AMENDMENT NO. 1627

"Calendar No.

Purpose: To better integrate university and private industry into the National Laboratory system of the Department of Energy so as to speed the development of technology in areas of significant economic potential.

IN THE SENATE OF THE UNITED STATES-100th Cong., 2d Sess.

S. 1480

The Department of Energy National Laboratory Cooperative Research Initiatives Act

Referred to the Committee on Energy and Natural Resources and ordered to be printed

Ordered to lie on the table and to be printed

March 4, 1988

AMENDMENT proposed by Mr. DOMENICI (for himself, Mr. McClure, and Mr. Bingaman)

Viz:

- 1 Strike out all after the enacting clause and insert in
- 2 lieu thereof the following:
- 3 SECTION I. SHORT TITLE.
- This Act may be cited as the "Department of Energy
- 5 National Laboratory Cooperative Research Initiatives
- 6 Act``.

1	SEC. 2. DEFINITIONS.
2	For Purposes of this Act
3	(1) The term "National Laboratory" means
4	(A) Lawrence-Livermore National Laboratory;
5 -	(B) Lawrence-Berkeley National Laboratory;
6	(C) Los Alomos National Laboratory;
7	(D) Sandia National Laboratory;
8	(E) Fermi National Accelorator;
9	(F) Princeton Plasma Physics Laboratory;
10	(G) Idaho National Engineering Laboratory;
1.	(H) Argonne National Laboratory;
12	(I) Brookhaven National Laboratory;
13	(J) Oak Ridge National Laboratory;
14	(K) Pacific Northwest Laboratory;
15	(L) Ames Laboratory;
16	(M) Stanford Linear Accelerator Center;
17	(N) Bates Linear Accelerator Facility;
18	(0) Center for Energy and Environment Research;
19	(P) Coal Fired Flow Facility;
20	(Q) Energy Technology Engineering Center;
21	(R) Hanford Engineering Development Laboratory;
22	(S) Inhalation Toxicology Research Institute;

(T) Laboratory for Energy-Related Health Research;

1	(U) Laboratory of Biomedical and Environmenta	<u>al</u>
2	Sciences;	
3	(V) Laboratory of Radiobiology and Environmen	<u>ntal</u>
4	Health;	
5	(W) Michigan State University - DOE Plant Re	search
6	Laboratory;	
7	(X) Notre Dame Radiation Laboratory;	
8	(Y) Oak Ridge Associated Universities;	
9	(Z) Radiobiology Laboratory;	
10	(AA) Savannah River Ecology Laboratory;	•
11	(PR) Savannah Piwar Laboratory	े हैं। हेंग
12	(CC) Colon France Possorch Tostifutos	*
13	(DD) Ctarford Comphystran Rediction Toborate	ery.
14	Such torm also includes any future government-owned	
15	contractor constant laboratory facilities established	as
16	Department of Engage Multiprogram Inhoratories or	
17	Program-Dedicated Facilities	
•	Such term does not include Nevel Nuclear Propulsion Re	actor
18	Taboratories their contractors or subcontractors perf	
19	work covered under Executive Order 12344 as codified	_
20	section 7158 of title 4. United States Code.	
2.1	,	

- (3) The term "contract" means any contract, grant, or cooperative agreement as those terms are used in sections 6303, 6304, and 6305 of title 31, United States Code, entered into between any Federal agency and any contractor for the performance of experimental, developmental, or research work funded in whole or in part by the Federal Government. Such term includes any assignment, substitution of parties, or subcontract of any type entered into for the performance of experimental, developmental, or research work under a contract.
- (4) The term "cooperative research and development agreement" means any agreement [as defined in section 11 of the Stevenson Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(d)(1))] between one or more National Laboratories and one or more non-Federal parties under which the Government, through its National Laboratories, provides personnel, services, facilities, equipment, or other resources with or

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without reimbursement (but not funds to non-Federal parties) and the non-Federal parties provide funds, personnel, services, facilities, and equipment, or other resources toward the conduct of specified research or development efforts which are consistent with the missions of the National Laboratory; 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.

(5) The term "funding agreement" means any contract, grant, or cooperative agreement entered into between the Secretary of Energy and a contractor operating a National Laboratory of the Department of Energy that provides for such contractor to perform research and development at such National Laboratory.

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TITLE I -- THE DEPARTMENT OF ENERGY NATIONAL LABORATORIES

CENTERS FOR RESEARCH ON ENABLING TECHNOLOGIES

FOR HIGH TEMPERATURE SUPERCONDUCTING APPLICATIONS.

SEC. 101. FINDINGS.

