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REPORT TO THE JOINT COMMITTEE  
ON ATOMIC ENERGY  
CONGRESS OF THE UNITED STATES

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Policies And Procedures Relating To  
Disposition Of Patent Rights  
By The Atomic Energy Commission

B-159687

BY THE COMPTROLLER GENERAL  
OF THE UNITED STATES

~~904259~~

MARCH 15, 1972



COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

B-159687

ER  
Dear Mr. Chairman:

1  
This is our report on policies and procedures relating to disposition of patent rights by the Atomic Energy Commission. The review was made in accordance with your request of July 8, 1971.

The contents of the report have been discussed with representatives of the Atomic Energy Commission, and the Commission's comments have been incorporated into the report. As agreed with your Committee, copies of this report are being sent to the Atomic Energy Commission.

We plan to make no further distribution of this report unless copies are specifically requested, and then we shall make distribution only after your agreement has been obtained or public announcement has been made by you concerning the contents of the report.

Sincerely yours,

A handwritten signature in black ink, appearing to read "James B. Axtell".

Comptroller General  
of the United States

The Honorable John O. Pastore, Chairman  
Joint Committee on Atomic Energy  
Congress of the United States

## C o n t e n t s

|                                                                                                              | <u>Page</u> |
|--------------------------------------------------------------------------------------------------------------|-------------|
| DIGEST                                                                                                       | 1           |
| CHAPTER                                                                                                      |             |
| 1 INTRODUCTION                                                                                               | 5           |
| 2 NEED FOR IMPROVED INTERNAL MANAGEMENT CONTROLS OVER GRANTING OF EXCLUSIVE PATENT RIGHTS TO AEC CONTRACTORS | 11          |
| Disposition of 1966, 1970, and 1971 patent cases where exclusive rights were obtained by contractors         | 13          |
| Dispositions of patent rights pursuant to contract provisions                                                | 14          |
| Negotiated settlement                                                                                        | 15          |
| Inactivated cases                                                                                            | 17          |
| Administrative determination                                                                                 | 17          |
| Bases for decisions under which contractors obtained exclusive rights indeterminable                         | 19          |
| Naval reactor cases                                                                                          | 21          |
| Procedures established for processing inventions resulting from naval reactor program                        | 25          |
| Conclusions                                                                                                  | 27          |
| Recommendations                                                                                              | 28          |
| 3 CONTROLS OVER INVENTIONS IN FIELD OF ATOMIC ENERGY                                                         | 29          |
| Inventions referred to AEC by Patent Office                                                                  | 30          |
| Controls over exclusive rights to certain inventions                                                         | 32          |
| AEC's use of march-in provisions                                                                             | 33          |
| AEC follow-up procedures on march-in provisions                                                              | 35          |
| Recommendations                                                                                              | 36          |
| 4 ALLOWABILITY OF CONTRACTOR PATENT COSTS                                                                    | 37          |
| 5 SCOPE OF REVIEW                                                                                            | 39          |

APPENDIX

Page

|     |                                                                                                   |    |
|-----|---------------------------------------------------------------------------------------------------|----|
| I   | Letter of July 8, 1971, from Chairman,<br>Joint Committee on Atomic Energy                        | 41 |
| II  | Presidential Memorandum and Statement of<br>Government Patent Policy issued Octo-<br>ber 10, 1963 | 42 |
| III | AEC procurement regulations relating to<br>patent provisions                                      | 47 |
| IV  | Presidential Memorandum and Statement of<br>Government Patent Policy issued Au-<br>gust 23, 1971  | 50 |

ABBREVIATIONS

|     |                            |
|-----|----------------------------|
| AEC | Atomic Energy Commission   |
| DNR | Division of Naval Reactors |
| GAO | General Accounting Office  |

D I G E S T

WHY THE REVIEW WAS MADE

Each year hundreds of patents are issued on inventions developed under Atomic Energy Commission (AEC) contracts. In each case AEC determines the patent rights to be obtained by the contractor that developed the invention and the rights to be obtained by the Government.

At the request of the Joint Committee on Atomic Energy, the General Accounting Office (GAO) examined into AEC's patent policies and procedures for determining the disposition of rights to patented inventions developed under its contracts. (See app. I.)

FINDINGS AND CONCLUSIONS

Under the provisions of the Atomic Energy Act of 1954, inventions useful in the field of atomic energy that are made or conceived under AEC contracts are the property of AEC. The act provides, however, that AEC may waive its claim to inventions under such circumstances as it considers appropriate, consistent with the policy of the applicable section of the act. The act contains no provisions related to patents or inventions made or conceived under AEC contracts which do not relate to the field of atomic energy. (See p. 5.)

AEC has developed and implemented regulations under which contractors may obtain exclusive patent rights in certain circumstances. AEC's current regulations are consistent, in our opinion, with the provisions of the act and the Presidential Statement of Government Patent Policy of 1963. (See app. II.)

AEC obtained rights to about 3,704 patents issued during fiscal years 1961 through 1971. These primarily included (1) patents relating to inventions made, conceived, reduced to actual practice, or utilized under AEC contracts and (2) patents in which disputes as to whether the inventions resulted from work performed under AEC contracts had been resolved through negotiated settlement.

Of these 3,704 patents, AEC obtained all exclusive rights in 2,823 cases. In 448 cases AEC's rights were limited to nonexclusive licenses to use the patented inventions for Government purposes. In 433 cases AEC obtained exclusive rights in the field of atomic energy and nonexclusive licenses for Government purposes for uses outside the field of atomic energy.

MARCH 15, 1972

Thus contractors (or inventors) obtained some form of exclusive rights in 881 cases, or about 24 percent of the total. AEC advised GAO that 60 of these cases involved inventions made or conceived by contractors prior to the effective dates of the contracts involved and that AEC therefore was entitled to obtain only nonexclusive licenses. In addition, according to AEC exclusive rights were obtained by contractors in 243 of the cases pursuant to contract patent provisions. (See p. 12.)

Since fiscal year 1966 the number of cases in which contractors have obtained exclusive patent rights has decreased substantially. For example, in fiscal year 1971 such patents represented only about 11 percent of the total. GAO's review did not identify any specific policy or procedural revisions by AEC which would explain fully the reasons for the decrease, but the following factors might have contributed:

- AEC's procurement regulations were revised in 1964 to implement the Presidential Statement of Government Patent Policy, and new criteria for granting contractors exclusive patent rights were established.
- Procedures, which were established by the AEC Division of Naval Reactors in 1966 and revised in 1968, provided for the Division to be consulted on patent dispositions relating to its programs. After implementation of these procedures, the Division consistently had opposed granting contractors exclusive rights to inventions made or conceived in the naval reactor program. Through fiscal year 1971 contractors had not obtained exclusive rights to such inventions after implementation of the revised 1968 procedures. (See p. 19.)

Under AEC delegations of authority, the Assistant General Counsel for Patents has not been required to obtain comments from cognizant Headquarters program divisions prior to granting contractors exclusive patent rights. Also such actions have not been required to be reviewed at higher levels within AEC.

AEC has not followed the practice of formally documenting the bases for decisions under which contractors obtained exclusive patent rights. GAO reviewed 189 cases involving patents issued in fiscal years 1966, 1970, and 1971, in which contractors obtained some form of exclusive patent rights. For most of these cases, GAO could determine from AEC records, with reasonable certainty, the bases for the patent rights dispositions. In 40 cases, however, documentation in the individual case files was not sufficient to enable GAO to make such determinations. (See p. 11.)

Under the provisions of section 152 of the Atomic Energy Act, the Patent Office is responsible for identifying and referring to AEC all patent applications which appear to disclose inventions useful in the field of atomic energy, to protect the Government's interest in inventions developed under AEC contracts. AEC and the Patent Office have established procedures pursuant to this section, which are designed to ensure that the Government's interests in such inventions are protected. (See p. 30.)

In certain cases AEC obtains the right to follow up on the use made of an invention to which a contractor has obtained exclusive patent rights.

If the invention has not been used or licensed after 3 years, AEC retains the right to require the granting of nonexclusive licenses to others at any time thereafter. (See p. 32.)

AEC has not taken actions to publicize the availability of nonexclusive licenses in those cases where it has found that contractors have not taken effective steps to use or license inventions to which they have obtained exclusive patent rights. AEC informed GAO in January 1972 that, because of staff shortages for about the past 2 years, follow-up actions had not been taken systematically to ascertain the uses made of such inventions. Subsequently AEC reinstated procedures providing for such follow-up actions. (See p. 35.)

GAO's review of AEC audits of three cost-type contracts revealed that, for one contract, certain patent costs which required the express approval of the contracting officer had not been questioned by the auditors even though the costs had not been approved by the contracting officer. AEC informed GAO that such costs would be questioned in its current audit and that patent costs allowed in prior years were being reviewed to determine whether a refund should be requested from the contractor. (See p. 38.)

#### RECOMMENDATIONS OR SUGGESTIONS

AEC should require that:

- The bases for decisions which result in contractors' obtaining exclusive patent rights be formally documented in all cases.
- Comments be obtained from the AEC Headquarters program divisions having cognizance over the contracts or activities involved, before finalizing decisions to grant contractors exclusive patent rights not required under contract provisions.
- Decisions to grant contractors exclusive patent rights not required under contract provisions receive additional review at higher levels within AEC. (See p. 28.)
- The availability of nonexclusive licenses be published when AEC's follow-up procedures disclose that contractors have not used or licensed inventions to which they have obtained exclusive patent rights. (See pp. 28 and 36.)

#### AGENCY ACTIONS AND UNRESOLVED ISSUES

AEC accepted GAO's recommendations and issued instructions to implement them. (See pp. 28 and 36.)

## CHAPTER 1

### INTRODUCTION

The Atomic Energy Act of 1954, as amended (42 U.S.C. 2181), and the Presidential Statement of Government Patent Policy, dated October 10, 1963 (see app. II), provide the bases for the Atomic Energy Commission's patent policies and procedures. Section 152 of the Atomic Energy Act of 1954, as amended, provides, in part, that:

"Any invention or discovery, useful in the production or utilization of special nuclear material or atomic energy, made or conceived in the course of or under any contract, subcontract, or arrangement entered into with or for the benefit of the Commission, regardless of whether the contract, subcontract, or arrangement involved the expenditure of funds by the Commission, shall be vested in, and be the property of, the Commission, except that the Commission may waive its claim to any such invention or discovery under such circumstances as the Commission may deem appropriate, consistent with the policy of this section."

The guidance provided by this section of the act has been supplemented by the Presidential Statement of Government Patent Policy dated October 10, 1963 (hereinafter referred to as the Presidential memorandum of 1963),<sup>1</sup> which provides guidelines as to the circumstances under which rights to patents developed under Government contracts may be granted to contractors.

To implement the provisions of the Atomic Energy Act and the Presidential memorandum of 1963, AEC procurement regulations provide for the following three basic types of

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<sup>1</sup>The Presidential memorandum of 1963 was revised on August 23, 1971. (See app. IV.) At the time of our review, which was completed in January 1972, AEC had not modified its patent policies or procedures to incorporate the revised memorandum because the General Services Administration had not issued implementing regulations.

patent provisions to be inserted in AEC contracts. Each of these provisions is to be used under certain specific circumstances.

Type A--"\*\*\* the Commission shall have the sole power to determine \*\*\* the disposition of the title to and rights in and to any invention or discovery and any patent application or patent that may result."

