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H. R. 3773

[Report No. 99–283]

IN THE SENATE OF THE UNITED STATES

DECEMBER 11 (legislative day, DECEMBER 9), 1985
Received; read twice and referred to the Committee on Commerce, Science, and Transportation

APRIL 21, 1986
Reported by Mr. DANFORTH, with amendment
[Strike out all after the enacting clause and insert the part printed in italic]

APRIL 21, 1986
Sequentially referred to the Committee on the Judiciary for a period not to extend beyond thirty calendar days, for the purpose of considering sections 4, 5, 6, and 7, pursuant to the order of March 20, 1986

AN ACT

To amend the Stevenson-Wydler Technology Innovation Act of 1980 to promote technology transfer by authorizing Government-operated laboratories to enter into cooperative research agreements and by establishing a Federal Laboratory Consortium for Technology Transfer within the National Science Foundation, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Federal Technology Transfer Act of 1985".

SEC. 2. COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS.

The Stevenson-Wydler Technology Innovation Act of 1980 is amended by redesignating sections 12 through 15 as sections 15 through 18, and by inserting immediately after section 11 the following new section:

"SEC. 12. COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS.

"(a) GENERAL AUTHORITY.—Each Federal agency may permit the director of any of its Government-operated Federal laboratories—

"(1) to enter into cooperative research and development agreements on behalf of such agency (subject to subsection (c) of this section) with other Federal agencies; units of State or local government; industrial organizations including corporations, partnerships, and limited partnerships; industrial development organizations; public and private foundations; nonprofit organizations including universities; licensees of Federal inventions; or other persons; and

"(2) to negotiate licensing agreements under section 207 of title 35, United States Code, or under other authorities.

"(b) ENUMERATED AUTHORITY.—Under agreements described in subsection (a)(1), a Government-operated Federal laboratory shall have the authority (subject to subsection (c) of this section)—

"(1) to grant or agree to grant in advance, to a collaborating party, patent licenses or assignments, or options thereto, in any invention made by a Federal employee, or made jointly by a Federal employee and an employee of the collaborating party, under the agreement, retaining such rights as the Federal laboratory deems appropriate; and

"(2) to waive in advance, in whole or in part, any right of ownership which the Federal Government may have to any subject invention made by a collaborating party or employee of a collaborating party under the agreement.

"(c) AGENCY PLAN.—(1)(A) Within 180 days after the election by any Federal agency to implement subsection (a), revised regulations or instructions for that agency's cooperative research and development program shall be drafted or modified. The revised regulations or instructions need not apply to cooperative agreements entered into prior to the effective date of such regulations or instructions. Such revised regulations or instructions shall—

"(i) if they give the head of the agency or his designee an opportunity to disapprove or require the modification of any such agreement, provide a 30-day period beginning on the date the agreement is presented to him or her by the head of the laboratory concerned within which such action must be taken;

"(ii) give special consideration to small business firms, and consortia involving small business firms;

"(iii) give preference to business units located in the United States which agree that products embodying inventions made under the cooperative research and development agreement or produced through the use of such invention will be manufactured substantially in the United States;

"(iv) establish employee standards of conduct for resolving potential conflicts of interest, including but not limited to cases where present or former employees or their partners negotiate licenses or assignments of titles to inventions or negotiate cooperative research and development agreements with Federal agencies (including the agency with which the employee involved is or was formerly employed); and

"(v) contain other elements deemed appropriate by the agency.

"(B) In any case in which the head of an agency or his designee disapproves or requires the modification of an agreement presented under this section, the head of the agency or such designee shall transmit a written explanation of such disapproval or modification to the head of the laboratory concerned.

"(C) If, in implementing subparagraph (A)(iv), an agency is unable to resolve potential conflicts of interest within its current statutory framework, it shall propose necessary statutory changes to be forwarded to its authorizing committees in Congress.

"(2) Each agency shall maintain a record of all agreements entered into under this section.

"(d) DEFINITION.—As used in this section, the term 'cooperative research and development agreement' means any agreement between one or more Federal laboratories and one or more non-Federal parties under which the laboratory or laboratories will provide personnel, services, facilities, equipment, or other resources (but not funds to non-Federal parties) and the non-Federal party or parties will provide funds, personnel, services, facilities, equipment, or other resources toward the conduct of specified research or development efforts which are consistent with the missions of the agency; except that such term does not include a procurement contract as that term is used in section 6303 of title 31,

United States Code, or a cooperative agreement as that term is used in section 6305 of such title.

"(c) RELATIONSHIP TO OTHER LAWS.—Nothing in this section is intended to limit or diminish existing authorities of any agency.".

SEC. 3. ESTABLISHMENT OF FEDERAL LABORATORY CONSORTIUM FOR TECHNOLOGY TRANSFER.

