research in agriculture which were not previously covered by P.L. 96-517.

Subsection (3) allows agencies to limit patent ownership by small business or nonprofit organizations that are not located or do not have a place of business in the United States. This will clarify that agencies can control the export of technology in cases where the performer is not a domestic organization. The section also repeals the P.L. 96-517 provision excepting inventions made by nonprofit organizations when operating Government-owned laboratory facilities. This will result in uniform treatment of all domestic nonprofit organizations regardless of where they perform their Federally-funded work and is particularly important to organizations that manage Department of Energy laboratories.

Subsection (4) gives the Department of Commerce oversight of agency use of the exceptions to small business or nonprofit organization invention ownership.

Subsection (5) includes the favorable reporting provisions that were developed in OMB Circular A-124. These provisions have been proven to work. Small business and nonprofit organizations should be assured of their continuance beyond February, 1985, when A-124 is scheduled to expire.

Subsection (6) provides assurance that agencies can protect information provided to the Government by contractors on their invention utilization efforts.

Subsections (7) and (8) repeal certain conditions placed on licensing of inventions by nonprofit organizations. Among the conditions repealed is the five-year cap on the grant of a license to an industrial concern. This provision has made if difficult to licenses and develop inventions that require Food and Drug Administration approval prior to marketing. Its repeal will remove a substantial barrier to industry participation in research projects at universities and other nonprofit organizations.

Subsection (8) also places a limit on the amount of royalties that the contract operators of Government-owned laboratories are entitled to retain after paying patent administrative expenses and a share of the royalties to inventors. The limit is based on five percent of the annual budget of the laboratory, but includes in incentive provision rather than a simple cap to stimulate continued efforts to transfer technology if royalties ever reach the five percent figure. This provision ensures that the Government will share in the results of its research expenditures in the event the contract operator of a Government laboratory makes a major invention. This provision also requires that contractors and grantees give a preference to small businesses in licensing use of inventions.

Subsection (9) clarifies the procedures applicable to judicial review of disputes arising under the government march-in procedures contained in section 203.

Subsections (10), (11) and (12) consolidate the authority to issue regulations under P.L. 96-517 from the General Services Administration and the Office of Management and Budget into the Department of Commerce. This consolidation is consistent with other Commerce responsibilities including creating an environment favorable to the commercialization of the results of Federally-funded research. In addition, subsection (11) provides to the Department of Commerce certain information clearinghouse functions that will enable the Department to better serve the needs of the Federal agencies.

Subsection (13) assures that no agency will be permitted to waive the normal license retained by the Government or the capability to march-in in accordance with P.L. 96-517 in any situation where a Federal contractor elects to retain ownership of an invention made with Federal support.

Section 2(a)

Provides for amendments to Part II of Title 35 U.S.C. dealing with Federal laboratories.

New Section 212 of Title 35, Part II permits the directors of Federal laboratories with the consent of the parent agency to enter into cooperative research and development projects with the private sector. In the course of any such arrangement, the director may accept funds, services, and property from the collaborating entity and license or assign patent rights in any laboratory invention in which it has a right of ownership. In addition, the director may require royalties from any invention licensed or assigned. Part of these royalties must be shared with the laboratory inventor and part may be used to fund mission related research and development at the laboratory. Finally, Section 212 permits the directors to allow laboratory inventors to own inventions for which the Government determines not to seek patent protection.

New Section 213 of Title 35 requires the Secretary of Commerce to develop guidelines to assist the Federal agencies in performing their responsibilities under the cooperative research development projects entered into under Section 212. In addition, Section 213 requires the Secretary of Commerce to submit an annual report to the President and Congress on the activities and accomplishments of the research and development program.

New Section 214 of Title 35 provides definitions for "Federal agency," "laboratory invention," "laboratory inventor," "cooperative research and development arrangement," and "Secretary."

Section 2(b)—Caption change

Section 3(a)—Requires that the Director of the Office of Personnel Management in coordination with the Federal agencies promulgate regulations that permit Federal employees to accept royalty payments and participate in further commercial efforts regarding their inventions.

Section 3(b)—Provides that Federal employees that accept royalty payments will not be deemed to be in violation of enumerated conflict of interest laws nor to be considered to have accepted awards because of receipt of such royalties.

Section 3(c)—Clarifies the meaning of "special government employee."

Section 4—States the obligation of all Federal agencies to assist the Department of Commerce in exercising its responsibilities under this Act.