Type B--"\*\*\* the Commission shall have the sole power to determine \*\*\* the disposition of the title to and the rights in and to any invention or discovery and any patent application or patent that may result; provided, however, that the contractor, in any event, shall retain at least a non-exclusive, irrevocable, royalty-free license under said invention, discovery, patent application, or patent."

Type C--"\*\*\* the Commission shall have the sole power to determine \*\*\* the disposition of the title to and rights in and to any invention or discovery and any patent application or patent that may result; provided, however, that the contractor in any event shall retain at least a sole (except as against the Government on its account), irrevocable, royalty-free license with the sole right to grant sublicenses, under said invention, discovery, patent application or patent, such license and sublicensing rights being limited to the manufacture, use and sale for purposes other than use in the production or utilization of special nuclear material or atomic energy."

Only the type C patent provision specifically provides for contractors to obtain<sup>1</sup> exclusive rights to the use of inventions made or conceived under AEC contracts. Even in such cases the Government is entitled to obtain the right to use the inventions for its own purposes on a royalty-free basis. Also the type C provision does not provide for contractors to obtain any rights with respect to the use of inventions in the production or utilization of special nuclear material or atomic energy (hereinafter referred to as the field of atomic energy).

In practice AEC has used several variations of these patent provisions in its contracts. The particular patent provisions to be included in each contract is determined primarily by (1) the character of the work to be performed under the contract, such as research and development, routine development, construction, supply, or quantity production, and (2) the industrial and patent position of the contractor in the field of the contract. The specific criteria for the use of each patent provision, which are consistent with the Presidential memorandum of 1963, are contained in the AEC procurement regulations. (See app. III.)

In addition to the above-described patent provisions, certain AEC contracts include background patent provisions. Under such provisions the Government, as represented by AEC, obtains a nonexclusive, irrevocable, royalty-free license to use inventions--which are patented or are the subject of patent applications--made or conceived prior to the effective date of the contract but which are either reduced to actual practice or utilized as part of the work performed under the contract. The purpose of such provisions is to

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<sup>1</sup> Depending on the circumstances several terms may be used to describe the disposition of various types of patent rights, such as "accord," "retain," "acquire," "grant," or "obtain." For ease of expression in this report, however, two terms are used without intending any particular legal connotation. "Obtain" is used to describe patent rights vested in AEC or contractors. "Grant" is used in those cases where contractors obtain some form of exclusive patent rights although not required under the contracts.

protect the Government's investment in any work directed toward the development, improvement, or use of such inventions.

There are various circumstances under which AEC contractors have obtained some type of exclusive patent rights. For example, such rights have been obtained (1) pursuant to type C patent provisions contained in contracts, (2) to inventions which AEC believed did not have sufficient potential usefulness to warrant its filing for a patent, and (3) when disputes have arisen as to whether the inventions were, in fact, made or conceived under AEC contracts. In addition, when background patent provisions are involved, contractors obtain exclusive rights to inventions made or conceived prior to the effective dates of the contracts but AEC receives nonexclusive licenses.

Under present AEC regulations AEC may make administrative determinations to grant contractors exclusive rights where such rights were not specifically provided for under the contracts. Prior to December 15, 1964, AEC procurement regulations contained no specific provisions relating to such administrative determinations. The AEC Assistant General Counsel for Patents informed us that prior to this date such determinations were made by considering (1) the circumstances under which an invention was conceived and (2) whether the circumstances met the criteria normally applied in deciding to include a type C patent provision in a contract.

On December 15, 1964, the AEC procurement regulations were revised to incorporate an additional provision whereby contractors could be granted exclusive rights even though such rights were not specified under the patent provisions included in their contracts. This provision stipulated that such rights could be granted after an invention or discovery had been identified and reported, provided that the criteria normally applied in deciding to include a type C patent provision in a contract were met or:

"\*\*\* the accord of greater rights is a necessary incentive to call forth private risk capital and expense to bring the invention to the point of practical application or where the equities warrant such action."

Also on December 15, 1964, the AEC procurement regulations were revised to change the criteria under which a type C patent provision would be included in AEC contracts. This revision was made to incorporate the criteria contained in the Presidential memorandum of 1963.

The Assistant General Counsel for Patents has been delegated responsibility for the administration of AEC's patent policies and procedures. The AEC manual states that:

"\*\*\* Within the framework of the policies established by the General Counsel he [the Assistant General Counsel for Patents] has authority to act finally on all domestic and foreign patent matters that do not require a basic change of Commission policy, subject to review by the General Counsel on all matters going to the Office of the General Manager or the Commission as well as nonroutine matters involving consultation or coordination with other agencies of the Government."

The AEC organization for handling patent matters is composed of a Headquarters staff, designated as the Office of the Assistant General Counsel for Patents, and eight field patent groups. The Assistant General Counsel for Patents serves as Chairman of the Executive Subcommittee of the Committee on Government Patent Policy, Federal Council for Science and Technology, and he also serves as vice chairman of the full committee. AEC pointed out that the Assistant General Counsel participated in the development of the Presidential memoranda of 1963 and 1971 on Government patent policy.

Both the Office of the Assistant General Counsel for Patents and the field patent groups include patent attorneys and advisors who are considered by AEC to be experts in patent law and related technical matters. The Headquarters staff comprises eight patent attorneys and a technical consultant with 15 supporting personnel, including two patent interns. Each field patent group includes from one to seven patent attorneys and advisors and a supporting staff.

Guidance and interpretation of AEC's policies and procedures are provided to the field patent groups by the Headquarters staff, through formal and informal communications and meetings with field patent groups.

Generally AEC's patent process begins when an inventor discharges his contractual responsibility of reporting inventions and discoveries to AEC by submitting a preliminary invention disclosure to an AEC field patent group. The number of such disclosures has ranged between 1,100 and 1,700 annually in recent years.

Each invention disclosure, which describes the concept of the possibly unique process or invention, is reviewed by the field patent group and forwarded to Headquarters, together with the field patent group's recommendations as to the patentability of the invention and whether a patent application should be filed by AEC. The field patent groups also make recommendations as to the disposition of patent rights.

The determination to file a patent application is arrived at by Headquarters generally on the basis of (1) patentability of the concept and (2) applicability of the concept to AEC programs. If Headquarters determines that these criteria are met, a patent search is conducted to ensure that the prime requisite of patentable novelty is present. The filing of the patent application and the issuance of the patent by the Department of Commerce, Commissioner of Patents, Patent Office, usually takes about 3 years.

## CHAPTER 2

### NEED FOR IMPROVED INTERNAL MANAGEMENT CONTROLS OVER

### GRANTING OF EXCLUSIVE PATENT RIGHTS TO AEC CONTRACTORS

The regulations established by AEC for determining the disposition of rights to patents resulting from work performed under AEC contracts are, in our opinion, consistent with the provisions of the Atomic Energy Act of 1954, as amended, and the Presidential memorandum of 1963. We believe, however, that there is a need for AEC to improve its internal management controls relating to the granting of exclusive rights to patents arising from AEC contracts.

Under AEC delegations of authority, AEC has not required that the Assistant General Counsel for Patents obtain comments from cognizant Headquarters program divisions prior to granting exclusive patent rights to contractors. Also such actions have not been required to be reviewed at higher levels within AEC.

AEC has not followed the practice of formally documenting the bases for decisions under which contractors obtain exclusive patent rights. For most of the 189 cases included in our review in which contractors obtained some form of exclusive patent rights--involving patents issued in fiscal years 1966, 1970, and 1971--we could determine from AEC records, with reasonable certainty, the bases for the patent rights dispositions. In 40 cases, however, documentation in the individual case files was not sufficient to enable us to make such determinations.

By analyzing records made available to us and information provided to the Joint Committee on Atomic Energy by AEC, we developed the following estimates of patent rights dispositions relating to patents issued during fiscal years 1961 through 1971. These primarily included (1) patents resulting from work performed under AEC contracts, (2) patents in which AEC had obtained a nonexclusive license pursuant to contractual background patent provisions, and (3) patents involving inventions in which disputes as to whether the inventions resulted from work performed under

AEC contracts had been resolved through negotiated settlement. We have not included patents obtained under international agreements.

| Rights disposition                                                                                                   | Fiscal year in which patent issued |            |            |            |            |            |            |            |            |            |            | Total                  |
|----------------------------------------------------------------------------------------------------------------------|------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------------------|
|                                                                                                                      | 1961                               | 1962       | 1963       | 1964       | 1965       | 1966       | 1967       | 1968       | 1969       | 1970       | 1971       |                        |
| Contractor or inventor did not obtain exclusive rights:                                                              |                                    |            |            |            |            |            |            |            |            |            |            |                        |
| No rights obtained by contractor                                                                                     | 204                                | 229        | 177        | 181        | 212        | 202        | 315        | 265        | 225        | 220        | 241        | 2,471                  |
| Contractor obtained nonexclusive license                                                                             | <u>27</u>                          | <u>38</u>  | <u>38</u>  | <u>36</u>  | <u>37</u>  | <u>24</u>  | <u>36</u>  | <u>39</u>  | <u>27</u>  | <u>19</u>  | <u>31</u>  | <u>352</u>             |
| Total                                                                                                                | <u>231</u>                         | <u>267</u> | <u>215</u> | <u>217</u> | <u>249</u> | <u>226</u> | <u>351</u> | <u>304</u> | <u>252</u> | <u>239</u> | <u>272</u> | <u>2,823</u>           |
| Contractor or inventor obtained some form of exclusive rights:                                                       |                                    |            |            |            |            |            |            |            |            |            |            |                        |
| AEC obtained nonexclusive license for Government purposes                                                            | 44                                 | 50         | 68         | 54         | 39         | 65         | 46         | 22         | 24         | 23         | 13         | 448                    |
| AEC obtained exclusive rights in field of atomic energy and nonexclusive license in non-atomic-energy-related fields | <u>33</u>                          | <u>58</u>  | <u>51</u>  | <u>44</u>  | <u>55</u>  | <u>50</u>  | <u>45</u>  | <u>34</u>  | <u>25</u>  | <u>18</u>  | <u>20</u>  | <u>433</u>             |
| Total                                                                                                                | <u>77</u>                          | <u>108</u> | <u>119</u> | <u>98</u>  | <u>94</u>  | <u>115</u> | <u>91</u>  | <u>56</u>  | <u>49</u>  | <u>41</u>  | <u>33</u>  | <u>881<sup>a</sup></u> |
| Total                                                                                                                | <u>308</u>                         | <u>375</u> | <u>334</u> | <u>315</u> | <u>343</u> | <u>341</u> | <u>442</u> | <u>360</u> | <u>301</u> | <u>280</u> | <u>305</u> | <u>3,704</u>           |
| Percentage of cases in which contractor or inventor obtained some form of exclusive rights                           | <u>25</u>                          | <u>29</u>  | <u>36</u>  | <u>31</u>  | <u>27</u>  | <u>34</u>  | <u>21</u>  | <u>16</u>  | <u>16</u>  | <u>15</u>  | <u>11</u>  | <u>24</u>              |

<sup>a</sup>AEC advised us that 60 of these cases involved background patent provisions relating to inventions made or conceived by contractors prior to the effective dates of the contracts and that, therefore, AEC was only entitled to obtain nonexclusive licenses. AEC stated also that, in 243 of the cases, contractors obtained exclusive rights in accordance with contract patent provisions.

