THE WHITE HOUSE

WASHINGTON, D.C.

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MEMORANDUM FOR THE PRESIDENT

FROM : Bo Cutter
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SUBJECT: Administration Position Concerning FEDERAL PATENT POLICY and H.R. 6249

We have reviewed the history and present situation regarding government patent policy, as well as the positions of the various Federal agencies regarding proposed legislation (H.R. 6249).

The basic issue is ownership of patent rights on inventions resulting from Federal grants and contracts. The main possibilities or options are:

-- government ownership and control of inventions;

-- allowing the inventing contractor or grantee to retain such rights; or

-- a combination of the above--allowing patent policy to develop depending on the individual contracting situations, government agencies, or R&D programs involved.

This issue is controversial and emotional, and has been debated by Congress, industry, the university community and the Executive Branch for over 30 years without resolution. Current policy is controlled by approximately 20 statutes applying to different agencies and programs, and by the Presidential patent policy in all situations not covered by statute.

Congressman Ray Thornton has introduced a bill (H.R. 6249), which would establish a uniform and government-wide patent policy. Congressman Thornton's bill has been favorably supported by most Federal agencies and is co-sponsored by 14 Congressmen. Presently, there is no competing legislative proposal and hearings on the Thornton bill are expected in January or February 1978.

The bill gives contractors and grantees the initial option to retain ownership of inventions resulting from federally supported R&D and allows them to retain exclusive rights for a period of 7 to 10 years. The Government receives title to all inventions not selected for commercialization by the contractor. In these inventions the contractor selects, the Government receives a paid-up license and the right to require the licensing of others in the event the contractor fails to utilize the invention or in other public policy situations. Safeguards against non-use are provided in the form of "march-in" rights.

The Thornton proposal is designed to allow industry to undertake the initial efforts to commercialize federally supported technology, with government involvement only where such efforts are unsuccessful or misused. If the government acquired title, the burden of insuring commercialization would be in the government but this more appropriately is the responsibility of industry. The Thornton proposal concentrates the government's efforts on only those few inventions which may ultimately prove to be commercially important.

The Thornton bill would be attacked as a "give away" and as potentially producing "windfalls" for industry by public interest groups, by Admiral Rickover and others. Government supported studies indicate, however, that:

a. competition has not been adversely affected by the contractors ownership of inventions and "windfall" profits have not been produced by federally supported inventions;

b. additional incentives are necessary to rectify the low utilization rate of government supported inventions.

The Thornton bill follows a 1972 policy recommended by the Commission on Government Procurement, a bi-partisan group established by the Congress. The bill was based on proposed legislation drafted last year by the Federal Council for Science and Technology Committee on Government Patent Policy, an interagency committee. Additionally, the Thornton bill has recently been either not objected to or supported by all federal agencies except the Department of Justice (which prefers the current policy "mosaic" developed over the years) and the TVA. It is recommended that the Administration support Congressman Thornton's bill. A more detailed review of the issues and options is attached.

Attachment:
As stated

ISSUE PAPER
ON
FEDERAL PATENT POLICY

ISSUE

To develop an Administration position regarding ownership, control and use of inventions made under government R&D contracts and grants--generally referred to as the "government patent policy" issue.

Background and Discussion

Congressman Ray Thornton is vitally interested in patent policy. He held hearings on the subject last fall and has introduced a bill (H.R. 6249) which would establish a uniform and government-wide patent policy. Hearings on the bill are expected in January or February 1978.

Government patent policy is a controversial and emotional issue that has been debated in Congress, industry, the university community, and the Executive Branch for 30 years without a satisfactory resolution. There has been a tendency for opinions to polarize to one of two extremes:

-- that the government should always acquire ownership because to allow contractors to retain ownership to inventions is a "give away" of government property, a "windfall" to the contractor, and will suppress competition and the use of technology, or

-- that the contractor should always retain ownership because an invention owned by the government and available for all to use will be used by no one due to the lack of exclusive rights.