Section 11 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710) is amended—

(1) by redesignating subsection (e) as subsection (f); and

(2) by inserting after subsection (d) the following new subsection:

"(e) ESTABLISHMENT OF FEDERAL LABORATORY CONSORTIUM FOR TECHNOLOGY TRANSFER.—(1) There is hereby established the Federal Laboratory Consortium for Technology Transfer (hereinafter referred to as the 'Consortium') which shall be within the National Science Foundation and which, in cooperation with Federal laboratories and the private sector, shall—

"(A) develop and administer techniques, training courses, and materials concerning technology transfer to increase the awareness of Federal laboratory employees regarding the commercial potential of laboratory technology and innovations, except that such tech-

niques, courses, and materials may be administered only with the consent of the Federal laboratory concerned;

"(B) furnish advice and assistance requested by Federal agencies and laboratories for use in their technology transfer programs (including the planning of seminars for small business and other industry);

"(C) provide a clearinghouse for requests for technical assistance from States and units of local governments, businesses, industrial development organizations, not-for-profit organizations including universities, Federal agencies and laboratories, and other persons, and—

"(i) to the extent that such requests can be responded to with published information available to the National Technical Information Service, refer such requests to that Service; and

"(ii) otherwise refer these requests to the appropriate Federal laboratories and agencies;

"(D) facilitate communication and coordination between Offices of Research and Technology Applications of Federal laboratories;

"(E) utilize (with the consent of the agency involved) the expertise and services of the National Science Foundation, the Department of Commerce, the

National Aeronautics and Space Administration, and other Federal agencies, as necessary;

"(F) with the consent of any Federal laboratory, facilitate the use by such laboratory of appropriate technology transfer mechanisms such as personnel exchanges and computer-based systems;

"(G) with the consent of any Federal laboratory, assist such laboratory to establish technical volunteer service programs for the purpose of providing technical assistance to communities related to such laboratory;

"(H) facilitate communication and cooperation between Offices of Research and Technology Applications of Federal laboratories and regional, State, and local technology transfer organizations; and

"(I) establish advisory committees in each Federal laboratory consortium region composed of representatives from State and local governments, large and small business, universities, and other appropriate persons to advise on the effectiveness of the program (and the members of any such advisory committee shall serve at no expense to the government).

"(2) The membership of the Consortium shall consist of the Federal laboratories described in clause (1) of subsection (b) and such other laboratories as may choose to join the Consortium. The representatives to the Consortium shall in-

clude a senior staff member of each Federal laboratory which is a member of the Consortium and a representative appointed from each Federal agency with one or more member laboratories.

"(3) The representatives to the Consortium shall elect a Chairman of the Consortium.

"(4) The Director of the National Science Foundation shall provide the Consortium on a reimbursable basis with administrative services, such as office space, personnel, and support services of the Foundation, as requested by the Consortium and approved by such Director.

"(5) Not later than one year after the date of the enactment of this subsection, and every year thereafter, the Chairman of the Consortium shall submit a report to the President, to the appropriate authorization and appropriation committees of both Houses of the Congress, and to each agency with respect to which a transfer of funding is made (for the fiscal year or years involved) under paragraph (6), concerning the activities of the Consortium and the expenditures made by it under this subsection during the year for which the report is made.

"(6)(A) Subject to subparagraph (B), an amount equal to 0.005 percent of that portion of the research and development budget of each Federal agency that is to be utilized by the laboratories of such agency for a fiscal year referred to in

subparagraph (B)(ii) shall be transferred by such agency to the National Science Foundation at the beginning of the fiscal year involved. Amounts so transferred shall be provided by the Foundation to the Consortium for the purpose of carrying out activities of the Consortium under this subsection.

"(B) A transfer may be made by any Federal agency under subparagraph (A), for any fiscal year, only if—

"(i) the amount so transferred by that agency (as determined under such subparagraph) would exceed $10,000; and

"(ii) such transfer is made with respect to the fiscal year 1987, 1988, 1989, 1990, or 1991.

"(C) The heads of Federal agencies and their designees, and the directors of Federal laboratories, are authorized to provide such additional support for operations of the Consortium as they deem appropriate.".

SEC. 4. UTILIZATION OF FEDERAL TECHNOLOGY.

(a) RESPONSIBILITY FOR TECHNOLOGY TRANSFER.—Section 11(a) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710(a)) is amended—

(1) by inserting "(1)" after "POLICY.—"; and

(2) by adding at the end thereof the following new paragraphs:

"(2) Technology transfer, consistent with mission responsibilities, is a responsibility of each laboratory science and engineering professional.

"(3) Each laboratory director shall ensure that efforts to transfer technology are considered positively in laboratory job descriptions, employee promotion policies, and evaluation of the job performance of scientists and engineers in the laboratory.".

(b) RESEARCH AND TECHNOLOGY APPLICATIONS OFFICES.—(1) Section 11(b) of such Act (15 U.S.C. 3710(b)) is amended—

(A) by striking out "a total annual budget exceeding $20,000,000 shall provide at least one professional individual full-time" and inserting in lieu thereof "200 or more full-time scientific, engineering, and related technical positions shall provide one or more full-time equivalent positions";

(B) by inserting immediately before the next to last sentence the following new sentence: "Furthermore, individuals filling positions in an Office of Research and Technology Applications shall be included in the overall laboratory/agency management development program so as to ensure that highly competent technical managers are full participants in the technology transfer process.";

(C) by striking out "requirements set forth in (1) and/or (2) of this subsection" in the next to last sentence and inserting in lieu thereof "requirement set forth in clause (2) of the preceding sentence"; and

(D) by striking out "either requirement (1) or (2)" in the last sentence and inserting in lieu thereof "such requirement".