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Congress makes the following findings:

- (1) the Department of Energy has conducted extensive research in superconducting materials to support its programatic activities in High Energy Physics, Magnetic Fusion Energy, Energy Storage Systems, Electric Energy Systems, and Energy Conservation pursuant to the Federal Nonnuclear Energy Research and Development Act of 1974 (P.L.93-577), the Energy Reorganization Act of 1974 (P.L. 93-483), and the Department of Energy Organization Act (Public Law 95-91);
- (2) recent developments in high-temperature superconducting materials hold great promise for highly efficient energy storage and transmission, medical diagnostics, magnets for physics research and fusion reactors, and smaller supercomputers;

(3) the United States is a world leader in basic research on high-temperature superconducting materials, and programs supporting this research at the <u>Department of Defense</u>, the National Science Foundation and the Department of Energy should

be maintained and strengthened;

- (4) international interest in the commercialization of high-temperature superconducting materials is high and the key to success lies in the rapid development of these materials and the identification of applications; and
- (5) the National Laboratories of the Department of Energy have demonstrated expertise in superconductivity research and a proven record in research in enabling technologies which can benefit industrial efforts in product development.

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(1) to research critical enabling technologies to assist United States industry in the commercialization of high-temperature superconductors;

(2) to provide national organization and coordination in the research, development and commercialization of high-temperature superconductors; and

(3) to encourage private industry, university, and
Department of Energy National Laboratory interaction through
Centers for Research on Enabling Technologies at the National
Laboratories.

SEC. 103. ESTABLISHMENT OF THE SUPERCONDUCTOR RESEARCH INITIATIVE.--

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The Secretary of Energy shall initiate and carry out a cooperative program of research on enabling superconductor technology and on the practical applications of superconductor technology (hereafter in this title referred to as the "Superconductor Research Initiative").

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SEC. 104. PARTICIPATION OF NATIONAL LABORATORIES OF THE DEPARTMENT OF ENERGY.

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(a) Mission of National Laboratories. -- The Secretary of Energy shall ensure that the National Laboratories of the Department of Energy participate in the Initiative, to the extent that such participation does not detract from the primary mission of the National Laboratory.

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(b) Agreements.--The Secretary of Energy shall enter into such agreements with other Federal agencies, with U.S. private industrial or research organizations, consortias, or with any college or university as may be necessary to provide for the active participation of the National Laboratories of the Department of Energy in the Superconductor Research Initiative.

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(c) Required Provisions.--The Superconductor Research Initiative shall include provisions for one or more national laboratories of the Department of Energy to conduct research and development activities relating to research on high-temperature superconductivity. Such activities may include research and development in associated technologies including thin film and bulk ceramic synthesis and processing and the characterization of physical, chemical, and structural properties in materials.

SEC. 105. FORMATION OF COUNCIL AND CENTERS FOR RESEARCH ON ENABLING TECHNOLOGIES.

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(a) Council.--The Secretary of Energy shall form a council to be known as the "Council for Research on Enabling Technologies" (hereafter in this title referred to as the "Council") which shall be composed of representatives of appropriate government agencies, universities, and industry to provide guidance in setting goals and strategies for the timely research on critical enabling technologies in high-temperature superconductors. The Council shall set guidelines for the release of the technical findings and developments made by the cooperative research centers established pursuant to subsection (b). Guidelines for releasing technical findings set forth by the relevent agencies.

(b) Cooperative Research Centers.-- (1) The Secretary of Energy shall establish cooperative research centers in enabling technology for superconducting materials and applications (hereafter in this title referred to as "centers") at National Laboratories with appropriate university and private industry participants.

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2	which demonstrate expertise in
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4	(A) superconductivity research; and
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6	(B) research in associated technologies including
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8	(i) thin film and bulk ceramic synthesis and
9	processing; and decay and decay and decay are a second and the sec
. 0	(ii) characterization of physical, chemical, and
1	structural properties in materials.
2	en e
3	(c) Avoidance of Duplication The Council shall keep
4	appraised of activities taking place at the existing Research
5	Centers on Superconductivity and Superconductivity Pilot
6	Centers. In carrying out the responsibilities of subsection (a)
7	the Council shall ensure that unnecessarily duplicative research
Я	or activities are not being carried out at these Centers.

SEC. 106. PERSONNEL EXCHANGES. -- The Superconductor Research Initiative [shall] may include provisions for temporary exchanges of personnel between any domestic firm or university referred to in this title and the National Laboratories of the Department of Energy that are participating in the Superconductor Research Initiative. The exchange of personnel [shall] may be subject to such restrictions, limitations, terms and conditions as the Secretary of Energy considers necessary in the interest of national security.

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- (a) Availability of Resources. -- The Secretary of Energy shall make available to other departments or agencies of the Federal Government, and to any participant in research and development projects under the Superconductor Research Initiative, any facilities, personnel, equipment, services, and other resources of the Department of Energy for the purpose of conducting research and development projects under the Superconductor Research Initiative consistent with section 104.
- (b) Reimbursement.--The Secretary may make facilities
 available under this section only to the extent that the cost of
 the use of such facilities is reimbursed by the user.

SEC. 108. BUDGETING FOR SUPERCONDUCTIVITY RESEARCH.

To the extent the Secretary considers appropriate and necessary, the [The] Secretary of Energy, in preparing the research and development budget of the Department of Energy to be included in the annual budget submitted to the Congress by the President for fiscal years 1990, 1991, 1992, 1993, 1994, and 1995 under section 1105(a) of title 31, United States Code, shall provide for programs, projects, and activities that encourage the development of new technology in the field of superconductivity.

