## REPORT ON LEGISLATION CONTROLLING PATENTS IMPORTANT IN THE NATIONAL DEFENSE

26 April 1948

- 1. Existing laws and regulations .-- a. There are presently in effect three laws which may be invoked to prevent the issuance or release of patents applying to inventions deemed important in the national defense. The first, commonly designated "Public Law 700," is a war-time measure and was designed for security control of inventions in which the Government does not have a property interest; the second, commonly designated as the "Three-Year Rule," is a part of permanent legislation and only applies to inventions in which the Government has a property interest; and the third, Public Lav 535, commonly designated as the "Atomic Energy Act of 1946," is also permanent legislation but is only applicable to inventions in the field of atomic energy, regardless of whether or not the Government has a property interest therein. The lastnamed law is included in this report only for the sake of completeness and its possible bearing on the pattern of future legislation of direct interest in the cryptologic field.
- b. In addition to the foregoing laws there are presently also in effect two Executive Orders which have a direct or indirect bearing on this subject. These are Executive Orders Nos. 9668 and 9604.
- c. The foregoing laws and Executive Orders will be dealt with in detail in the subsequent paragraphs.
- 2. Public Law 700.--a. A copy of this Law, Act of Oct. 6, 1917, 40 Stat. 394 (U.S.C., Title 35, Sec. 42), with its various amendments, is attached as Inclosure 1. It was originally enacted, as indicated by the date cited above, as a war measure in World War I, lapsing on the official termination thereof. The law was re-enacted on 21 August 1941, shortly before our entrance into World War II. This law is specifically designed to prevent the publication or disclosure of any information concerning a U.S. Patent Application covering any invention the Commissioner of Patents deems important in the national defense. However, just as was the case in World War I, a limitation included in the law itself provides that it shall remain in force only "during the time when the United States is at war."

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- Since, so far as this Government is concerned, World War II has not yet been officially declared terminated, Public Law 700 is still in force. About a year ago, when the termination of war controls was being considered by the Congress, the various departments, bureaus, and agencies of the Government were consulted and a report on their recommendations was prepared by the Department of Justice (Senate Document No. 42, 80th Congress, 1st Session). Sections 476, 477, and 478 thereof (see Inclosure 2) refer to Public Law 700 and the recommendation was made that the authority contained in the cited statute be continued in effect until certain proposed new legislation had been considered by the Congress. This recommendation was apparently accepted, since the measure has not been repealed. However, unless this law or a similar one is made permanent legislation, so as to cover peace-time control, the present war-time control over the issuance of patents covering cryptologic inventions will lapse the day that the war is officially declared terminated. In Par. 8 there is a brief discussion of what is being attempted in the way of new legislation to cover this contingency.
- c. Public Law 700 affords adequate protection to the national defense as regards security of information relative to inventions important thereto; but it also protects the property interests of the inventors by providing a mechanism for compensating the latter, if and when a patent finally issues, for any damages alleged to have been suffered by reason of the application of secrecy orders preventing prompt issuance of the patent and thus deferring immediate commercial exploitation of the rights inherent therein.
- Rule arises from a proviso in a law, technically known as Section 4894, (U.S.C., Title 35, Sec. 37), which deals with the abandonment of patent applications by failure on the part of an applicant to complete action thereon or to prosecute it within the time allowed. The proviso referred to above reads: "Provided, however, that no application shall be regarded as abandoned which has become the property of the Government of the United States and with respect to which the head of any department of the Government shall have certified to the Commissioner of Patents, within a period of three years, that the invention disclosed therein is important to the armament or defense of the United States." Provision is also made for renewing the three-year period as many times as may be necessary (see Inclosure 3).
- b. As a general rule the foregoing proviso is currently invoked only in the case of inventions made by officers or civilian employees of the Armed Services, since only in those

cases do the patent applications generally fall in the category of applications "which have become the property of the Government" and which are "important to the armament or defense of the United States." All Government-employee inventions of this category, however, do not automatically become the property of the Government, because under a U.S. Supreme Court interpretation of existing law relating to patents, only an invention which has been produced as a result of a specific employment or contract to invent the specific device or article automatically becomes the property of the Government. In all other cases the Government has only a license or "shop rights" to inventions made in the course of their normal duties by Government employees; the patents in these cases, when issued, become the property of the inventors.