(2) Section 11(e) of such Act (15 U.S.C. 3710(e)) is amended—

(A) by striking out paragraph (1) and inserting in lieu thereof the following:

"(1) to prepare application assessments for selected research and development projects in which that laboratory is engaged and which in the opinion of the laboratory may have potential commercial applications;";

(B) by inserting "all" before "federally owned" in paragraph (2);

(C) by striking out "the Center for the Utilization of Federal Technology" in paragraph (3) and inserting in lieu thereof "the National Technical Information Service, the Federal Laboratory Consortium for Technology Transfer,"; and

(D) by striking out "in response to requests from State and local government officials" in paragraph (4)

and inserting in lieu thereof "to State and local government officials".

(c) DISSEMINATION OF TECHNICAL INFORMATION.—Section 11(d) of such Act (15 U.S.C. 3710(d)) is amended—

(1) by striking out "(d)" and all that follows down through "shall—" and inserting in lieu thereof the following:

"(d) DISSEMINATION OF TECHNICAL INFORMATION.—The National Technical Information Service shall—";

(2) by striking out paragraph (2);

(3) by striking out "existing" in paragraph (3), and redesignating such paragraph as paragraph (2);

(4) by striking out paragraph (4) and inserting in lieu thereof the following:

"(3) receive requests for technical assistance from State and local governments, respond to such requests with published information available to the Service, and refer such requests to the Federal Laboratory Consortium for Technology Transfer to the extent that such requests need a response involving more than the published information available to the Service;";

(5) by redesignating paragraphs (5) and (6) as paragraphs (4) and (5), respectively; and

(6) by striking out "(c)(4)" in subsection (4) as so redesignated and inserting in lieu thereof "(c)(3)".

(d) AGENCY REPORTING.—Section 11(f) of such Act (15 U.S.C. 3710(e)) (as redesignated by section 3(1) of this Act) is amended—

(1) by striking out "prepare biennially a report summarizing the activities" in the first sentence and inserting in lieu thereof "report annually to the Congress, as part of the agency's annual budget submission, on the activities"; and

(2) by striking out the second sentence.

(e) FUNCTIONS OF THE SECRETARY.—Section 11 of such Act (as amended by the preceding provisions of this Act) is further is amended by adding at the end thereof the following new subsection:

"(g) FUNCTIONS OF THE SECRETARY.—The Secretary, in consultation with other Federal agencies, may—

"(1) make available to interested agencies the expertise of the Department of Commerce regarding the commercial potential of inventions and methods and options for commercialization which are available to the Federal laboratories, including research and development limited partnerships;

"(2) develop and disseminate to appropriate agency and laboratory personnel model provisions for use on a voluntary basis in cooperative research and development arrangements; and

"(3) furnish advice and assistance, upon request, to Federal agencies concerning their cooperative research and development program and projects.".

SEC. 5. REWARDS FOR SCIENTIFIC, ENGINEERING, AND TECHNICAL PERSONNEL OF FEDERAL AGENCIES.

The Stevenson-Wydler Technology Innovation Act of 1980 (as amended by the preceding provisions of this Act) is further amended by inserting after section 12 the following new section:

"SEC. 13. REWARDS FOR SCIENTIFIC, ENGINEERING, AND TECHNICAL PERSONNEL OF FEDERAL AGENCIES.

"The head of each Federal agency that is making expenditures at a rate of more than $50,000,000 per fiscal year for research and development in its Government-operated laboratories shall use the appropriate statutory authority to develop and implement a cash awards program to reward its scientific, engineering, and technical personnel for—

"(1) inventions, innovations, or other outstanding scientific or technological contributions of value to the United States due to commercial applications or due to contributions to missions of the Federal agency or the Federal government, or

"(2) exemplary activities that promote the domestic transfer of science and technology developed within

the Federal Government and result in utilization of such science and technology by American industry or business, universities, State or local governments, or other non-Federal parties.''.

SEC. 6. DISTRIBUTION OF ROYALTIES RECEIVED BY FEDERAL AGENCIES.

The Stevenson-Wydler Technology Innovation Act of 1980 (as amended by the preceding provisions of this Act) is further amended by inserting after section 13 the following new section:

''SEC. 14. DISTRIBUTION OF ROYALTIES RECEIVED BY FEDERAL AGENCIES.

''(a) IN GENERAL.—(1) Except as provided in paragraph (2), any royalties or other income received by a Federal agency from the licensing or assignment of inventions under agreements entered into under section 12, and from inventions of Government-operated Federal laboratories licensed under section 207 of title 35, United States Code, or under any other provision of law shall be retained by the agency involved in the production of the income. Such funds shall be transferred by the agency to its Government-operated laboratories, with the major share of the royalties or other income from any invention going to the laboratory where the invention occurred; and the funds so transferred to any such laboratory may be used or obligated by that laboratory during

the fiscal year in which they are received or during the succeeding fiscal year—

"(A) for payment of expenses incidental to the administration and licensing of inventions by that laboratory or by the agency with respect to inventions which occurred at that laboratory, including the fees or other costs for the services of other agencies, persons, or organizations for invention management and licensing services;

"(B) to reward scientific, engineering, and technical employees of that laboratory as part of the agency's reward program established pursuant to the preceding section of this Act; provided that any payment made under this paragraph shall be in addition to the regular pay of the employee involved and to any other awards made to that employee, and shall not affect the entitlement of the employee to any regular pay, annuity, or award to which he is otherwise entitled or for which he is otherwise eligible or limit the amount thereof;

"(C) to further scientific exchange among the government-operated laboratories of the agency; or

"(D) for scientific research and development, for education and training of employees of that consistent with the research and development mission and objec-

tives of the agency, and for other activities that increase the licensing potential for transfer of the technology of the Government-operated laboratories of the agency.