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SEC. 109. COST-SHARING AGREEMENTS.

ensure that contracts for the operation of Department of Energy

National Laboratories provide the [The] director of each National

Laboratory of the Department of Energy that is participating in
the Superconductivity Research Initiative or the contractor
operating any such National Laboratory the authority to [may]
include in any cooperative research and development agreement
entered into with a domestic firm, or university in conjunction
with the Superconductor Research Initiative, a cooperative
provision for the domestic firm or university to pay a portion of
the cost of the research and development activities.

Laboratory of the Department of Energy that is participating in the Superconductivity Research Initiative, in determining the type and extent of its laboratory participation in carrying out work for others, shall undertake such work only when facilities are available and when it would not interfere with Department of Energy programs, and shall be conducted in such a way as to not create a future detrimental burden on the National Laboratory.

(c) <u>f(b)</u> Limitations.-- (1) An amount equal to not more than 10 percent of any National Laboratory's annual budget shall be received from non-appropriated funds derived from work for

others contracts entered into under the Superconductor Research Initiative in any fiscal year except to the extent approved in advance by the Secretary of Energy.

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(2) <u>Pursuant to the authority delegated by the Secretary of Energy to the National Laboratory Directors, no [Ne]</u> Department of Energy National Laboratory may receive more than \$10,000,000 of non-appropriated funds under any cooperative research and development agreement entered into under this subsection in connection with the Superconductor Research Initiative except to the extent approved in advance by the Secretary of Energy.

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SEC. 110. DEPARTMENT OF ENERGY OVERSIGHT OF COOPERATIVE

AGREEMENTS RELATING TO THE SUPERCONDUCTOR RESEARCH

INITIATIVE.

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(a) Provisions Relating to Disapproval and Modification of Agreements.-- (1) The Secretary of Energy or his designee may review a cooperative research and development agreement for the purpose of disapproving or requiring the modification of the cooperative research and development agreement [if the agreement exceeds \$1,000,000]. If the Secretary notifies the parties to the agreement of his intent to review the agreement, the agreement shall provide a 30-day period within which the agreement may be disapproved or modified beginning on the date the agreement is submitted to the Secretary.

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

(b) Record of Agreements.-- Each national laboratory shall maintain a record of all agreements entered into under this section[.], and submit such record to the Secretary of Energy on an annual basis.

SEC. 111. AVOIDANCE OF DUPLICATION.

In carrying out the Superconductivity Research Initiative, the Secretary of Energy shall ensure that unnecessarily duplicative research is not performed at the research facilities (including the National Laboratories of the Department of Energy) that are participating in the Superconductivity Research Initiative.

SEC. 112. INTERNAL REVENUE CODE TREATMENT.

(a) Tax Exemptions.--Any cooperative agreement, assocaition, or consortium established by the Department of Energy or the National Laboratories of the Department of Energy, and which is consistent with the purposes of this Title, shall be treated as an organization described in section 501(c)(3) of the Internal Revenue Code of 1986 and exempt from tax under section 501 (a) of such Code with respect to activities authorized by this Title.

(b) Basic Research Payments.-- Any amounts transferred to an organization described in paragraph (a) by a participating member of such an organization shall be taken into account as basic research paymnets for purposes of section 41(a)(2) of such Code.

(c) Capital Gains Treatment. --

19.

(1) No gain or loss shall be recognized in connection with the transfer pursuant to this title of any patent, copyright, trademark, trade secret, mask work, or other intellectual property by or between an organization described in subsection (a) and any participating member of such an organization.

(2) If property is received in a transfer described in paragraph (1), the basis of the property in the hands of the transferee shall be the same as it would be in the hands of the transferor.

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SEC. 113. ANTITRUST TREATMENT.

Any cooperative agreement, association, or consortia created by the Department of Energy or the National Laboratories of the Department of Energy pursuant to the provisions of this Title, shall be considered a joint research and development venture within the meaning of section 2(a)(6) of the National Cooperative Research Act of 1984 (15 U.S.C. 4301 et seq.), for purposes of such Act.

TITLE II --TECHNOLOGY MANAGEMENT AT THE DEPARTMENT OF ENERGY

NATIONAL LABORATORIES

1	Sec.	200. Findings.
2	•	
3		The Congress finds that
4	· · · · · · · · · · · · · · · · · · ·	
5		(1) private industry has great interest in scientific
6		collaboration with the Department of Energy National
7		Laboratories but only if the present Department of Energy
8		laboratory contracting process can be streamlined and
9		intellectual property associated with joint ventures,
LO		adequately protected;
1	;	
12		(2) contracts for the operation of the Department of
L 3	•	Energy National Laboratories must provide the Directors of
4		such Laboratories with sufficient management authority for
L 5		intellectual property { must be granted
16		to the Director of the Department
l 7		-of Energy National Laboratories] to ensure that they can
l 8		negotiate with industry to set up cooperative research and
1 0		development agreements; This authority shall be subject to

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periodic audit and oversight by the Secretary of Energy, the

- Inspector General and the Comptroller General as well as
- 2 Congress.