VI. Regulatory Impact Statement

In compliance with paragraph 11(b), Rule XXVI, of the Standing Rules of the Senate, the Committee has concluded that the bill will have no significant regulatory impact or impact on personal privacy. Enactment of the bill would not create any significant additional paperwork.

VII. Cost of the Legislation

In accordance with paragraph 11(a), Rules XXVI, of the Standing Rules of the Senate, the Committee offers the following report of the Congressional Budget Office:

U.S. Congress,
Congressional Budget Office,
Washington, DC, October 2, 1984.

Hon. Strom Thurmond,
Chairman, Committee on the Judiciary, U.S. Senate, Dirksen Senate Office Building, Washington, DC.

Dear Mr. Chairman: The Congressional Budget Office has reviewed S. 2171, a bill to amend title 35 of the United States Code for the purpose of creating a uniform policy and procedure concerning patent rights in inventions developed with federal assistance, and for other purposes, as ordered reported by the Senate Committee on the Judiciary, September 28, 1984. We expect that this bill will result in no costs to the federal government, or to state and local governments.

S. 2171 would amend Public Law 96-517 to encourage the transfer of technology from federal laboratories to the private sector. It would create a uniform policy of patent licensing for domestic nonprofit organizations. The bill also would allow, but not require, agencies to authorize directors of government laboratories to enter into a variety of cooperative research and development arrangements, to issue patent licenses, and to require royalty payments for the right to use government inventions. Fifteen percent of royalties received each year would be returned to the inventor, and the remainder would be used for laboratory purposes or deposited in the general fund of the Treasury.

Based on information from the Department of Commerce, which would have authority to issue regulations to implement S. 2171, we expect that this bill would have the effect of codifying certain existing practices as well as providing an incentive to federal agencies to license inventions. Because the changes would simplify certain procedures and would be discretionary on the part of the agencies, we expect that they would generally be adopted if cost-effective. It is not possible at this time to estimate precisely the additional royalties, if any, available to the laboratories or returned to the Treasury as a result of enactment of S. 2171.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

ERIC HANUSHEK,
(For Rudolph G. Penner, Director).

VIII. CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI, of the Standing Rules of the Senate, changes in existing law made by S. 2171 as reported are shown as follows (existing law proposed to be omitted is enclosed in brackets, new matter is printed in italic, and existing law in which no change is proposed is shown in roman):

UNITED STATES CODE

TITLE 35—PATENTS

* * * * * * *

PART II.—PATENTABILITY OF INVENTIONS AND GRANT OF PATENTS

Chap.		Sec.
10.	Patentability of Inventions	110
11.	Application for Patent	111
12.	Examination of Applications	131
13.	Review of Patent and Trademark Office Decisions	141
14.	Issue of Patent	151
15.	Plant Patents	161
16.	Designs	171
17.	Secrecy of Certain Inventions and Filing Applications Abroad	181
18.	Patent Rights in Inventions Made with Federal Assistance	200
19.	*Licensing and Assignment of Laboratory Inventions*	*212*

* * * * * * *

CHAPTER 18.—PATENT RIGHTS IN INVENTIONS MADE WITH FEDERAL ASSISTANCE

* * * * * * *

§ 201. Definitions

* * * * * * *

(d) The term "invention" means any invention or discovery which is or may be patentable or otherwise protectable under this title *or any novel variety of plant which is or may be protectable under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.).*

(e) The term "subject invention" means any invention of the contractor conceived or first actually reduced to practice in the performance of work under a funding agreement*: Provided, That in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act (7 U.S.C. 2401 (d))) must also occur during the period of contract performance.*

* * * * * * *

§ 202. Disposition of rights

(a) Each nonprofit organization or small buiness firm may, within a reasonable time after disclosure as required by paragraph (c)(1) of this section, elect to retain title to any subject invention: *Provided, however,* That a funding agreement may provide otherwise [(i) when the funding agreement is for the operation of a Government-owned research or production facility,] *(i) when the contractor is not located in the United States or does not have a place of business located in the United States;*

* * * * * * *

[(b)(1) Any determination under (ii) of paragraph (a) of this section shall be in writing and accompanied by a written statement of facts justifying the determination. A copy of each such determination and justification shall be sent to the Comptroller General of the United States within thirty days after the award of the applicable funding agreement. In the case of determinations applicable to funding agreements with small business firms copies shall also be sent to the Chief Counsel for Advocacy of the Small Business Administration.]