Any of such funds not so used or obligated by the end of the fiscal year succeeding the fiscal year in which they are received shall be paid into the Treasury of the United States.

"(2) If the royalties received by an agency in any fiscal year exceed 5 percent of the budget of the Government-operated laboratories of the agency for that year, 75 percent of such excess shall be paid to the Treasury of the United States and the remaining 25 percent may be used or obligated for the purposes described in subparagraphs (A) through (C) of paragraph (1) during that fiscal year or the succeeding fiscal year. Any funds not so used or obligated shall be paid into the Treasury of the United States.

"(b) CERTAIN ASSIGNMENTS.—In the event that the invention involved was one assigned to the Federal agency—

"(1) by a contractor, grantee, or party to a cooperative agreement with the agency, or

"(2) by an employee of the agency who was not working in a Government-operated laboratory at the time the invention was made,

the agency unit that funded or employed the entity that made such assignment shall be considered to be a Government-operated laboratory for purposes of this section.

"(c) REPORTS.—In making their annual budget submissions Federal agencies shall submit, to the appropriate authorization and appropriation committees of both Houses of the Congress, summaries of the amount of royalties or other income received and expenditures made (including inventor awards) under this section.".

SEC. 7. MISCELLANEOUS AND CONFORMING AMENDMENTS.

(a) REPEAL OF NATIONAL INDUSTRIAL TECHNOLOGY BOARD.—Section 10 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3709) is repealed.

(b) CHANGES IN TERMINOLOGY OR ADMINISTRATIVE STRUCTURE.—(1) Section 3(2) of the Stevenson-Wydler Technology Innovation Act of 1980 is amended by striking out "centers for industrial technology" and inserting in lieu thereof "cooperative research centers".

(2) Section 4 of such Act is amended—

(A) by striking out "Industrial Technology" in paragraph (1) and inserting in lieu thereof "Productivity, Technology, and Innovation";

(B) by striking out " 'Director' means the Director of the Office of Industrial Technology" in paragraph (3) and inserting in lieu thereof " 'Assistant Sec-

retary' means the Assistant Secretary for Productivity, Technology, and Innovation";

(C) by striking out "Centers for Industrial Technology" in paragraph (4) and inserting in lieu thereof "Cooperative Research Centers";

(D) by striking out paragraph (6), and redesignating paragraphs (7) and (8) as paragraphs (6) and (7), respectively; and

(E) by striking out "owned and funded" in paragraph (6) as so redesignated and inserting in lieu thereof "owned, leased, or otherwise used by a Federal agency and funded".

(3) Section 5(a) of such Act is amended by striking out "Industrial Technology" and inserting in lieu thereof "Productivity, Technology, and Innovation".

(4) Section 5(b) of such Act is amended by striking out "DIRECTOR" and inserting in lieu thereof "ASSISTANT SECRETARY", and by striking out "a Director of the Office" and all that follows and inserting in lieu thereof "an Assistant Secretary for Productivity, Technology, and Innovation.".

(5) Section 5(c) of such Act is amended by striking out "the Director" each place it appears and inserting in lieu thereof "the Assistant Secretary".

(6) The heading of section 6 of such Act is amended to read as follows:

"SEC. 6. COOPERATIVE RESEARCH CENTERS."

(7) Section 6(a) of such Act is amended by striking out "Centers for Industrial Technology" and inserting in lieu thereof "Cooperative Research Centers".

(8) Section 6(b)(1) of such Act is amended by striking out "basic and applied".

(9) Section 6(c) of such Act is amended to read as follows:

"(c) RESEARCH AND DEVELOPMENT UTILIZATION.—In the promotion of technology from research and development efforts by Centers under this section, chapter 18 of title 35, United States Code, shall apply to the extent not inconsistent with this section.".

(10) Section 6(f) of such Act is repealed.

(11) The heading of section 8 of such Act is amended by striking out "CENTERS FOR INDUSTRIAL TECHNOLOGY" and inserting in lieu thereof "COOPERATIVE RESEARCH CENTERS".

(12) Section 8(a) of such Act is amended by striking out "Centers for Industrial Technology" and inserting in lieu thereof "Cooperative Research Centers".

(c) RELATED CONFORMING AMENDMENT.—Section 210 of title 35, United States Code, is amended by adding at the end thereof the following new subsection:

"(c) The provisions of the Stevenson-Wydler Technology Innovation Act of 1980, as amended by the Federal Tech-

nology Transfer Act of 1985, shall take precedence over the provisions of this chapter to the extent that they permit or require a disposition of rights in subject inventions which is inconsistent with such chapter.''.