The issue involves an inter-relationship of economic, scientific, business and social considerations that is very complex and not well understood. The problem is one of balancing policies that protect the general public interest and yet provide enough exclusive benefit to the developer to insure full utilization of innovative ideas resulting from Federal R&D. It must also be pointed out that patent policy per se is but one of a number of ways that may aid the innovative process. Tax credits, cost sharing projects and subsidies could be used as incentives, however, patent policy should not be such as to inhibit commercialization and use of innovative ideas. Current Federal patent policy is a "mosaic" which has developed through Presidential statements and legislation over the last 20 years. In 1963, President Kennedy attempted to bring about more consistency by issuing the first Presidential Statement on Government Patent Policy. This was actually a three-tiered policy calling for one of three policy approaches depending upon the type of contracting situation. President Nixon reissued this policy with slight modifications in 1971 as a result of a three-year study. The agencies' authority, however, to operate under the Presidential Patent Policy has been twice challenged in the Federal courts. These challenges have failed because of procedural grounds and the merits of the challenges remain undecided.

Legislation on this issue has tended to be sporadic and inconsistent. Some legislation applies to all R&D activities of an agency (NSF and NASA), some to a particular field of technology (AEC/ERDA), some to particular R&D programs of an agency (Coal Research Act and Saline Water Conversion Act), and some to programs which cross agency boundaries (Solid Waste Disposal Act). Some legislation requires the Government to take title with no exceptions (Water Resources Act), while others permit exceptions, as in "appropriate circumstances" (Atomic Energy Act), in the "public interest" (NASA and ERDA) or in the "national defense" (Coal Research Act). Some legislation requires rights to be allocated in accordance with Presidential policies (Solid Waste Disposal Act and Federal Fire Prevention and Control Act) while the NSF Act requires invention rights to be allocated so as to protect the public interest and the equities of the contractor. In all, there are about 20 separate statutes governing patent policy.

Congressman Thornton initiated his legislation in order to resolve this issue, bring about uniformity, and simplify the Government's policy. (The Thornton bill also addresses the issues of roghts to government employee inventions and licensing of government-owned patents. These issues are not covered in this paper because they are not believed to be major, controversial policy issues.)

Over time the government patent policy has grown more flexible in some agencies. The NSF, AEC and NASA statutes of the 1950's included allowances for giving title to the contractor. The Presidential statements of 1963 and 1971 added flexibility if the agencies did not have specific legislation. While criticism of federal patent policy still centered on ownership of rights with emphasis being placed on inflammatory phrases such as patent "give away" and "windfalls", there was a realization that emphasis should be centered on obtaining expeditious, wide-spread commercial use of government-supported technology, while at the same time keeping in mind the issues of competition and encouraging private industry to work in government R&D efforts. One of the latest Congressional expressions of this more enlightened philosophy was set forth in the legislation applying to ERDA's non-nuclear R&D activities, wherein Congress directed ERDA to achieve the following four objectives in its patent policy:

1. Making the benefits of energy R&D programs widely available to the public in the shortest practicable time;

2. Promoting the commercial utilization of inventions;

3. Encouraging participation of private persons in ERDA's energy R&D programs; and

4. Fostering competition and preventing undue market concentration.

It is generally recognized that any government-wide patent policy should strive to achieve these four goals and, in addition, to obtain uniformity of application and simplicity of administration to the extent feasible.

In regard to encouraging commercial utilization, the "give away" critics imply that widespread utilization will be achieved through offering the inventions freely to the general public. Studies have shown, however, that merely making an invention available does not achieve commercial utilization, even in situations where the Federal Government finances the R&D effort that produced the invention. Substantial additional costs are normally necessary to further develop and market an invention, and studies have shown that this cost is normally 10-100 times the initial cost of the R&D effort that produced the invention. As an example, to commercially demonstrate alternative coal technologies that have already been experimentally proved, ERDA and industry are entering into joint ventures costing hundreds of millions of dollars. Any government-wide patent policy should give primary emphasis to achieving widespread commercial use of government supported technology, thereby strengthening the technology base of the United States.