[(2) If the Comptroller General believes that any pattern of determinations by a Federal agency is contrary to the policy and objectives of this chapter or that an agency's policies or practices are otherwise not in conformance with this chapter, the Comptroller General shall so advise the head of the agency. The head of the agency shall advise the Comptroller General in writing within one hundred and twenty days of what action, if any, the agency has taken or plans to take with respect to the matters raised by the Comptroller General.]

(b) (1) The rights of the Government under subsection (a) shall not be exercised by a Federal agency unless it first determines that at least one of the conditions identified in clauses (i) through (iii) of subsection (a) exists. Except in the case of subsection (a) (iii), the ageny shall file with the Secretary of Commerce, within thirty days after the award of the applicable funding agreement, a copy of such determination under subsection (a) (ii), the statement shall include an analysis justifying the determination. In the case of determinations applicable to funding agreements with small business firms, copies shall also be sent to the Chief Counsel for Advocacy of the Small Business Administration. If the Secretary of Commerce believes that any individual determination or pattern of determinations is contrary to the policies and objectives of this chapter or otherwise not in conformance with this chapter, the Secretary shall so advise the head of the agency concerned and the Administrator of the Office of Federal Procurement Policy, and recommend corrective actions.

(2) Whenever the Administrator of the Office of Federal Procurement Policy has determined that one or more Federal agencies are utilizing the authority of clause (i) or (ii) of subsection (a) of this in a manner that is contrary to the policies and objectives of this chapter, the Administrator is authorized to issue regulations describing

classes of situations in which agencies may not exercise the authorities of those clauses.

* * * * * * *

(c) Each funding agreement with a small business firm or nonprofit organization shall contain appropriate provisions to effectuate the following:

[(1) A requirement that the contractor disclose each subject invention to the Federal agency within a reasonable time after it is made and that the Federal Government may receive title to any subject invention not reported to it within such time.]

[(2) A requirement that the contractor make an election to retain title to any subject invention within a reasonable time after disclosure and that the Federal Government may receive title to any subject invention in which the contractor does not elect to retain rights or fails to elect rights within such time.]

[(3) A requirement that a contractor electing rights file patent applications within reasonable times and that the Federal Government may receive title to any subject inventions in the United States or other countries in which the contractor has not filed patent applications on the subject invention within such times.]

[(4) With respect to any invention in which the contractor elects rights, the Federal agency shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States any subject invention throughout the world, and may, if provided in the funding agreement, have additional rights to sublicense any foreign government or international organization pursuant to any existing or future treaty.]

(1) That the contractor disclose each subject invention to the Federal agency within a reasonable time after it becomes known to contractor personnel responsible for the administration of patent matters, and that the Federal Government may receive title to any subject invention not disclosed to it within such time.

(2) That the contractor make a written election within two years after disclosure to the Federal agency (or such additional time as may be approved by the Federal agency) whether the contractor will retain title to a subject invention: Provided, That in any case where publication, on sale, or public use, has initiated the one year statutory period in which valid patent protection can still be obtained in the United States, the period for election may be shortened by the Federal agency to a date that is not more than sixty days prior to the end of the statutory period: And provided further, That the Federal Government may receive title to any subject invention in which the contractor does not elect to retain rights or fails to elect rights within such times.

(3) That a contractor electing rights in a subject invention agrees to file a patent application prior to any statutory bar date that may occur under this title due to publication, on sale, or public use, and shall thereafter file corresponding patent applications in other countries in which it wishes to retain title within reasonable times, and that the Federal Government may receive title to any subject inventions in the United States or other countries in which the contractor has not filed patent applications on the subject invention within such times.

(4) With respect to any invention in which the contractor elects rights, the Federal agency shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States any subject invention throughout the world: Provided, That the funding agreement may provide for such additional rights, including the right to assign or have assigned foreign patent rights in the subject invention, as are determined by the agency as necessary for meeting the obligations of the United States under any treaty, international agreement, arrangement, including military agreements relating to weapons development and production.

(5) The right of the Federal agency to require periodic reporting on the utilization or efforts at obtaining utilization that are being made by the contractor or his licensees or assignees: Provided, That any such information [may] *as well as any information on utilization or efforts at obtaining utilization obtained as part of a proceeding under Section 203 of this chapter shall* be treated as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of title 5 of the United States Code.