(d) ADDITIONAL DEFINITIONS.—Section 4 of such Act (as amended by subsection (b)(2) of this section) is further amended by adding at the end thereof the following new paragraphs:

''(8) '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.

''(9) 'Invention' means any invention or discovery which is or may be patentable or otherwise protected under title 35, United States Code, 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.).

''(10) 'Made' when used in conjunction with any invention means the conception or first actual reduction to practice of such invention.

''(11) 'Small business firm' means a small business concern as defined in section 2 of Public Law 85-536 (15 U.S.C. 632) and implementing regulations of

~~the Administrator of the Small Business Administration.".~~

~~(c) REDESIGNATION OF SECTIONS TO REFLECT CHANGES MADE BY PRECEDING PROVISIONS.—(1) Such Act (as amended by the preceding provisions of this Act) is further amended by redesignating sections 11 through 18 as sections 10 through 17, respectively.~~

~~(2)(A) Section 5(d) of such Act is amended by inserting "(as then in effect)" after "sections 5, 6, 8, 11, 12, and 13 of this Act".~~

~~(B) Section 8(a) of such Act is amended by striking out the last sentence.~~

~~(C) Section 9(d) of such Act is amended by striking out "or 13" and inserting in lieu thereof "or 12".~~

~~(3) Section 13(a)(1) of such Act (as redesignated by paragraph (1) of this subsection) is amended by striking out "section 12" in the matter preceding subparagraph (A) and inserting in lieu thereof "section 11".~~

That this Act may be cited as the "Federal Technology Transfer Act of 1986".

UTILIZATION OF FEDERAL TECHNOLOGY

SEC. 2. (a) Section 11(a) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710(a)) is amended—

(1) by inserting "(1)" after "POLICY.—"; and

(2) by adding at the end thereof the following:

"(2) Each laboratory director shall ensure that efforts to transfer technology are considered positively in laboratory job descriptions, employee promotion policies, and evaluation of the job performance of scientists and engineers in the laboratory.".

(b)(1) Section 11(b) of such Act (15 U.S.C. 3710(b)) is amended—

(A) by striking "a total annual budget exceeding $20,000,000 shall provide at least one professional individual full-time" and inserting in lieu thereof "200 or more full-time scientific, engineering, and related technical positions shall provide one or more full-time equivalent positions";

(B) by striking "requirements set forth in (1) and/or (2) of this subsection" and inserting in lieu thereof "requirement set forth in clause (2) of the preceding sentence"; and

(C) by striking "either requirement (1) or (2)" in the last sentence and inserting in lieu thereof "such requirement".

(2) Section 11(c) of such Act (15 U.S.C. 3710(c)) is amended—

(A) by amending paragraph (1) to read as follows:

"(1) to prepare application assessments for selected research and development projects in which that laboratory is engaged and which in the opinion of the laboratory may have potential commercial applications;";

(B) by striking "the Center for the Utilization of Federal Technology" in paragraph (3) and inserting in lieu thereof "the National Technical Information Service, the Federal Laboratory Consortium for Technology Transfer,", and by striking "; and" and inserting in lieu therof a semicolon;

(C) by striking "in response to requests from State and local government officials." in paragraph (4) and inserting in lieu thereof "to State and local government officials; and"; and

(D) by adding after paragraph (4) the following:

"(5) to participate, where feasible, in regional, State, and local government programs designed to facilitate or stimulate the transfer of technology for the benefit of the region, State, or local jurisdiction in which the Federal laboratory is located.".

(c) Section 11(d) of such Act (15 U.S.C. 3710(d)) is amended—

(1) by striking all from "(d)" through "shall—" and inserting in lieu thereof the following:

"(d) DISSEMINATION OF TECHNICAL INFORMATION.—The National Technical Information Service shall—";

(2) by striking paragraph (2);

(3) by striking "existing" in paragraph (3), and redesignating such paragraph as paragraph (2);

(4) by striking paragraph (4) and inserting in lieu thereof the following:

"(3) receive requests for technical assistance from State and local governments, respond to such requests with published information available to the Service, and refer such requests to the Federal Laboratory Consortium for Technology Transfer to the extent that such requests require a response involving more than the published information available to the Service;";

(5) by redesignating paragraphs (5) and (6) as paragraphs (4) and (5), respectively; and

(6) by striking "(c)(4)" in paragraph (4), as so redesignated, and inserting in lieu thereof "(c)(3)".

(d) Section 11(e) of such Act (15 U.S.C. 3710(e)) is amended by striking "Center for the Utilization of Federal Technology" and inserting in lieu thereof "Secretary".