Consideration must also be given to fostering competition and preventing undue market concentration which so often concerns the "give away" and "windfall" critics. The largest study ever conducted on this policy issue (the Harbridge House Study) was supported by the Federal Council for Science and Technology Committee on Government Patent Policy approximately 10 years ago. This study found no adverse effects on competition as a result of contractors retaining ownership to inventions, and no "windfall" profits obtained by such contractors. In fact, the evidence indicated a low utilization rate (approximately 12%) of government supported inventions. The study did show that utilization increased when the contractors acquired title to inventions, and that of the 200 inventions being used by industrial contractors, all but seven were owned by the contractors. The study also indicated that contractors normally license their patented technologies and that, in any event, alternative technologies were generally available. Accordingly, it is believed that little if any adverse effects on competition are derived from government patent policies.

The "give away" philosophy incorrectly implies that contractors bring no equities to the contract. This, of course, is not the case. Private industry with the most to offer to government R&D programs frequently has the most private investment in technology and is the most concerned with protecting its investment in technical qualifications and facilities. This is especially true where the research to be conducted is directed towards the contractor's proprietary commercial position, or where the contractor is expected to cost share the R&D effort. Failure to recognize these equities can and does cause some segments of industry to refuse to contract with the government and/or to segregate private R&D efforts from those undertaken with government support. Fiscal year 1975 data showed that less than one quarter of the larger (more than 1000 employees) R&D companies undertook Federal R&D contracts (only 235 companies out of a total of 1,133) and even a smaller percentage of the 10,000 small R&D firms performed government R&D. Accordingly, encouraging the participation of private industry is an important goal of government patent policy.

Finally, a federal patent policy should be capable of being consistently applied to all segments of industry, by all government agencies, and in all contracting situations. Such a goal simplifies the contracting process, simplifies government regulations, and is an important feature particularly to small businesses who cannot afford private attorneys specializing in government contracts. This is particularly important in view of the fact that over 30,000 contracts and grants are awarded by the Federal Government annually (and this results in the government receiving the title to about 1,500 patents). Also important is the reduction of administrative burdens by both the government and government contractors. Any policy should strive to reduce the amount of effort necessary to petition for or justify exceptions to normal policy, and to depend, as much as feasible, on industry to obtain commercial utilization rather than the Government.

Policy Alternatives

Option 1 - Status Quo (20 Statutes plus Presidential Statements)

No government-wide legislation, leaving patent policy to be controlled by Presidential patent policy or legislation where applicable. This is the option most recently supported by the Department of Justice, although Justice has and probably would support Options 3 and 4.

Pros

1. No efforts necessary to revise present laws.

Cons

1. No uniformity or consistency. (This could also be viewed as a pro, realizing that all agencies are different.)

(All pros and cons of other options could apply depending on which agency policy is applicable.)

Option 2 - Thornton Type Legislation

This policy would allow the contractor to retain ownership of inventions which the contractor intends to protect and commercialize. The Government obtains title to all other inventions. When the contractor retains title, the government acquires a paid-up license, and has the right to license others or require the contractor to do so (a) if the invention is not commercialized or (b) in certain public interest situations. After a period of 7-10 years, the contractor's exclusive rights are reviewed. Under this policy, the contractor is given the first opportunity to achieve commercial utilization, with the Government stepping in only where necessary.