The table shows that the number and percentage of cases in which some form of exclusive patent rights were obtained by contractors or inventors (hereinafter referred to as contractor) declined substantially since fiscal year 1966. We selected for examination patents issued during fiscal years 1966, 1970, and 1971 in which the contractor obtained some form of exclusive rights. We selected fiscal year 1966 patents because contractors obtained exclusive rights to a greater percentage of the patents issued that year than any other year in the past 8 fiscal years. Fiscal years 1970 and 1971 were selected because these were the latest years for which information was available.

DISPOSITION OF 1966, 1970, AND 1971  
PATENT CASES WHERE EXCLUSIVE RIGHTS  
WERE OBTAINED BY CONTRACTORS

AEC has not followed the practice of formally documenting the bases for decisions under which contractors obtain exclusive patent rights. As a result, in determining the bases for patent rights dispositions in the cases we reviewed, it was necessary for us to review individual case files containing such data as recommendations from field patent groups and correspondence with contractors. In addition, we reviewed available records of patent provisions included in applicable contracts and, in some cases, discussed the reasons for dispositions with the Assistant General Counsel for Patents.

For most of the cases included in our review we were able to identify, with reasonable certainty, the bases for the dispositions made, as shown in the following table.

| Fiscal<br>year | Total cases<br>where some<br>form of<br>exclusive<br>rights were<br>obtained<br>by AEC<br>contractors | Basis for disposition              |                                   |                                    |                  |                                           |                     |
|----------------|-------------------------------------------------------------------------------------------------------|------------------------------------|-----------------------------------|------------------------------------|------------------|-------------------------------------------|---------------------|
|                |                                                                                                       | In accordance<br>with contract     |                                   | Negoti-<br>ated<br>settle-<br>ment | Inacti-<br>vated | Adminis-<br>trative<br>deter-<br>mination | Indeter-<br>minable |
|                |                                                                                                       | Type C<br>patent<br>provi-<br>sion | Back-<br>ground<br>provi-<br>sion |                                    |                  |                                           |                     |
| 1966           | 115                                                                                                   | 33                                 | 17                                | 9                                  | 18               | 7                                         | 31                  |
| 1970           | 41                                                                                                    | 7                                  | 12                                | 5                                  | 4                | 9                                         | 4                   |
| 1971           | 33                                                                                                    | 16                                 | 7                                 | 1                                  | 3                | 1                                         | 5                   |
|                | <u>189</u>                                                                                            | <u>56</u>                          | <u>36</u>                         | <u>15</u>                          | <u>25</u>        | <u>17</u>                                 | <u>40</u>           |

Dispositions of patent rights  
pursuant to contract provisions

In 38 of the 56 cases in which contractors obtained exclusive rights pursuant to type C patent provisions, these rights were limited to use of the inventions in non-atomic-energy-related fields and AEC obtained exclusive rights in the field of atomic energy. In the other 18 cases, AEC did not obtain exclusive rights in the field of atomic energy because the varieties of type C provisions included in the contracts did not provide for obtaining such rights in certain cases. For example, one such contract patent provision provided that:

"Whenever any invention or discovery, useful in the production or utilization of special nuclear material or atomic energy is made or conceived by [the contractor] or its employees in the course of, in connection with or in the performance of the work under this contract, the Commission shall have the power to determine the disposition as between [the contractor] and the Government of title to and the rights under any application or patent that may result; provided, however, that [the contractor] in any event, shall retain at least a sole (except as against the Government or its account), irrevocable, royalty-free license, with the sole right to grant sublicenses and with a right to institute actions against infringers and to discontinue such actions, under said invention, discovery, application or patent, such license being limited to the manufacture, use and sale for purposes other than use in the production or utilization of special nuclear material or atomic energy. Subject to the license retained by [the contractor], as provided in this section, the judgment of the Commission on these matters shall be accepted as final; and [the contractor], for itself and for its employees, agrees that the inventor or inventors will execute all documents and do all things necessary or proper to carry out the judgment of the Commission.

"Whenever any invention or discovery, relating to fields other than those useful in the production or utilization of special nuclear material or atomic energy (which other field shall include, without limitations, computer and electronic data processing machines and systems and components thereof) is made or conceived [by the contractor or his employees] in the course of, in connection with or in the performance of the work under this contract, [the contractor] shall retain all right, title and interest in and to any such inventions, subject to an irrevocable, royalty-free nonexclusive license to the Government for governmental purposes." (Underscoring supplied.)

Because the above provision defines computer and electronic data processing machines and systems and components as relating to fields other than atomic energy, AEC could not obtain any exclusive rights to such inventions.

In 36 cases AEC exercised its rights under the background patent provision to obtain nonexclusive licenses for Government purposes. Under background patent provisions AEC ordinarily has the right to obtain such licenses to inventions made or conceived prior to the effective date of the contract, if such inventions are reduced to actual practice or utilized as part of the work performed under the contract.

#### Negotiated settlement

Under the provisions of section 152 of the Atomic Energy Act of 1954, as amended, the Patent Office is responsible for identifying and referring to AEC all patent applications which appear to disclose inventions useful in the field of atomic energy. (See p. 5.)

In some cases, after such referrals, disputes arose with patent applicants as to whether the inventions were, in fact, conceived under AEC contracts. Such disputes are sometimes settled by compromise through negotiation. In 14 cases included in our review, AEC obtained nonexclusive licenses pursuant to such settlements and the applicants or contractors obtained the balance of the rights. In one

other case, pursuant to negotiation, AEC exchanged a non-exclusive license in an invention developed under an AEC contract for a nonexclusive license in a private invention when the inventions appeared to relate to common patentable subject matter.

### Inactivated cases

When AEC does not desire to file a patent application on a reported invention and the contractor desires to undertake the filing at his own expense, the contractor may be granted the right to file for a patent and secure rights on the basis of the facts of the particular case. Among the cases in which AEC normally is not interested in filing for a patent are:

1. Minor and obvious variations of hardware components.
2. Suggestions for merely doing one's job better.
3. One-shot devices for scientific research, which neither the Government nor anyone else is ever likely to build a second time.
4. Inventions which have insufficient application in the field of atomic energy to warrant filing by AEC.

In 25 of the cases we reviewed, the contractors had indicated a desire to file patent applications at their own expense after AEC had made technical determinations that it would not be in AEC's interest to file. In each of these cases, AEC obtained at least a nonexclusive license to use the invention for Government purposes. Also in four of these cases, AEC obtained exclusive rights in the field of atomic energy.

### Administrative determination

As discussed on page 8, AEC may, by administrative determination, grant contractors greater patent rights than those provided for in their contracts. The following table shows the types of exclusive patent rights granted through administrative determination for the cases included in our review.

| <u>Rights granted</u>                                                                                                                                                                                                  | Number of<br><u>cases</u> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Contractor was granted exclusive rights subject to a nonexclusive license to AEC for Government purposes                                                                                                               | 1                         |
| Contractor was granted exclusive rights except in field of atomic energy--AEC obtained exclusive rights in field of atomic energy and nonexclusive license for Government purposes in non-atomic-energy-related fields | <u>16</u>                 |
|                                                                                                                                                                                                                        | <u>17</u>                 |

Our review of documentation contained in the patent files indicated that these determinations were made for the following reasons.

| <u>Reason</u>                                                                                                                                                       | Number of<br><u>cases</u> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Contractor had acquired technical competence, and the invention was related to an area in which the contractor had an established industrial or commercial position | 12                        |
| Granting of greater rights was a necessary incentive to call forth private risk capital and expense to bring the invention to the point of practical application    | 1                         |
| Equities warranted such action                                                                                                                                      | <u>4</u>                  |
|                                                                                                                                                                     | <u>17</u>                 |

Bases for decisions under  
which contractors obtained  
exclusive rights indeterminable

For 40 of the cases we reviewed, the documentation in the individual case files was not sufficient to enable us to determine the bases for the decisions under which contractors obtained exclusive patent rights.

The following table shows the types of rights obtained in these 40 cases.

| <u>Disposition of patent rights</u>                                                                                                                                                                                  | <u>Number of patent cases</u> |             |             |              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------|-------------|--------------|
|                                                                                                                                                                                                                      | <u>1966</u>                   | <u>1970</u> | <u>1971</u> | <u>Total</u> |
| Contractor obtained exclusive rights subject to a nonexclusive license to AEC for Government purposes                                                                                                                | 12                            | 0           | 0           | 12           |
| Contractor obtained exclusive rights except in field of atomic energy-- AEC obtained exclusive rights in field of atomic energy and nonexclusive license for Government purposes in non-atomic-energy-related fields | <u>19</u>                     | <u>4</u>    | <u>5</u>    | <u>28</u>    |
|                                                                                                                                                                                                                      | <u>31</u>                     | <u>4</u>    | <u>5</u>    | <u>40</u>    |

Since fiscal year 1966 the number of cases in which exclusive patent rights have been obtained by contractors has decreased substantially. Our review did not identify any specific policy or procedural revisions by AEC which would fully explain the reasons for this decrease. In 1964, however, the AEC procurement regulations were revised to include, for the first time, criteria for making administrative determinations.

The Assistant General Counsel for Patents advised us that the criteria for including a type C provision in a contract also were revised in 1964 and made generally more restrictive. Under these criteria a contractor is required to have an established nongovernmental commercial position to obtain a type C patent provision in his contract, whereas the former requirement was that a contractor have an

established commercial position whether governmental or nongovernmental. We were advised that this revision also affected the criteria for making administrative determinations because the existence of an established commercial position by a contractor formed the basis for granting of exclusive patent rights in some cases.

As discussed in the following section, the AEC Division of Naval Reactors (DNR) developed procedures in 1966 and 1968 providing for it to be consulted on patent dispositions relating to its programs. Since 1968 DNR has taken several actions to oppose granting contractors exclusive rights to patents resulting from naval reactor programs, and contractors have not obtained exclusive rights to such patents since that time.

The Assistant General Counsel for Patents has advised us that the 1964 revisions to the AEC procurement regulations have been applied in determining patent rights dispositions to inventions conceived since that time. Therefore the revisions to the procurement regulations, together with the increased involvement by DNR, may have contributed to the reduction that occurred in the number of cases in which contractors obtained exclusive patent rights.

## NAVAL REACTOR CASES

During the naval nuclear propulsion program hearings before the Joint Committee on Atomic Energy in March 1971, the Director of DNR stated that AEC was giving rights to contractors for patents developed under AEC contracts. In this regard the Director stated:

"Despite the intent of Congress in establishing the patent provisions of the Atomic Energy Act, I have found that in practice the Atomic Energy Commission actually gives away to its contractors the rights to many patents developed under Commission contracts. This is done by waiving the Commission's statutory and contractual rights to these patents.

"Several years ago I found that some of the contractors were being given exclusive rights to patents developed in the naval nuclear program. I wrote several memorandums to express my disagreement with the practice and requested that I be consulted on any patent matters relating to my program. A procedure was established whereby I was supposed to be consulted, yet I continue to find actions being taken on patent matters relating to my program without my knowledge, and rights to patents being given away without my knowledge."

\* \* \* \* \*

"\*\*\* If my organization had been involved in these dealings, the rights to these patents would not have been given away. In a few cases where the Commission had allowed my contractors to have exclusive patent rights, we went back and had the contractor assign these patents to the Commission. The contractor knew he should not have received exclusive rights to these patents and he gave them back without much fuss."