ESTABLISHMENT OF FEDERAL LABORATORY CONSORTIUM FOR TECHNOLOGY TRANSFER

SEC. 3. Section 11 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710), as amended by section 2 of this Act, is further amended—

(1) by redesignating subsection (e) as subsection (f); and

(2) by inserting after subsection (d) the following:

"(e) ESTABLISHMENT OF FEDERAL LABORATORY CONSORTIUM FOR TECHNOLOGY TRANSFER.—(1) There is established the Federal Laboratory Consortium for Technology transfer (hereinafter referred to as the 'Consortium') which, in cooperation with Federal laboratories and private sector, shall—

"(A) develop and, with the consent of the Federal laboratory concerned, administer techniques, training courses, and materials concerning technology transfer to increase the awareness of Federal laboratory employees regarding the commercial potential of laboratory technology and innovations;

"(B) furnish advice and assistance requested by Federal agencies and laboratories for use in their technology transfer programs (including the planning of seminars for small business and other industry);

"(C) provide a clearinghouse, at the laboratory level, for requests for technical assistance from States and units of local governments, businesses, industrial development organizations, not-for-profit organizations (including universities), Federal agencies and laboratories, and other persons, and—

"(i) to the extent that a response to such requests can be made with published information available to the National Technical Information Service, refer such requests to that Service; and

"(ii) otherwise refer such requests to the appropriate Federal laboratories and agencies;

"(D) facilitate communication and coordination between Offices of Research and Technology Applications of Federal laboratories;

"(E) utilize (with the consent of the agency involved) the expertise and services of the National Science Foundation, the Department of Commerce, the National Aeronautics and Space Administration, and other Federal agencies, as necessary;

"(F) with the consent of any Federal laboratory, facilitate the use by such laboratory of appropriate technology transfer mechanisms such as personnel exchanges and computer-based systems;

"(G) with the consent of any Federal laboratory, assist such laboratory to establish programs, such as technical volunteer services, for the purpose of providing technical assistance to communities related to such laboratory; and

"(H) facilitate communication and cooperation between Offices of Research and Technology Applications of Federal laboratories and regional, State, and local technology transfer organizations.

"(2) The membership of the Consortium shall consist of the Federal laboratories described in clause (1) of subsection (b) and such other laboratories as may choose to join the Consortium. The representatives to the Consortium shall include a senior staff member of each Federal laboratory which is a member of the Consortium and a representative appointed from each Federal agency with one or more member laboratories.

"(3) The representatives to the Consortium shall elect a Chairman of the Consortium.

"(4) The Director of the National Bureau of Standards shall provide the Consortium, on a reimbursable basis, with administrative services, such as office space, personnel, and support services of the Bureau, as requested by the Consortium and approved by such Director.

"(5) Not later than 1 year after the date of the enactment of this subsection, and every year thereafter, the Chairman of the Consortium shall submit a report to the President, to the appropriate authorization and appropriation committees of both Houses of the Congress, and to each agency with respect to which a transfer of funding is made (for the fiscal year or years involved) under paragraph (6), concerning the activities of the Consortium and the expenditures made by it under this subsection during the year for which the report is made.

"(6)(A) Subject to subparagraph (B), an amount equal to 0.005 percent of that portion of the research and development budget of each Federal agency that is to be utilized by the laboratories of such agency for a fiscal year referred to in subparagraph (B)(ii) shall be transferred by such agency to the National Bureau of Standards at the beginning of the fiscal year involved. Amounts so transferred shall be provided by the Bureau to the Consortium for the purpose of carrying out activities of the Consortium under this subsection.

"(B) A transfer may be made by any Federal agency under subparagraph (A), for any fiscal year, only if—

"(i) the amount so transferred by that agency (as determined under such subparagraph) would exceed $10,000; and

"(ii) such transfer is made with respect to the fiscal year 1987, 1988, 1989, 1990, or 1991.

"(C) The heads of Federal agencies and their designees, and the directors of Federal laboratories, may provide such additional support for operations of the Consortium as they consider appropriate.".

FUNCTIONS OF THE SECRETARY OF COMMERCE

SEC. 4. Section 11 of such Act (15 U.S.C. 3710), as amended by this Act, is further amended by adding at the end thereof the following:

"(g) FUNCTIONS OF THE SECRETARY.—(1) The Secretary, in consultation with other Federal agencies, may—

"(A) make available to interested agencies the expertise of the Department of Commerce regarding the commercial potential of inventions and methods and options for commercialization which are available to Federal laboratories, including research and development limited partnerships;

"(B) develop and disseminate to appropriate agency and laboratory personnel model provisons for use on a voluntary basis in cooperative research and development arrangements; and

"(C) furnish advice and assistance, upon request, to Federal agencies concerning their cooperative research and development programs and projects.

"(2) Two years after the date of enactment of this subsection, and every 2 years thereafter, the Secretary shall submit a report to the President and the Congress on the use by the agencies and the Secretary of the authorities specified in this Act. Other Federal agencies shall, to the extent permitted by law, provide the Secretary with all information necesssary to prepare such reports.".

COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS

SEC. 5. The Stevenson-Wydler Technology Innovation Act of 1980 is amended by redesignating sections 12 through 15 as sections 15 through 18, respectively, and by inserting after section 11 the following:

"SEC. 12. COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS.

"(a) GENEAL AUTHORITY.—(1) Each Federal agency may permit the director of any of its Government-operated Federal laboratories—

"(A) to enter into cooperative research and development arrangements (subject to such regulations or review procedures as the agency considers appropriate) with other Federal agencies, units of State or local government, industrial organizations (including corporations, partnerships and limited partnerships), public and private foundations, non-profit organizations (including universities), or other persons (including li-

censees of inventions owned by the Federal agency); and

"(B) to negotiate licensing agreements under section 207 of title 35, United States Code, or other authorities for Government-owned inventions made at the laboratory and other inventions of Federal employees that may be voluntarily assigned to the Government.