(3) the present Department of Energy policy of disseminating computer software publically, via the National Energy Software Center, despite its commercialization potential, has at times, benefited foreign companies and there should be timely, consistent review procedure to ensure that commercialization potential is considered when software is developed under a Department of Energy contract or may have involved some Department of Energy funding;

- (4) the Department of Energy National Laboratories must be perceived as "user-friendly" in order for industry to seriously consider the laboratories partners for collaborative research and development ventures;
- (5) the National Laboratories must aggressively seek contact with private industries to ensure that they recognize the technical and scientific expertise resident in these laboratories, in addition to publicizing the availability of user facilities and technological projects in [progress, and
- (6) the National Laboratories have demonstrateed successes in technology transfer into the private sector but the effort can be significantly enhanced if--

l		(A) industry becomes more aware of the
2	en e	laboratories research and development projects and
3		capabilities;
4		(B) technology transfer is considered a
5	and the second	significant part of the laboratory's mission;

- (C) the laboratories become better educated in industry market requirements; and
- (D) industry gets involved with the laboratories early enough in the research and development process to direct development of commercially viable products.

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1	Sec. 201. Duties and authorities of the Secretary of Energy.
2	en e
3	The Secretary of Energy shall:
4	SECURING SECTION OF THE SECTION OF T
5	(1) review all existing regulations, policies
6	procedures, and administrative processes associated with the
7	Department of Energy's National Laboratories Directors'
8	ability to:
9	
10	(A) form cooperative relationships and enter into
11	cooperative research and development agreements with
12	private industry or universities;
13	
14	(B) undertake "work-for others"; and
15	
16	(C) operate user facilities.
17	
18	(D) review standards of conduct for resolving
19	potential conflicts of interest to make sure they
20	adequately establish guidelines for situations likely
21	to arise through the use of the authorities granted in
22	this Act, included, but not limited to cases where
23	present or former National Laboratory employees or
2/1	their partners negotiate licenses or assignments of

1	titles to inventions or negotiate cooperative research
2	and development agreements with Federal agencies
3	including the Department of Energy or the
4	contractor-operator with which the employee involved is
5	or was formerly employed.
6	
7	(2)(A) review all public laws and related procedures
8	requiring public disclosure of technical data to ensure that
9	they are as consistent as legally possible with the
50	purposes of the this Act.
11	
1 2	(B) survey non-federal parties interested in
13	entering into cooperative research and development
I 4	agreements with the National Laboratories to
1.5	determine if adequate safeguards exist for
l 6	insuring the confidentiality and proprietary
l 7	value of technical data.
18	
19	(C) based on the results of the study develop
20	policy recommendations that shall be submitted to
21	the Congress.
2 2	
2 3	(3) formulate and carry out a comprehensive set of
2 4	policy guidelines to advance the goals of this act, based on
2 5	the review required under paragraphs (1) and (2).

1	(4) report to Congress and the President within 90
2	days the status of this review and implement the policy
3	quidelines within 180 days of enactment of this bill.

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SEC. 202. PURPOSE. And there are the rest of the second of

The purpose of this title is to better meet the continuing responsibility of the Federal Government to ensure the full use of the results of the Nation's Federal investment in the National Eaboratories' research and development in meeting international competition.

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Ţ	SEC. 203. POLICY.
2 -	
3	It is the policy of Congress that
4	
5	(1) intellectual property rights in technology [er
6	-devices] developed at the National Laboratories be -
7	-controlled in a manner that promotes] managed so as to
8	promote { the use of such technology and devices to improve
9	1 the competitiveness [advantage] of [the] United
10	States industries [.] ;
1.1	
12	
13	(2) the Secretary of Energy promulgate policy
14	guidelines dealing with cooperative research and developmen
15	agreements and intellectual property rights arising under
16	such agreements; and
17	
1.8	(3) the Laboratory Directors devise implementing
19	procedures consistent with the policy guidelines set forth
20	by the Secretary:

1	Sec. 2	204. DEFINITIONS.
2		
3		For purposes of this title
4		
5	<u>.</u>	(1) The term "invention" means any invention which is
6		or may be patentable or otherwise protected under Title 35,
7	1	United States Code, or any novel variety of plant which is
8	•	or may be protectable under the Plant Variety Protection Act
9		(7 U.S.C. 2321 et seq.);
10		
11		(2) The term "subject invention" means any invention of
12	· · · · · · · · · · · · · · · · · · ·	a National Laboratory first conceived or reduced to practice
13		in the performance of work under a contract or funding
14		agreement for the operation of a National Laboratory;
15		
16		(3) The term "made" when used in conjunction with any
17		invention means the conception or first actual reduction to
18	. 1	practice of such invention;
19		
20		(4) The term "technical data" means recorded
21	:	information of a scientific or technical nature regardless
22	· . (of form or the media on which it may be recorded;