Our review showed that contractors obtained some form of exclusive rights to 85 of the 206 patents cited during the hearings, as shown in the following table.

| <u>Rights disposition</u>                                                                                                                                                                                           | <u>Number of patents</u> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Contractor obtained exclusive rights subject to a nonexclusive license to AEC for Government purposes                                                                                                               | 46                       |
| Contractor obtained exclusive rights except in field of atomic energy--AEC obtained exclusive rights in field of atomic energy and nonexclusive license for Government purposes in non-atomic-energy-related fields | <u>39</u>                |
|                                                                                                                                                                                                                     | <u>85</u>                |

In all but two of these cases, agreements under which the contractors obtained exclusive patent rights were signed before fiscal year 1966, as shown in the following table.

| <u>Fiscal year</u> | <u>Number of patents in which exclusive rights were obtained by contractors</u> |
|--------------------|---------------------------------------------------------------------------------|
| Before 1961        | 26                                                                              |
| 1961               | 10                                                                              |
| 1962               | 8                                                                               |
| 1963               | 24                                                                              |
| 1964               | 10                                                                              |
| 1965               | 5                                                                               |
| 1968               | <u>2</u>                                                                        |
|                    | <u>85</u>                                                                       |

The patents involved in all but three of these cases related to work performed at two Government-owned, contractor-operated laboratories--Bettis Atomic Power Laboratory, Pittsburgh, Pennsylvania; and Knolls Atomic Power Laboratory, Schenectady, New York. AEC's contracts with both Bettis and Knolls incorporate the type A patent provision. We were advised by DNR that there were contracts related to the field of atomic energy funded by the Department of the Navy at these locations and at one other location. The contracts included both basic Armed Services

Procurement Regulations patent provisions and provisions for inventions relating to the field of atomic energy.

We were advised, in regard to the two cases in which the license agreements were signed in 1968, that the inventions were conceived in the naval reactor program under a Navy contract. The contract provided that the contractor receive exclusive rights to inventions considered to be non-atomic-energy related. Documentation in the files of the Assistant General Counsel for Patents showed that, for both these cases, the exclusive rights were obtained by the contractor under the contract provisions on the basis that the inventions were non-atomic-energy related.

DNR advised us that in June 1970 it initiated actions which resulted in acquiring the titles and exclusive rights to 32 pending patent applications and six issued patents, all of which related to work performed by one contractor. The 32 pending patent applications were in various stages of prosecution, and no disposition of rights had been finalized. The disposition of rights to two of the six issued patents also had not been settled at the time DNR initiated its action, even though these patents had been issued to the contractor in 1968 and 1969.

With regard to the other four issued patents, the AEC Assistant General Counsel for Patents advised us that, during the period from June 1966 through September 1968, he had agreed to grant the contractor some exclusive rights in one case and had indicated that granting some exclusive rights appeared to be acceptable in the other three cases. Following a request by DNR in June 1970, the Assistant General Counsel for Patents informed DNR of the status of the three latter cases. DNR stated that, prior to June 1970, it had not been consulted on the disposition of rights to these four patents.

AEC records showed that, in the latter part of 1970, the contractor submitted two assignments to AEC covering the titles and exclusive rights to the 32 patent applications and six issued patents. The assignments were accepted by AEC in January 1971.

Because, through fiscal year 1971, no exclusive patent rights to inventions conceived under the naval reactor program had been obtained by contractors since fiscal year 1965, except as discussed above, and because formal documentation had not been maintained by the Assistant General Counsel for Patents in support of patent rights dispositions, we did not conduct a detailed examination to determine the basis for each disposition of exclusive patent rights in the naval reactor program. Data provided to the Joint Committee on Atomic Energy by AEC in December 1971 showed, however, that the dispositions were made on the following basis.

| <u>Basis for disposition</u>                                   | <u>Number<br/>of<br/>patents</u> |
|----------------------------------------------------------------|----------------------------------|
| Administrative determination                                   | 46                               |
| Section 152 settlement                                         | 14                               |
| Closed by AEC--inventor or contractor filed for patent         | 13                               |
| Special contracts and contracts with other Government agencies | 10                               |
| Type C patent clause in the contract                           | <u>1</u>                         |
|                                                                | <u>84<sup>a</sup></u>            |

<sup>a</sup>The basis for disposition for one patent which had expired was not shown.

PROCEDURES ESTABLISHED FOR  
PROCESSING INVENTIONS RESULTING  
FROM NAVAL REACTOR PROGRAM

In a letter dated October 5, 1966, the Director of DNR advised the Assistant General Counsel for Patents that he had reviewed the disposition of rights in patents resulting from the contractor's operation of the Bettis laboratory. He stated that he did not agree that AEC should give the contractor rights to patents resulting from Bettis inventions and that he believed DNR should be consulted in the disposition of rights to patents resulting from work under its cognizance. The Director stated also that he would like to be informed in advance whenever the Assistant General Counsel for Patents intended to grant a contractor greater rights than those recommended by DNR.

A representative of DNR advised us that, as a result of the Director's concern, the Manager of the Pittsburgh Naval Reactors Office had established procedures for reviewing final patent applications and for making recommendations regarding disposition of rights on each Bettis patent application. After his review the Manager of the Pittsburgh Naval Reactors Office forwards the application, together with his recommendations for disposition of rights, to the Assistant General Counsel for Patents through DNR. Prior to submitting the data to the Assistant General Counsel, DNR checks the application, mainly for classification purposes and to ensure that the application is thorough and complete.

In a letter dated November 15, 1968, DNR informed the Managers of the Pittsburgh and Schenectady Naval Reactors Offices that its position on patent matters was that all titles and rights to patents issued as a result of work performed by contractors and subcontractors under the cognizance of DNR were to be retained by the Government. Both field offices were advised that, to ensure that this policy was effectively implemented, all correspondence between DNR's contractors and the Assistant General Counsel for Patents was to be transmitted through both the cognizant field office and DNR. The letter also reiterated the procedure established as a result of the October 5, 1966, letter concerning review of patent applications.

The Assistant General Counsel for Patents informed us that he did not routinely obtain advice from AEC Headquarters program divisions in determining whether to grant exclusive patent rights through administrative determination, except in the case of DNR. He explained that, in the past, he had tried to obtain advice from AEC program divisions but that their replies were, for the most, not responsive and timely.

- - - -

Most of the patent cases included in our review involving administrative determinations related to contracts under AEC's Divisions of Military Application and Reactor Development and Technology. We discussed with officials of these Divisions the desirability of their being consulted in such cases, to provide greater assurance that all pertinent facts were fully considered before determinations were made. Officials from both these Divisions advised us that they believed that, in accordance with good management practices, the program division which had cognizance over the contract under which the patent was developed should be consulted before the Assistant General Counsel for Patents granted a contractor greater rights than those provided for in the contract.

## CONCLUSIONS

Under the provisions of the Atomic Energy Act of 1954, as amended, AEC has the authority to waive its rights to inventions in the field of atomic energy. Also the act does not contain any provisions related to inventions developed under AEC contracts when the inventions do not relate to the field of atomic energy.

In accordance with the provisions of the act and the Presidential memorandum of 1963, AEC has developed and implemented regulations for granting contractors exclusive patent rights under certain circumstances. The procedures established by AEC, however, have not provided for formal documentation of the bases for decisions under which contractors obtain exclusive patent rights. Also, in accordance with AEC delegations of authority, the decisions made by the Assistant General Counsel for Patents have not generally received an independent review.

We believe that, to strengthen its procedures relating to disposition of patent rights, AEC should require the Assistant General Counsel for Patents to formally document the basis for each decision wherein a contractor obtains exclusive patent rights. Also, in view of the general nature of the criteria under which decisions are made to grant contractors exclusive patent rights when the granting of such rights is not required under contract provisions, we believe that such decisions should be subject to review at higher levels within AEC to provide for independent evaluations of the decisions.

We believe further that, before such decisions are finalized, comments should be obtained from the AEC Headquarters program division which has cognizance over the contract or activity involved, so that the technical expertise of these divisions may be considered in determining the most appropriate course of action.

In addition, AEC may find additional need for documenting and reviewing the bases that will be used in making determinations as a result of changes set forth in the Presidential Statement of Government Patent Policy of August 23, 1971. This memorandum provides that an agency

may grant to an interested party exclusive patent rights to inventions in which the Government has obtained exclusive rights when the agency determines that some degree of exclusivity may be necessary to encourage further development and commercialization of the invention.

### RECOMMENDATIONS

To provide improved control over the obtaining of exclusive patent rights by AEC contractors, we recommend that AEC develop procedures providing for:

- Formal documentation of the bases for decisions which result in contractors' obtaining exclusive patent rights.
- Obtaining comments from AEC Headquarters program divisions having cognizance over the contract or activity involved, before finalizing decisions to grant contractors exclusive patent rights not required under contract provisions.
- Additional reviews within AEC of the appropriateness of decisions to grant contractors exclusive patent rights not required under contract provisions.

- - - -

AEC has accepted our recommendations and has issued instructions to implement them, which state that:

- In each case where a decision is made which results in a contractor's obtaining some form of exclusive patent rights, a formal document briefly summarizing the bases for the decision will be included in the patent file.
- The Director of the cognizant Headquarters program division will be given an opportunity to comment on proposed decisions to grant contractors exclusive patent rights not required under contract provisions.
- Proposed decisions to grant contractors exclusive patent rights not required under contract provisions will be submitted to the General Counsel for review.

## CHAPTER 3

### CONTROLS OVER INVENTIONS IN FIELD OF ATOMIC ENERGY

The Atomic Energy Act of 1954, as amended, and the Presidential memorandum of 1963 have provided the bases for the establishment of procedures designed to ensure that (1) AEC has acquired sufficient rights to protect the Government's interest in all inventions made or conceived under AEC contracts and (2) certain contractors that obtain exclusive patent rights have taken effective steps to bring the invention to the point of practical application or to make it available for licensing to third parties on reasonable terms.

Our examination of procedures established pursuant to section 152 of the Atomic Energy Act of 1954, as amended, showed that AEC and the Patent Office had established controls designed to ensure that the Government's interest in inventions made or conceived under AEC contracts was protected. In cases where the contractor obtained exclusive rights, AEC, where contract provisions provided, retained the right to reacquire these exclusive rights under a clause in the license agreement. We found, however, that (1) follow-up procedures for ascertaining the steps taken by the contractor to utilize such patents had not been systematically followed in recent years and (2) actions had not been taken to publicize the availability of the patent, when AEC found that the contractor had not taken effective steps to bring the invention to the point of practical application.

## INVENTIONS REFERRED TO AEC BY PATENT OFFICE

Under the provisions of section 152 of the Atomic Energy Act of 1954, as amended, the Patent Office is responsible for identifying and referring to AEC all patent applications which appear to disclose inventions useful in the field of atomic energy.

The Director of the Special Laws Group, Patent Office, informed us that all patent applications filed with the Patent Office were routed through his group for screening and identifying patent applications describing inventions that might be related to the field of atomic energy before the normal patent processing begins. He stated that decisions to refer patent applications to AEC were made on the basis of the judgments and opinions of his staff and that, although no formal criteria, guidelines, or definitions had been established, the Patent Office utilized a very broad interpretation of what inventions might be useful in the field of atomic energy. Because of the technical nature of the material presented in patent applications, however, it was not practical for us to review issued and pending patents to test the adequacy of the judgments made with respect to an invention's applicability to the field of atomic energy.