- Departmental policies vary considerably in respect to the enforcement or applicability of the above-mentioned interpretation of the Supreme Court. In certain Departments the policy is to require the inventor to assign all rights in the invention to the Government. This has not been the policy of the Departments of the Army, Navy, or Air Force, which Departments normally adhere strictly to the letter of the law as interpreted by the Supreme Court. In the Department of the Navy and in the Department of the Air Force, whenever an invention is deemed to require secrecy, the patent application is placed under Public Law 700, with or without the consent of the inventor. Unless there has been a specific designation to invent the specific thing, full ownership of the patent when finally issued rests in the inventor, the Government retaining only shop rights. However, within only two agencies of the Department of the Army, viz., the Signal Corps and the Army Security Agency, has it been deemed necessary or desirable to provide a special mechanism whereby the patent application becomes temporarily the property of the Government. The mechanism referred to in the preceding sentence consists in requiring all personnel likely to invent to sign a document according to which such personnel agree to assign patent applications to the Secretary of the Army. The theory behind this mechanism appears to be that it enables the Government, in peace time, to avail itself of the Three-Year Rule, and thus hold up issuance of the patent. However, it is the general rule that even in the case of these inventions ownership of the patent application reverts to the inventor when the need for secrecy has passed, in which case the application is allowed to go to issue. The Government, however, still retains a license or "shop rights"; the inventor owns the patent and has "commercial rights" which he is free to exploit if he so wishes.
- d. Unlike the case of Public Law 700, the Three-Year Rule makes no provision for compensating the inventor

for any damages alleged to have been suffered by holding up issuance of the patent. Section 4894 is entirely silent on this point.

- e. It appears that the Navy, the Air Force, and the majority of the branches of the Army prefer, in war-time, and in all cases of Government-employee inventions, to operate under Public Law 700 rather than under the Three-Year Rule. For example, currently the Air Force does not have a single case involving a Government-employee patent application that is being held up under the Three-Year Rule, but many under Public Law 700.
- f. However, there seems to be no har to the simultaneous application of both Public Law 700 and the Three-Year Rule to the same invention. This has been dene in a number of cases for special reasons not germane to this report.
- g. Since the Three-Year Rule is permanent legislation, it can be invoked at any time, whether in war or in peace. But, as noted, it applies only to patent applications which have become the property of the Government, and this situation is now generally applicable only to inventions made by Government personnel. However, there is a possibility that in some cases inventions made by non-Government inventors may or could be placed under the Three-Year Rule. For example, in the case of an invention made by personnel of a contractor performing work under a Government contract, should the latter deal with equipment classified confidential or higher, the contract usually calls for a complete assignment of applications for patents covering all inventions made under the contract. Thus, the Government then would have a property interest in the applications and hence the Three-Year Rule could be invoked in such cases. However, this is now rarely. if ever, done, because Public Law 700 provides better and specific means for security protection of the invention in the case of non-Government inventions than does the Three-Year Rule. It will be noted that the latter (Sec. 4894) makes no provision whatsoever for enjoining secrecy upon the inventor, as does the former. What is preferred, therefore, is to put the applications under Public Law 700, which permits the contractor to have and to exercise reversionary rights, at the same time giving better security control to the Government as long as secrecy is necessary.
- 4. The Atomic Energy Act of 1946.--a. It is possible that this recently enacted law may set a pattern for other fields involving considerations of national defense or public

interest. Inclosure 4 cites the sections principally dealing with the security control of patents and inventions in the atomic energy field.