1	(5) The term "commercially valuable technical data"	
2	means applied technology which may have near term commercia	1
3	value or which arose under a cooperative research and	
4	development agreement. The term does not apply to basic	
5	research;	
6	n de la composition de la composition Année de la composition de la composit	
7	<u>f (5) 1 (6)</u> The term "computer software" means	
8	recorded information, regardless of form or the media on	
9	which it may be recorded, comprising computer programs or	
10	documentation thereof;	
11		
12	<u>[(6)] (7)</u> The term "intellectual property" means	
13	patents, trademarks, copyrights, trade secrets, mask works,	
14	and other forms of comparable [intellectual] property	
15	rights { enacted by Congress or the States };	
16		
17	<pre>f (7) 1 (8) The term "collaborative party" means a</pre>	
18	party to a cooperative research and development agreement	as
19	defined in paragraph (4);	
20	the second of th	
21	1 (8) 1 (9) The term "laboratory owned" means any	
22	rights in intellectual property conveyed under this title	to
23	a contractor operating a National Laboratory or any rights	
24	in intellectual property arising under the operating	٠.
25	contract for a National Laboratory where rights are not	
26	expressly taken by the United States Government or by a	

subcontractor;

1		(10) Ind tolm Dilocol Di d'indianal Indocediori
2		means the Department of Energy contractor operator's
3		employee, directing the management or operation of any
4	14.15	National Laboratory;
5		
6		(11) The term "laboratory manager or operator" means
7		the contractor who has signed a management and operating
8	•	contract with the Department of Energy (but only with
9	* .	respect to activities relating to such management or
10		operation).
11		
12	e e e	(12) The term "third parties" means domestic entities
13		located in the United States who agree to manufacture and to
14		conduct research, and development substantially in the
15		United States including
16	,	
17	••	(A) Federal agencies other than the Department of
18		Energy;
19	•	
20		(B) units of State or local government;
21	+ + · ;	
		(C) industrial organizations, such as
22		corporations, partnerships, limited partnerships,
23		consortia, or industrial development organizations;
24		
25		(D) public and private foundations;
26	•	(n) bantic and bitages toundactons;

1		(E) nonprofit organizations such as
2	and the second section of the second	universities; and
3		
4		(F) licensees of inventions, technical data, or
5		computer software owned by the laboratory manager
6		or operator.

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1	SEC. 205. COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS.		
2	(a) General Authority The Secretary of Energy shall		
3	develop policy guidelines under which he shall ensure that		
4	contracts for the operation of Department of Energy National		
5	Laboratories provide the Directors of such laboratories with the		
6	authority: [permit the Director of any of its National		
7	Laboratories: 1		
8			
9	(1) to enter into cooperative research and development		
10	agreements and to negotiate the terms and conditions of		
11	such agreements [on behalf of the Department of Energy]		
12	with		
13			
14	(A) other federal agencies;		
15	(B) units of state or local government;		
16	(C) industrial organizations including		
17	corporations, partnerships, and limited partnerships,		
18	consortia, and industrial development organizations;		
19	(D) public and private foundations;		
20	(E) nonprofit organizations including		
21	universities; or		
22	(F) other persons including licensees of		
23	inventions, technical data or computer software owned		
24	by the National Laboratory; and		

1	(2) to negotiate intellectual property licensing
2	agreements for National Laboratory owned inventions,
3	technical data or computer software, assigned or licensed to
4	the National Laboratory by third parties including voluntary
5	assignment by employees.
6	assignment by employees. Cuployees
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8	ARREST AND A CONTROL OF THE PROPERTY OF THE PR
9	(b) Specific Authority [Under cooperative research and
10	-development agreements entered into pursuant to subsection-
11	(a)(1), the Director of a National Laboratory may 1 Each
12	Director of a National Laboratory may negotiate and include
13	provisions in any cooperative research and development agreement
14	entered into pursuant to this section permitting the laboratory
15	manager or operator, on behalf of the United States to
16	Herekia, kalanda kan di bahar di bahar bahar bahar di bahar
17	(1) accept, retain, and use funds, personnel,
18	services, and property from collaborating parties and
19	provide personnel, services, and property to
20	collaborating parties;
21	e alikuliten arrendak bilangen garupak indka ilikan errekatikan enginalengihane
22	(2) grant or agree to grant in advance to a
23	collaborat <u>fing live</u> party, intellectual property
24	licenses or assignments, or options thereto, in any
25	invention, technical data or computer software, made in

whole or in part by T a National Laboratory employee 1

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2	the cooprative research and agreement; and
3	a describer on a green and the second of
4	(3) to the extent consistent with Department of
5	Energy [requirements and standards of conduct,]
6	regulations, orders, and directives pertaining to
7	conflict of interest, permit employees or former
8	employees of <u>f the National Laboratory</u> a laboratory
9	manager or operator to participate in efforts to 1
10	transfer to the private sector
11	inventions, technical data or computer software, <u>I they</u>
1 2	such employees developed or made while in the
13	service of <u>{ the National Laboratory }</u> such laboratory
14	manager or operator.
15	
16	(c) In determining whether to enter into a cooperative
1 7.	research and development agreement the Laboratory Director shall
18	<u>determine that</u>
19	and the second of the second o
20	(1) facilities at the National Laboratory are
21	available to do the work that is the subject of the
22	cooperative research and development agreement;
23	
24	(2) the work that is the subject of the
25	not interfere with Department of Energy programs;
26	mor fincertate with paparement of Fuerdy brodians,