In this regard, however, one patent issued in fiscal year 1971 came to our attention, which was related to the field of atomic energy but which was not referred to AEC by the Patent Office. The Director of the Special Laws Group of the Patent Office informed us that the application for this patent had gone through the screening process but that the invention's relevance to the field of atomic energy had not been identified. He stated that steps were being taken to review with his staff the terminology related to the field of atomic energy, to provide them with a reference system for future screening.

According to AEC records, under the provisions of section 152 of the Atomic Energy Act of 1954, as amended, the Patent Office, as of July 1, 1971, had referred about 8,250 U.S. patent applications for review by AEC. On the basis of AEC's review of these referrals, some type of patent rights had been obtained by AEC in 379 cases, through either (1) agreements reached with the inventor prior to the time

of filing a directive with the Patent Office claiming rights to the patent or (2) settlement of the issues after filing of the directive. At that time 26 other cases were pending. For the remaining 7,845 cases, AEC had determined through various investigative practices that either the invention apparently was not conceived or developed under an AEC contract or the patent had been previously resolved through AEC's contract patent provisions and procedures.

In accordance with section 152, AEC reviews each patent application referred by the Patent Office to determine whether the invention was made or conceived in the course of, or under, any arrangement with or for the benefit of AEC. For such situations AEC has established procedures for ascertaining whether the conception or reduction to practice of the invention in question was made under any arrangement with AEC.

AEC's procedures for examining Patent Office referrals include ascertaining whether the applicants (1) ever received an AEC security clearance, (2) ever reported any other inventions, (3) ever had an arrangement with AEC or any of AEC's contractors, and (4) indicated any relationships with AEC or an AEC contractor. If this examination reveals any positive indications that the invention has been conceived or made under such circumstances, the data is checked further by AEC, utilizing, if necessary, the appropriate AEC program division and field operations office personnel to determine whether any evidence can be provided that the invention has been made or conceived under any arrangement with AEC.

CONTROLS OVER EXCLUSIVE RIGHTS  
TO CERTAIN INVENTIONS

It was the intent of the Presidential memorandum of 1963 that, when a contractor obtained an exclusive license, the policy would guard against the contractor's failure to practice the invention. In this regard AEC revised its procedures in December 1964 to add the following clauses to the type C patent provisions.

"(f) With respect to each invention or discovery in which the contractor is granted the principal or any exclusive rights under clause (a), the contractor agrees to provide written reports at reasonable intervals when requested by AEC as to:

"(i) The commercial use that is being made or is intended to be made of such invention or discovery; and

"(ii) The steps taken by the contractor to bring the invention to a point of practical application or to make the invention or discovery available for licensing.

"(g) With respect to each invention or discovery in which the contractor is granted the principal or any exclusive rights under clause (a), the contractor agrees to and does hereby grant the Commission:

"(i) The right to require the granting of non-exclusive, royalty-free licenses to applicants on any such invention or discovery unless the contractor, its transferees, or assignees demonstrate to the Commission, on request, that the contractor, its transferees, or assignees have taken effective steps within three (3) years after a patent issues on such invention or discovery to bring the invention or discovery to a point of practical application, or have granted licenses thereon free or on reasonable terms, or can show cause why he, his transferees, or

assignees should retain the principal or exclusive rights for a further period of time  
\*\*\*."

AEC commonly refers to the rights which it obtains under the above provisions as march-in rights.

#### AEC's use of march-in provisions

The Assistant General Counsel for Patents advised us that, during the period between issuance of the Presidential memorandum of 1963 and AEC's revision of its procurement regulations on December 15, 1964, AEC continued to apply the criteria set forth in the procurement regulations and that contracts negotiated prior to the revision of the procurement regulations normally would not have included the march-in provisions. He advised us also that march-in rights were obtained for some patents issued in fiscal year 1966 but only when the contractors were willing to grant such rights to AEC.

In view of the above information and of the fact that applications for patents issued in fiscal year 1966 had been filed prior to December 1964, we limited our review of fiscal year 1966 patents to identifying the number of cases where march-in rights were obtained and to ascertaining whether any follow-up action had been taken. AEC obtained march-in rights to 15 patents issued during fiscal year 1966.

For fiscal years 1970 and 1971, the patents were not yet subject to follow-up action. Therefore we determined (1) the number of cases in which march-in rights had been obtained and (2) the number of cases in which march-in rights had not been obtained and the reasons why such rights had not been obtained.

For fiscal years 1970 and 1971, we identified 41 and 33 patents, respectively, where a contractor had obtained exclusive rights. AEC obtained march-in rights in 22 of the 41 patents for fiscal year 1970 and in 10 of the 33 patents for fiscal year 1971. The following schedule shows the breakdown of the patents for fiscal years 1970 and 1971, including the patents where AEC did not obtain march-in

rights and the apparent reasons why such rights were not obtained.

Reasons March-in Rights not Obtained

| <u>Fiscal year</u> | <u>March-in rights obtained</u> | <u>Rights obtained under background provisions of contracts--march-in not applicable</u> | <u>Negotiated settlement of dispute as to whether work performed under AEC contract</u> | <u>Patent application filed at time contract clause did not provide for march-in provisions</u> | <u>Total</u> |
|--------------------|---------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------|
| 1970               | 22                              | 12                                                                                       | 5                                                                                       | 2                                                                                               | <u>41</u>    |
| 1971               | 10                              | 7                                                                                        | 1                                                                                       | 15                                                                                              | <u>33</u>    |

AEC follow-up procedures  
on march-in provisions

We examined the 15 patents issued during fiscal year 1966 to ascertain the degree of follow-up, if any, made by AEC at the end of the 3-year period allowed the contractors to bring the inventions to the point of practical application or to grant licenses to the inventions.

AEC contacted the contractors in 12 of the 15 cases to ascertain whether any commercial use had been made or was planned, and what steps were being taken, to bring the inventions to the point of practical application or to make them available for licensing. In each case the contractors notified AEC that no commercial use had been made of the invention in question and that no licenses had been granted. AEC made no attempts, however, to bring to the attention of interested parties, by use of official Government publications, the availability of nonexclusive, royalty-free licenses.

For three fiscal year 1966 patents in which march-in rights had been obtained, AEC had taken no action to exercise these rights at the end of the 3-year period. For these cases we could not determine from available records the reasons that follow-up actions had not been taken. The Assistant General Counsel for Patents informed us in January 1972 that, for about the past 2 years, follow-up actions pursuant to march-in provisions had not been taken systematically because of staff shortages. AEC advised us that failure to exercise march-in rights at the end of the 3-year period did not constitute waivers of such rights.

One of the major objectives in permitting contractors to obtain exclusive rights to inventions conceived under AEC contracts is to encourage their development. When AEC does not exercise march-in rights, however, it has no assurance that such inventions are being developed as anticipated at the time the exclusive rights were obtained by the contractor.

After we discussed this matter with the Assistant General Counsel for Patents, he advised us that procedures had been reinstated to follow-up systematically on the use made of exclusive patent rights obtained by contractors.

In our opinion, in those cases where AEC's follow-up procedures disclose that inventions have not been utilized or licensed by contractors having exclusive patent rights, AEC should publicize the availability of nonexclusive licenses to such inventions to encourage their development.

### RECOMMENDATIONS

To provide greater assurance that inventions developed under AEC contracts are used to the fullest practicable extent, we recommend that, when AEC's follow-up procedures disclose that contractors have not utilized or licensed inventions for which they have obtained exclusive patent rights, AEC publicize the availability of nonexclusive licenses.

- - - -

AEC has agreed to accept our recommendation and has issued instructions providing that information on the availability of nonexclusive licenses from contractors pursuant to march-in provisions will be included in a periodic report which AEC prepares to inform the public of the availability of AEC-owned patents for public use.

## CHAPTER 4

### ALLOWABILITY OF CONTRACTOR PATENT COSTS

AEC procurement regulations covering patent costs incurred by contractors under cost-type contracts provide that costs related to reporting invention disclosures are allowable. Examples of allowable costs are (1) preparation of invention disclosures, (2) reports and related documents, and (3) searching of the art to the extent necessary to make invention disclosures in accordance with the patent clause. Other patent costs, to be allowed, must be expressly provided for in the contract or approved by the contracting officer. Therefore the costs of preparation, filing, prosecution of patent applications, issuance of patents, or other legal patent activities by the contractor are not allowable except upon approval by the contracting officer, regardless of whether or not the contractor obtains exclusive rights to the patent.

The Assistant General Counsel for Patents advised us that the costs incurred for the preparation, filing, and prosecution of patents, or other legal patent activities, are borne by AEC when it retains title and exclusive rights to the patent. When the contractor requests to file for foreign patents, however, the AEC procurement regulations provide that the contractor must bear all the United States and foreign patent-filing costs to obtain title and rights to foreign patents.

It is the policy of AEC that internal auditing, which includes ascertaining the allowability of Government expenditures, be an element of control in the administration of operations performed by AEC and its cost-type contractors. The managers of operations offices are responsible for the execution of the internal audit program as it relates to the activities of contractors under their jurisdiction. The Chicago Operations Office informed us that the primary control over contractor patent costs was provided by its audit of the contracts.

Our review of AEC audits of three cost-type contracts by two operations offices revealed that, for one contract, certain patent costs which required the express approval of

the contracting officer had not been questioned by the auditors, even though the costs had not been approved by the contracting officer.

In this case AEC had reimbursed the contractor for legal patent expenses, including services for preparation, filing, and prosecution of patent applications, as well as for patent issuance fees. These patent costs had been accepted as allowable costs under the AEC contract by the Chicago Operations Office audit staff during audits of the contractor's overhead and direct costs covering the period from 1960 to 1968. The Chicago Office advised us that these costs had not been questioned by the auditors because the contracting officer had indicated that similar costs incurred in an earlier year were allowable, since they had provided some benefit to AEC.

The Chicago Office advised us also that patent costs charged to the contract totaled about \$25,000 from 1960 through 1968 and about \$4,000 for 1969. For 1970 and 1971 virtually no patent costs were charged to the contract.

The Chicago Office stated that the 1969 patent costs would be reviewed for allowability and, to the extent that they included items requiring express approval by the contracting officer, would be questioned during the current audit. The Chicago Office stated also that patent costs allowed in prior years would be reviewed to determine whether a refund should be requested from the contractor.

AEC advised us that it would emphasize to field office auditors the importance of examining the allowability of patent costs claimed by AEC contractors.

## CHAPTER 5

### SCOPE OF REVIEW

Our review was made at AEC Headquarters in Germantown, Maryland; AEC's Office of the Assistant General Counsel for Patents in Bethesda, Maryland; Chicago and New York field patent groups in Argonne, Illinois, and Brookhaven, New York, respectively; and the Patent Office in Arlington, Virginia.

Our review was directed primarily toward (1) evaluating AEC's patent policies and procedures under which its contractors are permitted to obtain exclusive patent rights, (2) ascertaining the extent to which AEC had permitted contractors to obtain exclusive patent rights and determining the bases for such decisions, (3) ascertaining the extent of screening performed by the Patent Office to ensure that patent applications on inventions in the field of atomic energy are referred to AEC, and (4) examining into AEC's policies and procedures for determining the allowability of patent costs paid to its contractors. Because of the technical judgments involved, we did not evaluate the reasonableness of decisions under which contractors obtained exclusive patent rights.