- b. This law does not differentiate between the inventions of Governmental and non-Governmental personnel. It gives the Government power to prevent any patent being granted "for any invention which is useful solely in the production of fissionable material or in the utilization of fissionable material or atomic energy for a military weapon." Moreover, it provides also for the revocation of any patent already granted for any such invention.
- c. The law establishes a mechanism whereby the Government may acquire such patents by authorizing the Atomic Energy Commission to purchase, or take, requisition, or condemn such inventions or any patents applicable thereto; at the same time, however, the law takes cognizance of the property rights of inventors and provides a specific mechanism for determining compensation.
- d. The law provides means for enjoining secrecy upon inventors and penalties for violations thereof. It also provides that "The Commissioner of Patents shall notify the Atomic Energy Commission of all applications for patents heretofore or hereafter filed which in his opinion disclose such inventions or discoveries and shall provide the Commission access to all such applications."
- 5. Executive Orders. -- a. Executive Order 9865 of 14
  June 1947 (see Inclosure 5) has a bearing on the subject of
  this report. It orders all Government departments and agencies,
  when practicable, to acquire the right to file foreign patent
  applications on inventions resulting from research conducted
  or financed by the Government. However, the order specifically
  exempts (1) all inventions within the jurisdiction of the
  Atomic Energy Commission (with certain exceptions) and (2) all
  other inventions officially classified as secret or confidential
  for reasons of national security.
- b. Executive Order 9604 of 27 August 1945 also has a bearing on this report (see Inclosure 6). It deals with the release of scientific and industrial information obtained from the enemy during World War II. It sets up the policy that there shall be prompt, public, free and general dissemination of such information. But the order specifically provides that "nothing in this order shall be construed to limit or modify the power of the Secretary of War or the Secretary of the Navy

to determine finally whether the national military security permits the release, in whole or in part, of enemy scientific or industrial information." Therefore, even if USCICC regulations did not already provide against the release of information of certain enemy cryptologic equipment, Executive Order 9604 would be effective to prevent such release.

- 6. Special provisions in contracts .-- a. Reference has already been made to the fact that patent applications covering inventions arising in connection with Government contracts can be placed in a secrecy status. This is provided for in the standard Government contract form as it appears in Par. 8 of Joint Procurement Regulations No. 101.3 (see Inclosure 10). In clause (c) it will be seen that while and so long as the subject matter of a contract is classified confidential or higher, the "contractor agrees upon request of the contracting officer or his designee to assign and convey to the Government the entire right, title and interest in and to each United States patent application ... " This would be sufficient to place the application under the Three-Year Rule but currently the practice is to place the application under Public Law 700 and not under the Three-Year Rule. Upon the lapsing of Public Law 700 and a failure to enact permanent legislation similar to it, security control of inventions and patent applications arising from Government contracts will be hindered, if not lost altogether.
- b. In addition, however, the standard Government contract form specifically gives the Government the power to sequester a patent application covering classified equipment developed by a contractor. In these cases the patent application may be drawn up but may be held in secret files and not even entered in the Patent Office at all until the Government sees fit to do so. It will be noted under clauses (a) and (b) of Inclosure 10 that sequestration is possible by virtue of the phrase "or otherwise withheld from issue by the Government for reasons of national security." This has been interpreted that the application seem be withheld from filing in the Patent Office for better security, if deemed advisable. The power granted has been employed in connection with patent applications arising from contracts covering certain ASA equipment being developed under contract.
- 7. The Joint Army-Navy Patents Advisory Board. -- a. Acting under the authority conferred on him by Public Law 700, the Commissioner of Patents upon our entry into World War II, established certain Boards to advise him in the execution of his responsibilities under that law. There was therefore

established the Joint Army-Navy Patents Advisory Board, with various subcommittees for the different fields. One such subcommittee handled all patent applications covering cryptographic and allied apparatus, and the Signal Security Agency had a member on this subcommittee. During the war a considerable number of such applications was examined by the committee and many were recommended for secrecy orders to be served on the inventors.