1	(3) the work that is the subject of the
2	cooperative research and development agreement would
3	not create a future detrimental burden on the National
4	e gogether Eaboratory; it is a label particle of the first and the
5	and the second of the second o
6	(4) the proposed cooperative research and
· 7	development agreement is consistent with other
8	guidelines that the Secretary of Energy may prescribe
9	consistent with the policies set forth in this Act
10	provided that such guidelines are first published for
11	
12	public comment in the Federal Register.
13	
14	
15	$\frac{[-(a)]-[d]}{[-(a)]}$ Approval of Agreement by Secretary $\frac{[-(a)]-[d]}{[-(a)]}$
16	the value of an agreement entered into under this section does
17	not exceed \$1,000,000, the agreement shall not be subject to the
18	approvel of the Cocretery of Energy.
19	
20	(2) When the value of the agreement exceeds \$1,000,000;
21	but does not exceed \$10,000,000 (the maximum amount for
2 2	a cooperative research and development agreement), t]
23	The Secretary of Energy or his designee may disapprove
24	or require the modification of the agreement. The
25	agreement shall provide a 30-day period beginning on
26	the date the agreement is presented to the Secretary of
27	Energy or his designee by the { head } Laboratory

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<u>Director</u> of the National Laboratory concerned, within which such action shall be taken. In any case in which the Secretary of Energy or his designee disapproves or requires the modification of any cooperative agreement presented under this section, the Secretary or his designee shall transmit a written explanation of such disapproval or modification to the <u>f head } Laboratory</u>

<u>Director</u> of the National Laboratory concerned. If such action is not taken within this thirty day period, the cooperative research and development agreement shall be deemed approved.

(d)-1 (e) Limit on Percentage Of the Total Work

Cooperative Research and Development Agreements Can Comprise at

the National Laboratories. The cumulative total of

non-appropriated funds of all agreements entered into by each

National Laboratory Director under this section shall not exceed

an amount equal to 10 percent of that laboratory's annual

budget.

f (e) f Records of Agreements.--Each National Laboratory shall maintain a record of all agreements entered into under this section, and shall submit it to the Secretary of Energy on an annual basis.

1	SEC. 206. CONTRACT CONSIDERATIONS (a) Regulations and
2	Procedures (1) [The Office of Federal Procurement Policy may
3	The Secretary of Energy shall issue within 180 days after
4	enactment of this Act regulations or set forth suitable
5	procedures for implementing the provisions of Section 205 \pm
6	$\frac{(a)(1)}{2}$ after public comment. Implementation of Section 205 $\frac{1}{2}$
7	-(a)(1) 1 shall not be delayed until issuance of such regulations
8	Andrew Communication (Communication Communication Communication Communication Communication Communication Comm The Communication
9	en et Marken en en en en el Maria en en en en en en en en arriver a la Maria en en La companya en
10	(2) Any regulations covering National Laboratory
11	cooperative research and development agreements under
12	Section 205 $\frac{1}{1}$ (a)(1) $\frac{1}{2}$ shall be guided by the purpose of
13	this Act.
14	
15	(3) The Office of Federal Procurement Policy shall
16	review such regulations referred to in subparagraph (1) for
17	consistency with this Act before issuance of such
18	regulations.
19	en e

Section 206 continued

1	(b) Agreement Considerations The Director of the National
2	laboratory in deciding what cooperative research and development
3	agreements to enter into shall:
4	
5 .	(1) give special consideration to small business
6	firms and consortia involving small business firms; and
7	
8	(2) give preference to business units located in
9	the United States, which agree that products embodying
10	inventions, technical data or computer software, made
11	under the cooperative research and development
12	agreement or produced through the use of such
13	inventions, technical data or computer software, will
14	be developed and manufactured substantially in the
15	United States.
16	en de tradition de la company de la comp La company de la company d
17	(3) in the case of any industrial organizations or
18	other person subject to the control of a foreign
19	company or government, as appropriate, take into
20	consideration whether or not such foreign government

persons to enter into cooperative research and

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22

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permits United States agencies, organizations, or other

development agreements and licensing agreements; and

4	(4) provide director one opportunity to
2	participate in such cooperative agreements when such
3	participation will contribute to the purpose of this
4	legislation.
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6	u om elektrika samt egytti eri till till her start i sulltitatt i som elektris.
7	(c) Record of Agreements The <u> Department of Energy </u>
8	Director of each National Laboratory shall maintain a record of
9	all agreements entered into under this section and submit it to
10	the Secretary of Energy on an annual basis.
11	and the company of the control of th