* * * * * * *

(7) In the case of a nonprofit organization, (a) a prohibition upon the assignment of rights to a subject invention in the United States without approval of the Federal agency, except where such assignment is made to an organization which has as one of its primary functions the management of inventions (and which is not, itself, engaged in or does not hold substantial interest in other organizations engaged in the manufacture or sale of products or the use of processes that might utilize the invention or be in competition with embodiments of the invention) (provided that such assignee shall be subject to the same provisions as the contractor); [(B) a prohibition aginst the granting of exclusive licenses under the United States Patents Applications in a subject invention by the contractor to persons other than small business firms for a period in excess of the earlier of five years from first commercial sale or use of the invention or eight years from the date of the exclusive license excepting that time before regulatory agencies necessary to obtain clearance unless, on a case-by-case basis, the Federal agency approves a longer exclusive license. If exclusive field of use licenses are granted, commercial sale or use in one field of use shall not be deemed commercial sale or use as to other fields of use, and a first commercial sale or use with respect to a product of the invention shall not be deemed to end the exclusive period to different subsequent products covered by the invention; (C) a requirement that the contractor share royalties with the inventor; and (D) a requirement that the balance of any royalties or income earned by the contractor with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, be utilized for the support of scientific research or education.] *(B) a requirement that the contractor share royalties with the inventor; (C) excect with respect to a funding agreement for the operation of a Government-owned-contractor-operated facility, a requirement that the balance of any royalties or*

income earned by the contractor with respect to subject inventions, after payment expenses (including payments to inventors) incidental to the administration of subject inventions, be utilized for the support of scientific research; and (D) with respect to a funding agreement for the operation of a Government-owned-contractor-operated facility, requirements (i) that after payment of patenting costs, including licensing costs, payments to inventors, and other expenses incidental to the administration of subject inventions, 100 percent of the balance of any royalties or income earned and retained by the contractor during any fiscal year, up to an amount equal to five percent of the annual budget of the facility, shall be used by the contractor for scientific research, development, and education consistent with the research and development mission and objectives of the facility; including activities that increase the licensing potential of other inventions of the facility; provided that is such balance exceeds five percent of the annual budget of the facility; that 75 percent of such excess shall be payed to the Treasury of the United States and the remaining 25 percent shall be used for the same purposes as described above in this clause (D); and (ii) that, to the extent it provides the most effective technology transfer, the licensing of subject inventions shall be administered by contractor employees on location at the facility.

* * * * * * *

§ 203. March-in rights

* * * * * * *

A determination pursuant to this section shall not be considered a contract dispute and shall not be subject to the Contract Disputes Act (41 U.S.C. 601 et seq.). Any contractor, assignee, or exclusive licensee adversely affected by a determination under this section may, at any time within sixty days after the determination is issued, file a petition in the United States Claims Court, which shall have jurisdiction to determine the matter de novo and to affirm, reverse, or modify as appropriate, the determination of the Federal agency.

* * * * * * *

[§ 206. Uniform clauses and regulations]

[The Office of Federal Procurement Policy, after receiving recommendations of the Office of Science and Technology Policy, may issue regulations which may be made applicable to Federal agencies implementing the provisions of sections 202 through 204 of this chapter and the Office of Federal Procurement Policy shall establish standard funding agreement provisions required under this chapter.]

§ 206. Uniform clauses and regulations

The Secretary of Commerce may issue regulations which may be made applicable to Federal agencies implementing the provisions of sections 202 through 204 of this chapter and shall establish standard funding agreement provisions required under this chapter. The regulations and the standard funding agreement shall be subject to public comment before their issuance.

§ 207. Domestic and foreign protection of federally owned inventions

(a) Each Federal agency is authorized to—

* * * * * * *

(b) For the purpose of assuring the effective management of Government-owned inventions, the Secretary of Commerce is authorized to—

(1) assist Federal agency efforts to promote the licensing and utilization of Government-owned inventions;

(2) assist Federal agencies in seeking protection and maintaining inventions in foreign countries, including the payment of fees and costs connected therewith; and

(3) consult with and advise Federal agencies as to areas of science and technology research and development with potential for commercial utilization.

§ 208. Regulations governing Federal licensing

The [Administrator of General Services] *Secretary of Commerce* is authorized to promulgate regulations specifying the terms and conditions upon which any federally owned invention, other than inventions owned by the Tennessee Valley Authority, may be licensed on a nonexclusive, partially exclusive, or exclusive basis.

* * * * * * *

§ 210. Precedence of chapter

* * * * * * *

(c) Nothing in this chapter is intended to limit the authority of agencies to agree to the disposition of rights in inventions made in the performance of work under funding agreements with persons other than nonprofit organizations or small business firms in accordance with the Statement of Government Patent Policy issued on [August 23, 1971 (36 Fed. Reg. 16887)] *February 18, 1983,* agency regulations, or other applicable regulations or to otherwise limit the authority of agencies to allow such persons to retain ownership of inventions *except that all funding agreements, including those with other than small business firms and nonprofit organizations, shall include the requirements established in paragraph 202(c)(4) and section 203 of this title.* Any disposition of rights in inventions made in accordance with the statement or implementing regulations, including any disposition occurring before enactment of this section, are hereby authorized.