"(2) Under arrangements entered into pursuant to paragraph (1), a laboratory may—

"(A) accept funds, services, and property from collaborating parties and provide services and property to collaborating parties;

"(B) grant or agree to grant in advance to a collaborating party patent licenses, assignments, or options thereto, in any invention made by a Federal employee under the arrangement, retaining such rights as the Federal agency considers appropriate;

"(C) waive, in whole or in part, any right of ownership which the Government may have under any other statute to any inventions made by a collaborating party or employee of a collaborating party under the arrangement; and

"(D) to the extent consistent with any applicable agency requirements, permit employees or former employees of the laboratory to participate in efforts to

commercialize inventions they made while in the service of the United States.

"(3) Each agency shall maintain a record of all agreements entered into under this section.

"(b) DEFINITION.—As used in this section, the term—

"(1) 'cooperative research and development agreement' means any agreement between one or more Federal laboratories and one or more non-Federal parties under which the Government provides personnel, services, facilities, equipment, or other resources (but not funds to non-Federal parties) and the non-Federal parties provide funds, personnel, services, facilities, equipment, or other resources toward the conduct of specified research or development efforts which are consistent with the missions of the agency, except that such term does not include a procurement contract or cooperative agreement as those terms are used in sections 6303, 6304, and 6305 of title 31, United States Code; and

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

"(c) RELATIONSHIP TO OTHER LAWS.—Nothing in this section is intended to limit or diminish existing authorities of any agency.".

REWARDS FOR SCIENTIFIC, ENGINEERING, AND TECHNICAL PERSONNEL OF FEDERAL AGENCIES

SEC. 6. The Stevenson-Wydler Technology Innovation Act of 1980, as amended by this Act, is further amended by inserting after section 12 the following:

"Sec. 13. REWARDS FOR SCIENTIFIC, ENGINEERING, AND TECHNICAL PERSONNEL OF FEDERAL AGENCIES.

"(a) CASH AWARDS PROGRAM.—The head of each Federal agency that is making expenditures at a rate of more than $50,000,000 per fiscal year for research and development in its Government-operated laboratories shall use the appropriate statutory authority to develop and implement a cash awards program to reward its scientific, engineering, and technical personnel for—

"(1) inventions, innovations, or other outstanding scientific or technological contributions of value to the United States due to commercial applications or due to contributions to missions of the Federal agency or the Federal Government; and

"(2) exemplary activities that promote the domestic transfer of science and technology developed within the Federal Government and result in utilization of such science and technology by American industry or

business, universities, State or local governments, or other non-Federal parties.

"(b) PAYMENT OF ROYALTIES.—Any royalties or other income received by an agency from the licensing or assignment of inventions under this section or under section 207 of title 35, United States Code, or other authority shall be retained by the agency whose laboratory produced the invention, except that beginning with fiscal year 1988, such royalties or other income shall be subject to appropriations, and shall be disposed of as follows:

"(1) At least 15 percent of the royalties or other income received each year by the agency on account of any invention shall be paid to the inventor or coinventors if they were employees of the agency at the time the invention was made. Payments made under this paragraph are in addition to the regular pay of the employee and to any awards made to that employee, and such payments shall not affect the entitlement or limit the amount of the regular pay, annuity, or other awards to which the employee is otherwise entitled or for which the employee is otherwise eligible.

"(2) The balance of any royalties or related income earned during any fiscal year after paying the inventors' portions under paragraph (1) shall be transferred to the agency's Government-operated laboratories

with a substantial percentage being returned to the laboratories whose inventions produced the royalties or income. Such royalties or income may be retained by the laboratory up to the limits specified in this paragraph, and used—

"(A) for mission-related research and development of the laboratory;

"(B) to support development and education programs for employees of the laboratory;

"(C) to reward employees of the laboratory for contributing to the development of new technologies and assisting in the transfer of technology to the private sector, and for inventions of value to the Government that will not produce royalties;

"(D) to further scientific exchange to and from the laboratory; and

"(E) for payment of patenting costs and fees and other expenses incidental to promoting, administering, and licensing inventions, including the fees or costs for services of other agencies or other persons or organizations for invention management and licensing services.

If the balance for any laboratory after paying the inventors' shares under paragraph (1) exceeds 5 percent of the annual budget of the laboratory, 75 percent of

the excess shall be paid to the Treasury of the United States and the remaining 25 percent shall be used for the purposes listed in subparagraphs (A) through (E), by the end of the fiscal year subsequent to the one in which they were received. Any funds not so used or obligated by the end of such fiscal year shall be paid to the Treasury of the United States.

"(c) ASSIGNED INVENTIONS.—If the invention was one assigned to the agency either (1) by a contractor, grantee, or the recipient of a cooperative agreement of the agency, or (2) by an employee of the agency that was not working in the laboratory at the time the invention was made, the agency unit that funded or employed or assigned the assignee shall, for purposes of this section, be considered to be a laboratory.

"(d) REPORTS.—In making their annual budget submissions, Federal agencies shall submit to the appropriate authorization and appropriation committees of both Houses of the Congress summaries of the amount of royalties or other income received and expenditures made (including inventor awards) under this section.".