Because of the several thousand unexpired patents in which AEC has obtained rights, we selected for examination records relating to patents issued in fiscal years 1966, 1970, and 1971 where the contractor obtained some exclusive rights to the patents. We selected fiscal year 1966 patents as a basis for our review because contractors obtained exclusive rights to a greater percentage of the patents issued in that year than in any other year in the past 8 years. Fiscal years 1970 and 1971 were selected because these were the latest years for which complete patent information was available.

As part of our examination, we reviewed the applicable legislative history and obtained the views of AEC employees knowledgeable of, and responsible for, the administration of AEC's patent policies and procedures. We obtained also the views of Patent Office officials responsible for referring to AEC patent applications considered to be related to the field of atomic energy.

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## Congress of the United States

### JOINT COMMITTEE ON ATOMIC ENERGY

WASHINGTON, D.C. 20510

July 8, 1971

The Honorable Elmer B. Staats  
Comptroller General of the United States  
Washington, D.C.

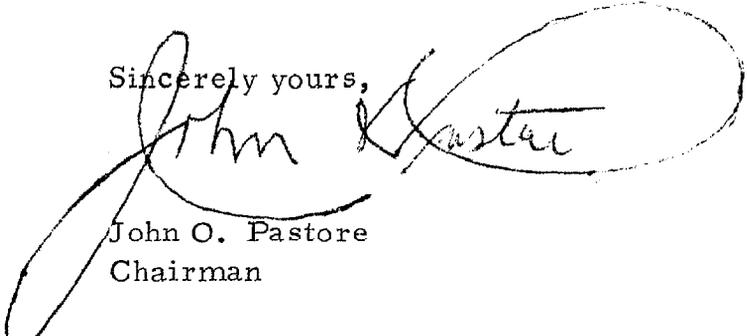
Dear Mr. Staats:

The Joint Committee learned from recent testimony by Admiral Rickover that the Atomic Energy Commission has not been retaining the title and exclusive rights to some of the patents resulting from work performed under Commission contracts.

The Committee is, of course, concerned if Commission contractors acquire exclusive rights to patents developed with public funds. The Committee therefore requests that the General Accounting Office undertake a review of the patent policies and procedures of the AEC and its administration. The Committee is particularly interested in knowing whether the Commission is complying with the patent provisions in the Atomic Energy Act of 1954, as amended.

The staffs of the GAO and the Joint Committee should meet to discuss this matter, and to identify more specifically the problem areas requiring detailed consideration. In that regard, please have your representative contact the Committee's Executive Director.

Sincerely yours,

  
John O. Pastore  
Chairman

**PRESIDENTIAL MEMORANDUM AND STATEMENT OF  
GOVERNMENT PATENT POLICY ISSUED OCTOBER 10,  
1963**

*Memorandum for the Heads of Executive Departments and Agencies*

Over the years, through Executive and Legislative actions, a variety of practices has developed within the Executive Branch affecting the disposition of rights to inventions made under contracts with outside organizations. It is not feasible to have complete uniformity of practice throughout the Government in view of the differing missions and statutory responsibilities of the several departments and agencies engaged in research and development. Nevertheless, there is need for greater consistency in agency practices in order to further the governmental and public interests in promoting the utilization of Federally-financed inventions and to avoid difficulties caused by different approaches by the agencies when dealing with the same class of organizations in comparable patent situations.

From the extensive and fruitful national discussions of Government patent practices, significant common ground has come into view. First, a single presumption of ownership does not provide a satisfactory basis for Government-wide policy on the allocation of rights to inventions. Another common ground of understanding is that the Government has a responsibility to foster the fullest exploitation of the inventions for the public benefit.

Attached for your guidance is a statement of Government patent policy, which I have approved, identifying common objectives and criteria and setting forth the minimum rights that Government agencies should acquire with regard to inventions made under their grants and contracts. This statement of policy seeks to protect the public interest by encouraging the Government to acquire the principal rights to inventions in situations where the nature of the work to be undertaken or the Government's past investment in the field of work favors full public access to resulting inventions. On the other hand, the policy recognizes that the public interest might also be served by according exclusive commercial rights to the contractor in situations where the contractor has an established nongovernmental commercial position and where there is greater likelihood that the invention would be worked and put into civilian use than would be the case if the invention were made more freely available.

Wherever the contractor retains more than a nonexclusive license, the policy would guard against failure to practice the invention by requiring that the

contractor take effective steps within three years after the patent issues to bring the invention to the point of practical application or to make it available for licensing on reasonable terms. The Government would also have the right to insist on the granting of a license to others to the extent that the invention is required for public use by Governmental regulations or to fulfill a health need, irrespective of the purpose of the contract.

The attached statement of policy will be reviewed after a reasonable period of trial in the light of the facts and experience accumulated. Accordingly, there should be continuing efforts to monitor, record, and evaluate the practices of the agencies pursuant to the policy guidelines.

This memorandum and the statement of policy shall be published in the Federal Register.

JOHN F. KENNEDY

## STATEMENT OF GOVERNMENT PATENT POLICY

### Basic Considerations

A. The Government expends large sums for the conduct of research and development which results in a considerable number of inventions and discoveries.

B. The inventions in scientific and technological fields resulting from work performed under Government contracts constitute a valuable national resource.

C. The use and practice of these inventions and discoveries should stimulate inventors, meet the needs of the Government, recognize the equities of the contractor, and serve the public interest.

D. The public interest in a dynamic and efficient economy requires that efforts be made to encourage the expeditious development and civilian use of these inventions. Both the need for incentives to draw forth private initiatives to this end, and the need to promote healthy competition in industry must be weighed in the disposition of patent rights under Government contracts. Where exclusive rights are acquired by the contractor, he remains subject to the provisions of the antitrust laws.

E. The public interest is also served by sharing of benefits of Government-financed research and development with foreign countries to a degree consistent with our international programs and with the objectives of U.S. foreign policy.

F. There is growing importance attaching to the acquisition of foreign patent rights in furtherance of the interests of U.S. industry and the Government.

G. The prudent administration of Government research and development calls for a Government-wide policy on the disposition of inventions made under Government contracts reflecting common principles and objectives, to extent consistent with the missions of the respective agencies. The policy must recognize the need for flexibility to accommodate special situations.

### Policy

SECTION 1. The following basic policy is established for all Government agencies with respect to inventions or discoveries made in the course of or

## APPENDIX II

under any contract of any Government agency, subject to specific statutes governing the disposition of patent rights of certain Government agencies.

(a) Where

- (1) a principal purpose of the contract is to create, develop or improve products, processes, or methods which are intended for commercial use (or which are otherwise intended to be made available for use) by the general public at home or abroad, or which will be required for such use by Governmental regulations; or
- (2) a principal purpose of the contract is for exploration into fields which directly concern the public health or public welfare; or
- (3) the contract is in a field of science or technology in which there has been little significant experience outside of work funded by the Government, or where the Government has been the principal developer of the field, and the acquisition of exclusive rights at the time of contracting might confer on the contractor a preferred or dominant position; or
- (4) the services of the contractor are
  - (i) for the operation of a Government-owned research or production facility; or
  - (ii) for coordinating and directing the work of others,

the Government shall normally acquire or reserve the right to acquire the principal or exclusive rights throughout the world in and to any inventions made in the course of or under the contract. In exceptional circumstances the contractor may acquire greater rights than a nonexclusive license at the time of contracting, where the head of the department or agency certifies that such action will best serve the public interest. Greater rights may also be acquired by the contractor after the invention has been identified, where the invention when made in the course of or under the contract is not a primary object of the contract, provided the acquisition of such greater rights is consistent with the intent of this Section 1(a) and is a necessary incentive to call forth private risk capital and expense to bring the invention to the point of practical application.

(b) In other situations, where the purpose of the contract is to build upon existing knowledge or technology, to develop information, products, processes, or methods for use by the Government, and the work called for by the contract is in a field of technology in which the contractor has acquired technical competence (demonstrated by factors such as know-how, experience, and patent position) directly related to an area in which the contractor has an established nongovernmental commercial position, the contractor shall normally acquire the principal or exclusive rights throughout the world in and to any resulting inventions, subject to the Government acquiring at least an irrevocable nonexclusive royalty-free license throughout the world for Governmental purposes.

(c) Where the commercial interests of the contractor are not sufficiently established to be covered by the criteria specified in Section 1(b), above, the determination of rights shall be made by the agency after the invention has been identified, in a manner deemed most likely to serve the public interest as expressed in this policy statement, taking particularly into account the intentions of the contractor to bring the invention to the point of commercial application and the guidelines of Section 1(a) hereof, provided that the agency

may prescribe by regulation special situations where the public interest in the availability of the inventions would best be served by permitting the contractor to acquire at the time of contracting greater rights than a nonexclusive license. In any case the Government shall acquire at least a nonexclusive royalty-free license throughout the world for Governmental purposes.

(d) In the situation specified in Sections 1(b) and 1(c), when two or more potential contractors are judged to have presented proposals of equivalent merit, willingness to grant the Government principal or exclusive rights in resulting inventions will be an additional factor in the evaluation of the proposals.

(e) Where the principal or exclusive (except as against the Government) rights in an invention remain in the contractor, he should agree to provide written reports at reasonable intervals, when requested by the Government, on the commercial use that is being made or is intended to be made of inventions made under government contracts.

(f) Where the principal or exclusive (except as against the Government) rights in an invention remain in the contractor, unless the contractor, his licensee, or his assignee has taken effective steps within three years after a patent issues on the invention to bring the invention to the point of practical application or has made the invention available for licensing royalty-free or on terms that are reasonable in the circumstances, or can show cause why he should retain the principal or exclusive rights for a further period of time, the Government shall have the right to require the granting of a license to an applicant on a nonexclusive royalty-free basis.

(g) Where the principal or exclusive (except the Government) rights to an invention are acquired by the contractor, the Government shall have the right to require the granting of a license to an applicant royalty-free or on terms that are reasonable in the circumstances to the extent that the invention is required for public use by Governmental regulations or as may be necessary to fulfill health needs, or for other public purposes stipulated in the contract.

(h) Where the Government may acquire the principal rights and does not elect to secure a patent in a foreign country, the contractor may file and retain the principal or exclusive foreign rights subject to retention by the Government of at least a royalty-free license for Governmental purposes and on behalf of any foreign government pursuant to any existing or future treaty or agreement with the United States.

SECTION 2. Government-owned patents shall be made available and the technological advances covered thereby brought into being in the shortest time possible through dedication or licensing and shall be listed in official Government publications or otherwise.

SECTION 3. The Federal Council for Science and Technology in consultation with the Department of Justice shall prepare at least annually a report concerning the effectiveness of this policy, including recommendations for revision or modification as necessary in light of the practices and determinations of the agencies in the disposition of patent rights under their contracts. A patent advisory panel is to be established under the Federal Council for Science and Technology to

(a) develop by mutual consultation and coordination with the agencies common guidelines for the implementation of this policy, consistent with

## APPENDIX II

existing statutes, and to provide overall guidance as to disposition of inventions and patents in which the Government has any right or interest; and

(b) encourage the acquisition of data by Government agencies on the disposition of patent rights to inventions resulting from Federally-financed research and development and on the use and practice of such inventions, to serve as basis for policy review and development; and

(c) make recommendations for advancing the use and exploitation of Government-owned domestic and foreign patents.