* * * * * * * *

CHAPTER 19—LICENSING AND ASSIGNMENT OF LABORATORY INVENTIONS

Sec.
212. Cooperative research and development programs.
213. Duties of the Secretary.
214. Definitions.

§ 212. Cooperative research and development programs

(a) The head of each Federal agency is authorized to permit the directors of laboratories which are operated by employees of such agency and which have adequate administrative capabilities, to commit such laboratories to cooperative research and development arrangements on matters of mutual interest which are consistent with the laboratory mission, with other Federal laboratories, units of State or local government, industrial organizations, universities, or other organizations or individuals including licensees of laboratory inventions or general partners of research and development limited partnerships.

(b) In the course of any arrangement entered into pursuant to subsection (a), the director of the laboratory may—

(1) accept funds, services, and property from collaborating entities; and

(2) grant patent licenses or assign future or existing ownership rights in any laboratory invention in which the Government has a right, or future right of ownership, retaining such rights as the Federal agency deems appropriate.

(c) In the course of any arrangement entered into pursuant to subsection (a), the laboratory shall—

(1) require royalties from an invention licensed or assigned under any arrangement made under subsection (b), and shall dispose of royalties received as follows:

(A) pay at least fifteen percent of the royalties received each year by the laboratory on account of a laboratory invention to the laboratory inventor of such invention:

(B) of all royalties remaining after the payment pursuant to subsection (a), use such royalties to fund any mission-related research and development of the laboratory, support employee development and education, reward employees for inventions of value to the Government that will not produce royalties, or further scientific exchange; and

(C) deposit all other royalties in the United States Treasury; and

(2) allow a laboratory inventor to own—subject to reservation by the Government of a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States throughout the world—patent, and develop a laboratory invention which the Government has the right to own but for which the Government has determined not to seek a patent under this title for itself; and

(3) report annually to the appropriate oversight and appropriations committees of the Senate and the House of Representatives detailing the amount of royalties received and the expenditure of such royalties.

§ 213. Duties of the Secretary

(a) The Secretary of Commerce, in consultation with other Federal agencies and after opportunity for public comment, shall issue, monitor, and amend, as necessary, guidelines for voluntary use by the Federal agencies for—

(1) techniques and procedures to use to aid in the early determination of the commercial potential of new technologies generated in performance of Federal laboratory research; .

(2) training courses to be developed and administered by the Secretary to—

(A) increase the awareness of laboratory researchers regarding potential inventions; and

(B) communicate the essentials for options for commercialization which are available to the Federal laboratories;

(3) provisions for the disposition of inventions pursuant to clause (b)(2) of section 212, including the protection of the Government's interests, as necessary.

(b) The head of each Federal agency, upon consultation with the Secretary, may adopt, supplement or revise the guidelines issued pursuant to clauses (a) (1) and (3) of this section consistent with the mission of the Federal agency concerned.

(c) The Secretary shall, upon request, furnish advice and assistance to laboratory directors pursuant to section 212.

(d) The Secretary shall submit an annual report to the President and Congress on the activities and accomplishments of the cooperative research and development program, including technologies being developed through cooperative research and development arrangements made under the authority of section 212, and recommendations for legislative changes if deemed desirable. The first such reports shall be submitted one year after the date of enactment of this chapter.

§ 214. Definitions

As used in this chapter the term—

(1) "Federal agency" means any executive agency as defined in section 105 of title 5, United States Code, and the military departments as defined in section 102 of such title;

(2) "laboratory" means a facility owned, leased, or used by a Federal agency, a substantial purpose of which is the performance of research and development by Government employees;

(3) "laboratory invention" means any invention or discovery which is or may be patentable or otherwise protectable under this title, and is reportable to the Federal Agency for determination of ownership;

(4) "laboratory inventor" means a Government employee of the laboratory who has made a laboratory invention;

(5) "cooperative research and development arrangement" means any agreement between a Federal laboratory and one or more non-Federal parties under which all parties agree to—

(A) apply resources to conduct specified research and development, or

(B) license or assign laboratory inventions for commercial use; and

(6) "Secretary" means the Secretary of Commerce.

O