EMPLOYEE ACTIVITIES

SEC. 7. The Stevenson-Wydler Technology Innovation Act of 1980, as amended by this Act, is further amended by inserting after section 13 the following:

"SEC. 14. EMPLOYEE ACTIVITIES.

"(a) IN GENERAL.—If a Federal agency which has the right of ownership to an invention under this Act does not intend to file for a patent application or otherwise to promote commercialization of such invention, the agency may allow the inventor, if the inventor is a Government employee or former employee who made the invention during the course of employment with the Government, to retain title to the invention (subject to reservation by the Government of a nonexclusive, nontransferrable, irrevocable, paid up license to practice or have practiced the invention throughout the world by or on behalf of the Government). In addition, the agency may condition the inventor's right to title on the timely filing of a patent application in cases when the Government determines that it has or may have a need to practice the invention.

"(b) DEFINITION.—For purposes of this section, Federal employees include 'special Government employees' as defined in section 202 of title 18, United States Code.

"(c) RELATIONSHIP TO OTHER LAWS.—Nothing in this section is intended to limit or diminish existing authorities of any agency.".

MISCELLANEOUS AND CONFORMING AMENDMENTS

SEC. 8. (a) Section 10 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3709) is repealed.

(b)(1) Section 3(2) of such Act (15 U.S.C. 3702(2)) is amended by striking "centers for industrial technology" and inserting in lieu thereof "cooperative research centers".

(2) Section 4 of such Act (15 U.S.C. 3703) is amended—

(A) by striking "Industrial Technology" in paragraph (1) and inserting in lieu thereof "Productivity, Technology, and Innovation";

(B) by striking "'Director' means the Director of the Office of Industrial Technology" in paragraph (3) and inserting in lieu thereof "'Assistant Secretary' means the Assistant Secretary for Productivity, Technology, and Innovation";

(C) by striking "Centers for Industrial Technology" in paragraph (4) and inserting in lieu thereof "Cooperative Research Centers";

(D) by striking paragraph (6), and redesignating paragraphs (7) and (8) as paragraphs (6) and (7), respectively; and

(E) by striking "owned and funded" in paragraph (6), as so redesignated, and inserting in lieu thereof "owned, leased, or otherwise used by a Federal agency and funded".

(3) Section 5(a) of such Act (15 U.S.C. 3704(a)) is amended by striking "Industrial Technology" and inserting in lieu thereof "Productivity, Technology, and Innovation".

(4) Section 5(b) of such Act (15 U.S.C. 3704(b)) is amended by striking "DIRECTOR" and inserting in lieu thereof "ASSISTANT SECRETARY", and by striking all from "a Director of the Office" and inserting in lieu thereof "an Assistant Secretary for Productivity, Technology, and Innovation.".

(5) Section 5(c) of such Act (15 U.S.C. 3704(c)) is amended by striking "the Director" each place it appears and inserting in lieu thereof "the Assistant Secretary".

(6) The heading of section 6 of such Act is amended to read as follows:

"SEC. 6. COOPERATIVE RESEARCH CENTERS.".

(7) Section 6(a) of such Act (15 U.S.C. 3705(a)) is amended by striking "Centers for Industrial Technology" and inserting in lieu thereof "Cooperative Research Centers".

(8) Section 6(b)(1) of such Act (15 U.S.C. 3705(b)(1)) is amended by striking "basic and applied".

(9) Section 6(e) of such Act (15 U.S.C. 3705(e)) is amended to read as follows:

"(e) RESEARCH AND DEVELOPMENT UTILIZATION.—In the promotion of technological innovation and commercial-

ization of research and development efforts by Centers under this section, chapter 18 of title 35, United States Code, shall apply.".

(10) Section 6(f) of such Act (15 U.S.C. 3705(f)) is repealed.

(11) The heading of section 8 of such Act is amended by striking "CENTERS FOR INDUSTRIAL TECHNOLOGY" and inserting in lieu thereof "COOPERATIVE RESEARCH CENTERS".

(12) Section 8(a) of such Act (15 U.S.C. 3707(a)) is amended by striking "Centers for Industrial Technology" and inserting in lieu thereof "Cooperative Research Centers".

(c) Section 4 of such Act (15 U.S.C. 3703), as amended by subsection (b)(2) of this section, is further amended by adding at the end thereof the following:

"(8) '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.

"(9) 'Invention' means any invention or discovery which is or may be patentable or otherwise protected under title 35, United States Code, 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.).

"(10) 'Made', when used in conjunction with any invention, means the conception or first actual reduction to practice of such invention.".

(d)(1) Such Act (as amended by this Act) is further amended by redesignating sections 11 through 18 as sections 10 through 17, respectively.

(2)(A) Section 5(d) of such Act (15 U.S.C. 3704(d)) is amended by inserting "(as then in effect)" after "Act" the second time it appears.

(B) Section 8(a) of such Act (15 U.S.C. 3707(a)) is amended by striking the last sentence.

(C) Section 9(d) of such Act (15 U.S.C. 3708(d)) is amended by striking "or 13" and inserting in lieu thereof "10, or 14".

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