SECTION 4. Definitions: As used in this policy statement, the stated terms in singular and plural are defined as follows for the purposes hereof:

(a) *Government agency*—includes any Executive department, independent commission, board, office, agency, administration, authority, or other Government establishment of the Executive Branch of the Government of the United States of America.

(b) *Invention or Invention or discovery*—includes any art, machine, manufacture, design, or composition of matter, or any new and useful improvement thereof, or any variety of plant, which is or may be patentable under the Patent Laws of the United States of America or any foreign country.

(c) *Contractor*—means any individual, partnership, public or private corporation, association, institution, or other entity which is a party to the contract.

(d) *Contract*—means any actual or proposed contract, agreement, grant, or other arrangement, or subcontract entered into with or for the benefit of the Government where a purpose of the contract is the conduct of experimental, developmental, or research work.

(e) *Made*—when used in relation to any invention or discovery means the conception or first actual reduction to practice of such invention in the course of or under the contract.

(f) *Governmental purpose*—means the right of the Government of the United States (including any agency thereof, state, or domestic municipal government) to practice and have practiced (make or have made, use or have used, sell or have sold) throughout the world by or on behalf of the Government of the United States.

(g) *To the point of practical application*—means to manufacture in the case of a composition or product, to practice in the case of a process, or to operate in the case of a machine and under such conditions as to establish that the invention is being worked and that its benefits are reasonably accessible to the public.

## AEC PROCUREMENT REGULATIONS RELATING TO PATENT PROVISIONS

## § 9-9.5003 Type A patent provisions.

The following patent article shall be used where the principal purpose of the contract is:

(a) To conduct research or development work in the field of atomic energy at AEC expense; or

(b) For the operation of a Government-owned atomic energy research or production facility; or

(c) To conduct research or development for AEC where a major part of the equipment employed in the research and development is furnished at Government expense.

## TYPE A PATENT PROVISIONS

(a) Whenever any invention or discovery is made or conceived by the contractor or its employees in the course of or under this contract, the contractor shall promptly furnish the Commission with complete information thereon; and the Commission shall have the sole power to determine whether or not and where a patent application shall be filed, and to determine the disposition of the title to and rights in and to any invention or discovery and any patent application or patent that may result. The judgment of the Commission on these matters shall be accepted as final; and the Contractor, for itself and for its employees, agrees that the inventor or inventors will execute all documents and do all things necessary or proper to carry out the judgment of the Commission.

(b) No claim for pecuniary award or compensation under the provisions of the Atomic Energy Act of 1954, as amended, shall be asserted by the contractor or its employees with respect to any invention or discovery made or conceived in the course of or under this contract.

(c) Except as otherwise authorized in writing by the Commission, the contractor will obtain patent agreements to effectuate the purposes of paragraphs (a) and (b) of this article from all persons who perform any part of the work under this contract, except such clerical and manual labor personnel as will not have access to technical data.

(d) Except as otherwise authorized in writing by the Commission, the contractor will insert in all subcontracts provisions making this article applicable to the subcontractor and its employees.<sup>1</sup>

<sup>1</sup>For publication and indemnity clauses for use in research and development contracts with educational institutions, see § 9-16.5002-8, Articles B-III and B-VIII, for special research support agreements; and see § 9-16.5002-9, Articles B-6 and B-7, for cost-type contracts.

(e) It is recognized that during the course of the work under this contract, the contractor or its employees may from time to time desire to publish, within the limits of security requirements, information regarding scientific or technical developments made or conceived in the course of or under this contract. In order that public disclosure of such information will not adversely affect the patent interests of the Commission or the contractor, patent approval for release and publication shall be secured from the Commission prior to any such release or publication.<sup>1</sup>

(f) With respect to any U.S. Patent Application filed by the Contractor on any contract invention or discovery made or conceived in the course of the contract, the Contractor will incorporate in the first paragraph of the U.S. Patent Application the following statement:

"The invention described herein was made in the course of, or under, a contract (if desired, may substitute contract with identifying number) with the U.S. Atomic Energy Commission."

The following patent article shall be used where the criteria set forth in § 9-9.5003 are inapplicable and where:

(a) A principal purpose of the contract is to create, develop or improve products, processes, or methods which are intended for commercial use (or which are otherwise intended to be made available for use) by the general public at home or abroad, or which will be required for such use by governmental regulations; or

(b) A principal purpose of the contract is for exploration into fields which directly concern the public health or public welfare; or

(c) The contract is in a field of science or technology in which there has been little significant experience outside of work funded by the Government, or where the Government has been the principal developer of the field, and the acquisition of exclusive rights at the time of contracting might confer on the contractor a preferred or dominant position; or

(d) The services of the contractor are:

(1) For the operation of a Government-owned, nonatomic energy research or production facility; or

(2) For coordinating and directing the work of others.

## TYPE B PATENT PROVISIONS

(a) Whenever any invention or discovery is made or conceived by the contractor or its employees in the course of or under this contract, the contractor shall promptly fur-

nish the Commission with complete information thereon; and the Commission shall have the sole power to determine whether or not and where a patent application shall be filed, and to determine the disposition of the title to and the rights in and to any invention or discovery and any patent application or patent that may result: *Provided, however,* That the contractor, in any event, shall retain at least a non-exclusive, irrevocable, royalty-free license under said invention, discovery, patent application, or patent. Subject to the license retained by the contractor, as provided in this paragraph, the judgment of the Commission on these matters shall be accepted as final; and the contractor, for itself and for its employees, agrees that the inventor or inventors will execute all documents and do all things necessary or proper to carry out the judgment of the Commission.

(b) No claim for pecuniary award or compensation under the provisions of the Atomic Energy Act of 1954, as amended, shall be asserted by the contractor or its employees with respect to any invention or discovery made or conceived in the course of or under this contract.

(c) Except as otherwise authorized in writing by the Commission, the contractor will obtain patent agreements to effectuate the purposes of paragraphs (a) and (b) of this article from all persons who perform any part of the work under this contract, except such clerical and manual labor personnel as will not have access to technical data.

(d) Except as otherwise authorized in writing by the Commission, the contractor will insert in all subcontracts provisions making this article applicable to the subcontractor and its employees.

(e) It is recognized that during the course of the work under this contract, the contractor or its employees may from time to time desire to publish within the limits of security requirements, information regarding scientific or technical developments made or conceived in the course of or under this contract. In order that public disclosure of such information will not adversely affect the patent interests of the Commission or the contractor, patent approval for release and publication shall be secured from the Commission prior to any such release or publication.

(f) With respect to any U.S. Patent Application filed by the Contractor on any contract invention or discovery made or conceived in the course of the contract, the Contractor will incorporate in the first paragraph of the U.S. Patent Application the following statement:

"The invention described herein was made in the course of, or under, a contract (if desired, may substitute contract with identifying number) with the U.S. Atomic Energy Commission."

#### § 9-9.5005 Type C patent provisions.

The following patent article shall be used where the criteria set forth in §§ 9-9.5003 and 9-9.5004 are inapplicable and where:

(a) The principal purpose of the contract is to build upon existing knowledge or technology to develop information, products, processes, or methods for use by the Government, and the work called for by the contract is (1) in a field of technology other than atomic energy in which the contractor has acquired technical competence (demonstrated by factors such as know-how, experience, and patent position), and (2) directly related to a area in which the contractor has an established nongovernmental commercial position; or

(b) The work to be performed or the material or equipment to be furnished by the contractor is of such character that any inventions or discoveries that may be made will probably: (1) Relate only incidentally (and not directly) to some phase of atomic energy, (2) relate to a field of work in which the contractor has an established industrial and patent position, and (3) result from routine development or production work by the contractor.

#### TYPE C PATENT PROVISIONS

(a) Whenever any invention or discovery is made or conceived by the contractor or its employees in the course of or under this contract, the contractor shall promptly furnish the Commission with complete information thereon; and the Commission shall have the sole power to determine whether or not and where a patent application shall be filed, and to determine the disposition of the title to and rights in and to any invention or discovery and any patent application or patent that may result; provided, however, that the contractor in any event shall retain at least a sole (except as against the Government or its account), irrevocable, royalty-free license with the sole right to grant sublicenses, under said invention, discovery, patent application or patent, such license and sublicensing rights being limited to the manufacture, use and sale for purposes other than use in the production or utilization of special nuclear material or atomic energy. Subject to the license retained by the contractor, as provided in this paragraph, the judgment of the Commission on these matters shall be accepted as final; and the contractor, for itself and for its employees, agrees that the inventor or inventors will execute all documents and do all things necessary or proper to carry out the judgment of the Commission.

(b) No claim for pecuniary award or compensation under the provisions of the Atomic Energy Act of 1954, as amended, shall be asserted by the contractor or its employees, with respect to any invention or discovery made or conceived in the course of or under this contract.

(c) Except as otherwise authorized in writing by the Commission, the contractor will obtain patent agreements to effectuate the purposes of paragraphs (a) and (b) of this article from all persons who perform any part of the work under this contract, except such clerical and manual labor personnel as will not have access to technical data.

(d) Except as otherwise authorized in writing by the Commission, the contractor will insert in all subcontracts provisions making this article applicable to the subcontractor and its employees.

(e) It is recognized that during the course of the work under this contract, the contractor or its employees may from time to time desire to publish, within the limits of security requirements, information regarding scientific or technical developments made or conceived in the course of or under this contract. In order that public disclosure of such information will not adversely affect the patent interests of the Commission or the contractor, patent approval for release and publication shall be secured from the Commission prior to any such release or publication.

(f) With respect to each invention or discovery in which the contractor is granted the principal or any exclusive rights under clause (a), the contractor agrees to provide written reports at reasonable intervals when requested by AEC as to:

(1) The commercial use that is being made or is intended to be made of such invention or discovery; and

(2) The steps taken by the contractor to bring the invention to a point of practical application or to make the invention or discovery available for licensing.

(g) With respect to each invention or discovery in which the contractor is granted the principal or any exclusive rights under clause (a), the contractor agrees to and does hereby grant the Commission:

(1) The right to require the granting of nonexclusive, royalty-free licenses to applicants on any such invention or discovery unless the contractor, its transferees, or assignees demonstrate to the Commission, on request, that the contractor, its transferees, or assignees have taken effective steps within three (3) years after a patent issues on such invention or discovery to bring the invention or discovery to a point of practical application, or have granted licenses thereon free or on reasonable terms, or can show cause why he, his transferees, or assignees should retain the principal or exclusive rights for a further period of time, and

(2) The right to grant licenses royalty-free or on reasonable terms to the extent that the invention or discovery is required for public use by governmental regulation, or as may be necessary to fulfill health needs, or for other public purposes stipulated in this contract.

(h) With respect to any U.S. Patent Application filed by the Contractor on any contract invention or discovery made or conceived in the course of the contract, the Contractor will incorporate in the first paragraph of the U.S. Patent Application the following statement:

"The invention described herein was made in the course of, or under, a contract (if desired, may substitute contract with identifying number) with the U.S. Atomic Energy Commission."

PRESIDENTIAL MEMORANDUM AND STATEMENT OF  
GOVERNMENT PATENT POLICY ISSUED AUGUST 23,

1971

Memorandum for Heads of Executive Departments and Agencies

THE WHITE HOUSE,  
*Washington, August 23, 1971.*

On October 10, 1963, President Kennedy forwarded to the Heads of Executive Departments and Agencies a Memorandum and Statement of Government Patent Policy for their guidance in determining the disposition of rights to inventions made under Government-sponsored grants and contracts. On the basis of the knowledge and experience then available, this Statement first established Government-wide objectives and criteria, within existing legislative constraints, for the allocation of rights to inventions between the Government and its contractors.