- b. In the last two years, however, not a single case covering a cryptographic patent application has come to the attention of the committee. Therefore, it appeared that either the Advisory Board had been eliminated or else the Commissioner of Patents had failed to continue the war-time practice of submitting cases to the Board. An inquiry was therefore recently made to ascertain if the Board was still in existence. This produced an affirmative answer. There is left then the question as to why no cryptographic patent applications have come to the Board for consideration in the past two years. This point is being investigated.
- 8. New or pending legislation. -- a. Three bills have been introduced in the present Congress with a view to the enactment of permanent legislation to give the Government better security control over inventions and patents important in the national defense. They are H.R. 4420, S.1726, and H.R. 5740.
- b. H.R. 4420 and S.1726 are identical bills. (See Inclosures 7 and 8.) They were sponsored by the Department of the Army. The State-Army-Navy-Air Force Coordinating Committee (SANACC), which has recently been studying the matter of industrial security, presented its conclusions and recommendations in a document issued on 26 February 1948, SANACC 386/2 (see Inclosure 11). SANACC has recommended that the State Department and the other two services give their support to H.R. 4420 and S.1726, the intent of which is to strengthen Public Law 700 and to make it permanent legislation. These bills include provision for compensating inventors who abide by the terms of the legislation.
- c. H.R. 5740 (see Inclosure 9) is a bill "to extend the jurisdiction of district courts to patent suits," but it contains a section (Sec. 7) which also represents an attempt to make Public Iaw 700 permanent legislation. Apparently it is sponsored by some Department other than the Army, Navy, or Air Force. It is not mentioned in SANACC 386/2.

- d. In addition to the foregoing bills there is, of course, S.1019, which USCIB-USCICC is sponsoring and which includes features which, while not specifically dealing with patents as such, could be used to control patent applications. This possibility arises from the inclusion of a prohibition against unauthorized disclosure of classified information "concerning the design ... of any device, apparatus, or appliance used or prepared or planned for use by the United States or any foreign government for cryptographic ... purposes." If this bill is enacted, presumably it could be applied to cortain patent applications, whether the inventions were made by Government or non-Government personnel. This bill, however, makes no provision for compensating inventors.
- e. The foregoing bills have not progressed beyond the stage of being introduced and referred to the Committee of the Judiciary. It is doubtful if there will be opportunity to debate them during the present session of the Congress. On the other hand, it is probable that Public Law 700 will, be retained until permanent legislation will have been enacted.
- 9. New proposed legislation. -- a. Included in new legislation recently proposed by a subcommittee of SANACC designated as the Unclassified Technological Information Committee is a draft of a bill to provide for the registration of certain disclosures of applied technological information effected through technical aid contracts. This draft forms Inclosure 12 of this report. This legislation would give further security protection for technical information obtained by contractors who perform research and development work for the Government in all fields, including that of cryptology. Data contained in patent applications would obviously fall within this category.
- b. Another proposed bill which is being sponsored by SANACC and which is pertinent to this report (see Inclosure 13), deals with measures to tighten up on contractors' personnel who may be given access to plans or specifications covering equipment being developed under Government contracts. This would help prevent the disclosure of information relative to inventions and patent applications.
- 10. General remark. -- a. It is apparent that piece-meal legislation and uncoordinated efforts to produce multiple laws to take care of various and different problems of the control of information important in the national defense is not the best way to find the proper answers to those problems. A general law, of wide applicability and in broad terms, might possibly be drafted to apply to most cases.

b. Should the USCIB-USCICC sponsored S.1019 fail of debate or passage in the 80th Session of the Congress, a fresh attempt along the foregoing lines could be made, this to include not only what is now covered in S.1019, but also what is covered in the various other bills discussed above as well as in Section 11 of Public Law 585, the Atomic Energy Act of 1946.

## 11. Recommendations .-- It is recommended that:

- a. USCIB-USCICC lend 1ts support to H.R. 4420 and 3.1726 as a matter of immediacy and expediency in view of the possible lapsing of Public Law 700, even though this contingency appears currently remote.
- An appropriate subcommittee of USCICC study the entire subject of patents insofar as it contains implications of applicability to or threats against U.S. communication intelligence interests.
- In such a study, consideration be given to the drafting of new legislation not specifically directed or applicable to communication intelligence but of a very broad and general character useful to all branches of the Armed Forces.
- Such a bill, insofar as patents and inventions are concerned, be patterned after Public Law 585, The Atomic Energy Act of 1946.

## 13 Incls:

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- 1. Public Law 700
- 2. Sections from S. Doc. 42
- 3. Sec. 4894 (Three-Year Rule)
- 4. Sec. 11, Atomic Energy Act
- 5. Ex. Order 9865
- 6. Ex. Order 9604
- 7. H.R. 4420
- **S.1726**
- 9. H.R. 5740
- Par. 8, Joint Proc. Regs. SANACC 386/2 10.
- 11.
- 12. Bill Proposed by UTI of SANACC
- 13.