Pros

1. Achieves uniformity;

2. Administratively easy to apply with minimum government involvement in commercial use of technology.

3. Concentrates administrative burden on only those commercial inventions of importance.

4. Recognizes investment of the contractor.

5. Encourages private participation in government R&D programs and joint industry/government R&D efforts.

Cons

1. Susceptibility to the "give away" allegation.

2. May provide exclusive patent rights in some instances where such rights were unnecessary to achieve commercial use.

Option 3 - Government Title

The government would obtain ownership to inventions made under government contracts and grants, with limited or no exceptions to this policy. Utilization of inventions would be achieved by dedicating the inventions to the public and/or a government licensing program. This is the policy that was followed by the AEC in the nuclear field, is presently followed under most R&D efforts of the Department of Interior and is favored by Admiral Rickover.

Pros

1. Achieves uniformity.

2. Answers the "give away", "windfall" and "suppression" arguments.

3. Administratively easy to apply.

Cons

1. Ongoing investment of the contractor not considered.

2. Discourages participation in government R&D programs.

3. Encourages separation of government and private R&D efforts.

4. Maximum government involvement in encouraging commercial use of technology.

Option 4 - Government Title With Waiver

The normal policy would be the acquisition of title by the government with the authority to waive the government's invention rights to the contractor in limited situations and under controlled conditions. Commercial use to be achieved primarily through government dedication and licensing. This policy is followed by NASA and ERDA (DOE).

Pros

1. Provides balance between advantages and disadvantes of Option 3, more consideration of contractor investment and more encouragement to participate.

2. A compromise position biased toward government ownership.

Cons

1. Less uniformity in application.

2. Considerable administrative burden for contractors to request and support waiver applications, and for the government to justify and document reasons for waiver determinations.

ANALYSIS

In view of the many and varied legislative patent policies, the fact that Congress continues to legislate in a piece-meal fashion, and the fact that the Presidential patent policy is apparently susceptible to legislative challenges, it appears that a uniform, government-wide legislative patent policy is appropriate. Accordingly, Option 1 of retaining the status quo should be rejected.

While Option 3 provides uniformity and ease of administration, and satisfies the "give away" critics, it has substantial disadvantages in discouraging cooperation between government and industry and participation in government programs. Additionally, it relies upon dedication to the public through publication or a government licensing program as the main encouragement to achieve utilization, and the licensing of technology is best handled by industry rather than government.

Option 4, with its waiver flexibility, improves the government's ability to cooperate with industry, but introduces a substantial administrative burden in reviewing and justifying waiver requests. On an average, there are approximately 8,000 inventions reported annually under approximately 30,000 government grants and contracts. No study indicates that the administrative burden necessary to handle waivers for such a workload produces an equivalent public benefit. In addition, this option still relies primarily on government activities to obtain commercial utilization.

Option 2, therefore, appears to provide the best balance of uniformity and administrative ease, recognizing contractor equities and encouraging government/industry cooperation. It also depends upon industry to push commercial use, rather than government. With its uniform application, however, exclusive rights to inventions may be provided where it was not necessary to do so in order to achieve commercial use. Studies show, however, that "windfalls have not been produced by such a policy and that more incentives for commercialization are needed. As a safeguard, Option 2 provides for required licensing where public needs exist and where the contractor does not effectively commercialize the invention.

Two possible modifications of Option 2 can be considered but would require a change in legislation. One involves a proviso that the Federal government would share in royalties resulting from commercial use of the invention. This may provide a more effective answer to the "give away" and "windfall" arguments, but would create a substantial administrative burden in determining which commercial products utilized government-sponsored inventions and in determining the relative value of the government contribution versus that of private industry. It would also put the government in the approval chain for commercialization.

A second modification involves the granting of an exclusive license to the contractor rather than title. This has the appearance of creating a greater degree of government control and providing the contractor with a lesser right. On the other hand, this modification would increase the administrative burden through government ownership and licensing, would not serve to encourage industrial cooperation to the extent of Option 2, and would generally be opposed by the university community.

DECISION

___ Option 1 - Status Quo
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___ Option 2 - Thornton Type Legislation
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___ Option 3 - Government Title
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___ Option 4 - Government Title With Waiver
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