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SEC. 407. PATENT OWNERSHIP AND THE CONDITIONS OF OWNERSHIP .--

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- (a) Disposal of Title to Inventions.--Notwithstanding section 152 of the Atomic Energy Act of 1954 (42 U.S.C. 2182), section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5908), or other provision of law, the Secretary of Energy shall dispose of the title to any subject invention made in the performance of a Department of Energy contract to operate any National Laboratory in the same manner as applied to small business and nonprofit organizations under Chapter 18 of title 35, United States Code.
 - (b) Retention of Title by United States.--(1) Whenever a National Laboratory manager or operator makes an invention to which the Department of Energy has determined (at the time of contracting for the management and operation of the National Laboratory) to retain title:
 - (A) for exceptional circumstances under section202(a)(ii) of title 35, United States Code; or
 - (B) because the invention is made in the course of or under a funding agreement described in section 202(a)(iv) of title 35, United States Code, the title to such invention shall be retained by the Government unless the National Laboratory at which the invention is made requests title to

deemed to be

such invention and the Secretary of Energy does not notify
the <u>Director of the National Laboratory within 90 days after</u>
receipt of such request that the invention is covered by an exceptional circumstances determination or has been designated sensitive technical information as authorized by
Federal statutes <u>fother than those involving export control</u>

(2) The Secretary may not use export control statutes or regulations as (2) the sole basis for refusing a request for title.

(3) The Secretary may not retain title to a subject invention under the exception set forth at Section 202(a)(iv) of title 35, United States Code, without first determining that the invention has been classified or has been designated sensitive technical information as authorized by applicable statutes that the Secretary does not notify the requesting National Laboratory, the laboratory shall be deemed to have elected title to the invention under the Government-wide contractor patentable ownership provisions of chapter 18 of title 35, United States Code.

, 1	ESEC. 208. TECHNICAL DATA OR COMPUTER SOFTWARE AND THE
2	-CONDITIONS OF OWNERSHIP(a) Rights Retained by a National
3	Laboratory. Notwithstanding any other provision of law, the
4	Secretary of Energy shall delegate the authority to permit a
5	National Laboratory to elect ownership to any intellectual
6	property rights that can be established to protect commercially
7	<u>valuable</u> technical data or computer software obtained or
8	generated under a Department contract for the operation of such
9	National Laboratory subject to a royalty free license to use and
10	reproduce such technical data or computer software for United
11	States Governmental purposes.
12	en e
13	(b) Protection of Technical Data and Computer
14	Software (1) Technical data or computer software obtained or
15	generated by a National Zaborutory shall not be disclosed to the
16	-public if the Director of the National Laboratory or his designee
17	-
18	en e
19	(A) the technical data or computer software is
20	commercially valuable; [and] or
21	
22	(D) the technical data has been generated as a result
23	of or under a cooperative research and development agreement
24	that provides for the total reimbursement by the non federal

artico; and

1	1 (B) 1 (C) there is a reasonable expectation that
2	disclosure of the technical data or computer seftware sould-
3	cause substantial harm to the commercial application of such
4	v information. The first of the state of the same of the same
5	and the company of the graph of the property of the company of the company of the company of the company of the
6	(2) A cooperative research and development agreement which
7	-provides that technical data or computer software which meets the
8	conditions of paragraph (1) obtained or generated
9	a de la companya della companya della companya della companya de la companya della companya
10	(A) by the Department of Energy or the National
11	-Laboratory pursuant to a cooperative research and
12	tive true development agreement; or the second of the seco
13	lander victoria de la medica de victoria de la completa de la completa de la completa de la completa de la comp
14	-(B) under a National Laboratory cooperative research
15	-and-development,
16	
17	shall not be disclosed to the public for a period of 2 years.
18	
19	(3) Decumentation disclosing technical data or computer
20	software subject to nondisclosure under paragraphs (1) and (2)
21	shall not be considered as agency records under the Freedom of
22	Information Act during the term of mondisclosure to the public.

1	(c) Regulations. L The Ullico of Federal Procurement
2	-Policy,] (1) The Department of Energy, in cooperation with
3	'other interested federal agencies, shall issue within 180 days
4	-after the date of encotment of this title including 30 days for
5	public comment, regulations establishing a standard contract
6	elause to implement [this] sections 407 and 400 in the
7	Department of Energy contract for the operation of any National
8	ord Laboratory. Commission of the control of the
9	ordinadas productivos de la 11 10 e a la seguidad de la Reina de la Calendaria de la Calendaria de la Calendaria
10	(2) The Office of Federal Procurement Policy shall review
11	such regulations for consistency with this Act prior to the
12	issuance of such regulations under paragraph (1).
13	strått et de de landet et fosse de et hälligt til de se det kolonit das die genolitiese (see de 2000). De land No
14	(2) In the event the Department of Energy regulations are
15	not issued within the time prescribed the sole responsibility
16	shall be transferred to the Office of Federal Procurement Policy.

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SEC. 1 209. 208. SPECIAL RULE FOR WAIVER OF GOVERNMENT LICENSE RIGHTS.--

Any of the rights of the Government or obligations of a National Laboratory described in chapter 18 of title 35, United States Code, including the license reserved in section 202 (c) (4) of title 35, United States Code, may be waived or omitted if the Secretary of Energy determines that the interests of the United States and the general public will be better served or the objectives and policies of this title will be better promoted by such waiver or omission. A waiver or omission shall be considered—

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(1) if it is necessary to obtain a uniquely or highly qualified contractor; or

(2) if invention involves cosponsored, cost sharing or joint venture research and development, and the contractor, cosponsor or joint venturer is making substantial contribution of funds, facilities or equipment to the work performed on the invention; or

(3) if the invention will require substantial additional investment in development before a product is

created and it is expected that the primary market for such

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product is the United States Government.