It was recognized that actual experience under the Policy could indicate the need for revision or modification. Accordingly, a Patent Advisory Panel was established under the Federal Council for Science and Technology for the purpose of assisting the agencies in implementing the Policy, acquiring data on the agencies' operations under the Policy, and making recommendations regarding the utilization of Government-owned patents. In December 1965, the Federal Council established the Committee on Government Patent Policy to assess how this Policy was working in practice, and to acquire and analyze additional information that could contribute to the reaffirmation or modification of the Policy.

The efforts of both the Committee and the Panel have provided increased knowledge of the effects of Government patent policy on the public interest. More specifically, the studies and experience over the past 7 years have indicated that:

(a) A single presumption of ownership of patent rights to Government-sponsored inventions either in the Government or in its contractors is not a satisfactory basis for Government patent policy, and that a flexible, Government-wide policy best serves the public interest;

(b) The commercial utilization of Government-sponsored inventions, the participation of industry in Government research and development programs, and commercial competition can be influenced by the following factors: the mission of the contracting agency; the purpose and nature of the contract; the commercial applicability and market potential of the invention; the extent to which the invention is developed by the contracting agency; the promotional activities of the contracting agency; the commercial orientation of the contractor and the extent of his privately

financed research in the related technology; and the size, nature and research orientation of the pertinent industry;

(c) In general, the above factors are reflected in the basic principles of the 1963 Presidential Policy Statement.

Based on the results of the studies and experience gained under the 1963 Policy Statement certain improvements in the Policy have been recommended which would provide (1) agency heads with additional authority to permit contractors to obtain greater rights to inventions where necessary to achieve utilization or where equitable circumstances would justify such allocation of rights, (2) additional guidance to the agencies in promoting the utilization of Government-sponsored inventions, (3) clarification of the rights of States and municipal governments in inventions in which the Federal Government acquires a license, and (4) a more definitive data base for evaluating the administration and effectiveness of the Policy and the feasibility and desirability of further refinement or modification of the Policy.

I have approved the above recommendations and have attached a revised Statement of Government Patent Policy for your guidance. As with the 1963 Policy Statement, the Federal Council shall make a continuing effort to record, monitor and evaluate the effects of this Policy Statement. A Committee on Government Patent Policy, operating under the aegis of the Federal Council for Science and Technology, shall assist the Federal Council in these matters.

This memorandum and statement of policy shall be published in the FEDERAL REGISTER.



## Statement of Government Patent Policy

## BASIC CONSIDERATIONS

A. The Government expends large sums for the conduct of research and development which results in a considerable number of inventions and discoveries.

B. The inventions in scientific and technological fields resulting from work performed under Government contracts constitute a valuable national resource.

C. The use and practice of these inventions and discoveries should stimulate inventors, meet the needs of the Government, recognize the equities of the contractor, and serve the public interest.

D. The public interest in a dynamic and efficient economy requires that efforts be made to encourage the expeditious development and civilian use of these inventions. Both the need for incentives to draw forth private initiatives to this end, and the need to promote healthy competition in industry must be weighed in the disposition of patent rights under Government contracts. Where exclusive rights are acquired by the contractor, he remains subject to the provisions of the antitrust laws.

E. The public interest is also served by sharing of benefits of Government-financed research and development with foreign countries to a degree consistent with our international programs and with the objectives of U.S. foreign policy.

F. There is growing importance attaching to the acquisition of foreign patent rights in furtherance of the interests of U.S. industry and the Government.

G. The prudent administration of Government research and development calls for a Government-wide policy on the disposition of inventions made under Government contracts reflecting common principles and objectives, to the extent consistent with the missions of the respective agencies. The policy must recognize the need for flexibility to accommodate special situations.

## POLICY

SECTION 1. The following basic policy is established for all Government agencies with respect to inventions or discoveries made in the course of or under any contract of any Government agency, subject to specific statutes governing the disposition of patent rights of certain Government agencies.

(a) Where

(1) a principal purpose of the contract is to create, develop or improve products, processes, or methods which are intended for commercial use (or which are otherwise intended to be made available for use) by the general public at home or abroad, or which will be required for such use by governmental regulations; or

(2) a principal purpose of the contract is for exploration into fields which directly concern the public health, public safety, or public welfare; or

(3) the contract is in a field of science or technology in which there has been little significant experience outside of work funded by the Government, or where the Government has been the principal developer of the field, and the acquisition of exclusive rights at the time of contracting might confer on the contractor a preferred or dominant position; or

(4) the services of the contractor are

(i) for the operation of a Government-owned research or production facility; or

(ii) for coordinating and directing the work of others,

the Government shall normally acquire or reserve the right to acquire the principal or exclusive rights throughout the world in and to any inventions made in the course of or under the contract.

In exceptional circumstances the contractor may acquire greater rights than a nonexclusive license at the time of contracting where the head of the department or agency certifies that such action will best serve the public interest. Greater rights may also be acquired by the contractor after the invention has been identified where the head of the department or agency determines that the acquisition of such greater rights is consistent with the intent of this Section 1(a) and is either a necessary incentive to call forth private risk capital and expense to bring the invention to the point of practical application or that the Government's contribution to the invention is small compared to that of the contractor. Where an identified invention made in the course of or under the contract is not a primary object of the contract, greater rights may also be acquired by the contractor under the criteria of Section 1(c).

(b) In other situations, where the purpose of the contract is to build upon existing knowledge or technology, to develop information, products, processes, or methods for use by the Government, and the work called for by the contract is in a field of technology in which the contractor has acquired technical competence (demonstrated by factors such as know-how, experience, and patent position) directly related to an area in which the contractor has an established nongovernmental commercial position, the contractor shall normally acquire the principal or exclusive rights throughout the world in and to any resulting inventions.

(c) Where the commercial interests of the contractor are not sufficiently established to be covered by the criteria specified in Section 1(b) above, the determination of rights shall be made by the agency after the invention has been identified, in a manner deemed most likely to serve the public interest as expressed in this policy statement, taking particularly into account the intentions of the contractor to bring the invention to the point of commercial application and the guidelines of Section 1(a) hereof, provided that the agency may prescribe by regulation special situations where the public interest in the availability of the inventions would best be served by permitting the contractor to acquire at the time of contracting greater rights than a nonexclusive license.

(d) In the situations specified in Sections 1(b) and 1(c), when two or more potential contractors are judged to have presented proposals of equivalent merit, willingness to grant the Government principal or exclusive rights in resulting inventions will be an additional factor in the evaluation of the proposals.

(e) Where the principal or exclusive rights in an invention remain in the contractor, he should agree to provide written reports at reasonable intervals, when requested by the Government, on the commercial use that is being made or is intended to be made of inventions made under Government contracts.

(f) Where the principal or exclusive rights in an invention remain in the contractor, unless the contractor, his licensee, or his assignee has taken effective steps within three years after a patent issues on the invention to bring the invention to the point of practical application or has made the invention available for licensing royalty-free or on terms that are reasonable in the circumstances, or can show cause why he should retain the principal or exclusive rights for a further period of time, the Government shall have the right to require the granting of a nonexclusive or exclusive license to a responsible applicant(s) on terms that are reasonable under the circumstances.

(g) Where the principal or exclusive rights to an invention are acquired by the contractor, the Government shall have the right to require the granting of a nonexclusive or exclusive license to a responsible applicant(s) on terms that are reasonable in the circumstances (i) to the extent that the invention is required for public use by governmental regulations, or (ii) as may be necessary to fulfill health or safety needs, or (iii) for other public purposes stipulated in the contract.

(h) Whenever the principal or exclusive rights in an invention remain in the contractor, the Government shall normally acquire, in addition to the rights set forth in Sections 1(e), 1(f), and 1(g),

(1) at least a nonexclusive, nontransferable, paid-up license to make, use, and sell the invention throughout the world by or on behalf of the Government of the United States (including any Government agency) and States and domestic municipal governments, unless the agency head determines that it would not be in the public interest to acquire the license for the States and domestic municipal governments; and

(2) the right to sublicense any foreign government pursuant to any existing or future treaty or agreement if the agency head determines it would be in the national interest to acquire this right; and

(3) the principal or exclusive rights to the invention in any country in which the contractor does not elect to secure a patent.

(i) Whenever the principal or exclusive rights in an invention are acquired by the Government, there may be reserved to the contractor a revocable or irrevocable nonexclusive royalty-free license for the practice of the invention throughout the world; an agency may reserve the right to revoke such license so that it might grant an exclusive license when it determines that some degree of exclusivity may be necessary to encourage further development and commercialization of the invention. Where the Government has a right to acquire the principal or exclusive rights to an invention and does not elect to secure a patent in a foreign country, the Government may permit the contractor to acquire such rights in any foreign country in which he elects to secure a patent, subject to the Government's rights set forth in Section 1(h).

SEC. 2. Under regulations prescribed by the Administrator of General Services, Government-owned patents shall be made available and the technological advances covered thereby brought into being in the shortest time possible through dedication or licensing, either exclusive or non-exclusive, and shall be listed in official Government publications or otherwise.

SEC. 3. The Federal Council for Science and Technology in consultation with the Department of Justice shall prepare at least annually a report concerning the effectiveness of this policy, including recommendations for revision or modification as necessary in light of the practices and determinations of the agencies in the disposition of patent rights under their contracts. The Federal Council for Science and Technology shall continue to

(a) develop by mutual consultation and coordination with the agencies common guidelines for the implementation of this policy, consistent with existing statutes, and to provide overall guidance as to disposition of inventions and patents in which the Government has any right or interest; and

(b) acquire data from the Government agencies on the disposition of patent rights to inventions resulting from federally financed research and development and on the use and practice of such inventions to serve as bases for policy review and development; and

(c) make recommendations for advancing the use and exploitation of Government-owned domestic and foreign patents.

Each agency shall record the basis for its actions with respect to inventions and appropriate contracts under this statement.

SEC. 4. Definitions: As used in this policy statement, the stated terms in singular and plural are defined as follows for the purposes hereof:

(a) *Government agency*—includes any executive department, independent commission, board, office, agency, administration, authority, Government corporation, or other Government establishment of the executive branch of the Government of the United States of America.

(b) *States*—means the States of the United States, the District of Columbia, Puerto Rico, the Virgin Islands, American Samoa, Guam and the Trust Territory of the Pacific Islands.

(c) *Invention, or Invention or discovery*—includes any art, machine, manufacture, design, or composition of matter, or any new and useful improvement thereof, or any variety of plant, which is or may be patentable under the Patent Laws of the United States of America or any foreign country.

(d) *Contractor*—means any individual, partnership, public or private corporation, association, institution, or other entity which is a party to the contract.

(e) *Contract*—means any actual or proposed contract, agreement, grant, or other arrangement, or subcontract entered into with or for the benefit of the Government where a purpose of the contract is the conduct of experimental, developmental, or research work.

(f) *Made*—when used in relation to any invention or discovery means the conception or first actual reduction to practice of such invention in the course of or under the contract.

(g) *To the point of practical application*—means to manufacture in the case of a composition or product, to practice in the case of a process, or to operate in the case of a machine and under such conditions as to establish that the invention is being worked and that its benefits are reasonably accessible to the public.