SEC. [210] 209. INTELLECTUAL PROPERTY CONTRACT PROVISIONS.

(a) Contract Provisions. -- Any Department of Energy ________

contract } funding agreement to operate a National laboratory
shall provide--

6 (1) that any royalties or income that is earned by the
7 manager or operator of a fither 1 National Laboratory from

manager or operator of a $\frac{1}{1}$ the $\frac{1}{2}$ National Laboratory from the licensing of laboratory-owned intellectual property rights in any fiscal year shall be used as authorized under subsection 202(c)(7)(E) of title 35, United States Code and section 13(a)(1)(B)(i)-(iv) and section 13(a)(2)-(4) of the Stevenson-Wydler Technology Innovation Act of 1980 (15)

13 U.S.C. 3710c(a)(1)(B)(i)-(iv) and 3710c(a)(2)-(4);

(2) that the costs of obtaining and protecting intellectual property rights in any invention, technical data or computer software, owned by the National Laboratory shall be paid for by f the Department of Energy to the extent not offset by royalty income earned from the licensing of National Laboratory awned intellectual property rights; the National Laboratories under standard operating funds or as a cost shared expense under a cooperative research and development agreement;

1.2

(3) that Department of Energy establish procedures to have the management of intellectual property rights, including procurement and retention of such rights as well as licensing of such rights, in connection with laboratory-owned inventions, commercially valuable technical data and computer software shall be the responsibility of the Director of the National Laboratory at which the invention, technical data, or computer software are made, developed or assigned.

appropriate regulations, orders, or directives precluding any laboratory manager or operator who has received title to intellectual property under this section from receiving money or other benefit from the use or licensing of such property for the benefit of the laboratory manager or operator, except for research and development associated with activities at the National Laboratory, to promote technology transfer as authorized by laws, or in special circumstances, as may be approved by the appropriate

(b) Compensation.--(1) Subject to paragraph (2), in return for retaining title to any intellectual property rights in any invention or discovery made in performance of a Department of Energy cooperative research agreement, the National Laboratory

contractor shall pay to the United States reasonable compensation based on the value of the technology transferred. The amount of the payment arising as a result of the transfer shall be set by an arbitration board consisting of one member selected by the contractor, one member selected by the Secretary of Energy, and one member jointly selected by the contractor and the Secretary. In determining the payment, the arbitration board shall set an amount that is proportionate with the research and development costs funded by the United States. The arbitration board shall have discretion to permit the payment to be made in installments according to the extent the contractor uses or employs the intellectual property.

1 1

(2) Provided that this subsection shall not apply if:

(A) the contractor is operating the National Laboratory for no profit or fee beyond expenses; and

(B) the contractor is offering the intellectual property for fair market value and any value or royalties the contractor derives from the intellectual property will be returned to the National Laboratory or the Federal Treasury in accordance with Section 202(c)(7)(E) of title 35, United States Code.

SEC. 1 211 210. MARCH-IN RIGHTS.

(a) Rights.--The Secretary of Energy may require the licensing to third parties of all intellectual property owned by the laboratory manager or operator that is subject to the provisions of this Act in the same manner as provided under section 203 of title 35, United States Code.

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[Each funding agreement for the operation of a National 8 Laboratory shall contain a provision allowing the Department of 9 Energy to require the licensing of the intellectual property-10 rights to third parties of inventions, technical data, or 11 software owned by the contractor that are subject to the 12 provide one of this title for any of the reasons described in 35 13 U.S.C. 203(1)(a-d). Such provision will ensure that the 14 technology is licensed and commercialized by affording dimilar-15 Federal march in rights provided for inventions under section 16 203, title 35, United States Gode, but - will be applied blo to 17 all intellectual property for which title was acquired by the 18 National Laboratory Directors under this title.] 19

1	-Regulations. [The Office of Federal Procurement
2	Tolicy,] (b) The Department of Energy, in cooperation with
3	other interested federal agencies, shall issue within 190 days
4	from enactment including thirty (30) for public comment,
5	regulations to implement the march in rights under this section.
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7	andre de la companya de la companya La companya de la co
8	(c) In the event the Department of Energy does not
9	issue the regulations referred to above in the prescribed,
10	time frame, the responsibility for issuing the regulations
11	shall be transferred to the Office of Federal Procurement
1 2	-Policy.]-

SEC. { 412 } 411. EFFECTIVE DATE. -- This title shall take effect 1 2 on the date of enactment. The Secretary of Energy shall 3 immediately enter into negotiations with the contractors of the National Laboratories to amend all existing contracts for the 4 5 operation of the National Laboratories, to reflect this Title. 6 Pending such amendment, the provisions of this title shall govern 7 the disposition of all intellectual property rights covering 8 laboratory-owned inventions, technical data, and computer 9 software, generated in performance of Department of Energy 10 contracts for the operation of the Department of Energy National 11 Laboratories.

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