As I told you this morning, this is intended to be exploratory in character—I really don't know how to proceed or what was intended by the original G-2 policy directive. If you have any suggestion as to how we could or should proceed without such a memo as this, I'd be appreciative of having it. Also, if it is decided that the paper should be written...
some other way, I'd be glad to change it in whatever direction is indicated. But I feel that I should not let the matter rest where it now stands, and I want to make some progress in the case, if possible.

W.F.F.
C5GAS

8 December 1947

SUBJECT: Patent Application Serial No. 443,320

THRU: Chief, Army Security Agency

TO: Director of Intelligence
General Staff, United States Army
Room 2B 612, The Pentagon
Washington 25, D.C.

1. Reference is made to the following inclosures:
   b. Memorandum dated 20 May 1946, from the Chief, Army Security Agency, in response to the above-mentioned memorandum (Incl. 2, with Tab 1).
   c. Memorandum dated 6 August 1947, from the undersigned to the Chief, Army Security Agency, with further reference to the subject patent application (Incl. 3).
   e. Letter dated 10 June 1946, to the undersigned from William F. Hall, Patents and Inventions Counsel, Legal Division, Office of the Chief Signal Officer, stating the facts as to the reversionary rights of the inventors in the case of the subject patent application (Incl. 5, with Tab 1)
2. In view of the decision set forth in Par. 3 of Inclosure 4, and in conformity with Par. 3 of Inclosure 2, the undersigned desires to prepare a case looking toward the disposition to the Government of all commercially exploitable reversionary rights of the inventors in the subject patent application. In this connection the following information is respectfully requested:

   a. Does the policy indicated in Par. 1b of Tab 1 of Inclosure 2 contemplate the disposition to the Government of the inventors reversionary rights by actual purchase of the application for letters patent? Or does the policy contemplate Congressional action in the form of the submission of a measure to the Congress for the "private relief" of the inventors, by way of reimbursement for their disposal to the Government of all commercially exploitable reversionary rights in the patent application? If neither of the foregoing is what is contemplated, is it possible to give some indication of the lines along which action might be taken, so as to afford guidance in the preparation of the case?

   b. In view of the complexities involved in this matter, and the technical difficulties involved in preparing a case for possible action, the undersigned would like to avail himself of the assistance of legal counsel. Would the Director of Intelligence have any objection, on security grounds, if the undersigned sought such private counsel to assist him in the furtherance of his interests, with the understanding that no details of the construction or operation of the equipments involved would be disclosed to such counsel? If there should be objection, would the Director of Intelligence be so kind as to indicate where such counsel might be obtained within the Department of the Army?

Incl. 1-5, Inclusive as listed on page 1

WILLIAM F. FRIEDMAN
SUBJECT: Release of Patent Application Serial No. 443, 320

TO: Commanding General
Army Security Agency

1. The subject patent application covers a cryptographic means and device for automatic encipherment and decipherment of teletypewriter signals and was filed in the U. S. Patent Office on 16 May 1942 in the name of the undersigned and Frank B. Rowlett, as co-inventors.

2. The principles involved in the subject application have been utilized in Converter M-228 and Converter M-294.

3. It is requested that the subject application be officially declassified in order that it may be allowed to go to issue, whereupon the right and title will revert to the undersigned and Frank B. Rowlett, subject to an irrevocable, non-exclusive, and royalty-free right and license remaining vested in the United States of America.

4. This action is desired because of the commercial applications of the invention, interest in which is believed to exist on the part of the U. S. communication companies.

5. Declassification of the patent application does not necessarily involve the declassification of the specific embodiments thereof represented in the apparatuses mentioned in paragraph 2.

WILLIAM F. FRIEDMAN

End 1
SUBJECT: Release of Patent Application Serial No. 443,320

TO: Mr. William F. Friedman, WDGSS-14

1. Reference your letter dated 27 September 1945, subject as above, the attached memorandum from the Acting Deputy Assistant Chief of Staff, G-2, outlines the War Department policy on the release of cryptographic principles.

2. Analysis of the policy would indicate that:

   a. Patent application No. 443,320 will not be released unless it can be shown that the employment of the principles involved are susceptible to cryptanalysis under all circumstances; and

   b. If not released, a request for purchase of all commercially exploitable reversionary rights may be entertained provided it can be shown that Frank B. Rowlett and yourself were not directed or employed to experiment on or to invent the principles or improvements embodied in Converter M-228 or Converter M-294.

3. If it is felt that subject Patent Application should be released under (a) above; or if and when it is felt a case should be presented for purchase of rights in conformity with stipulations contained in (b) above, an application for release or purchase, containing pertinent facts and necessary proofs, may be prepared and submitted to the Director of Intelligence through the Chief, Army Security Agency.

1 Incl
Cy ltr dtd 29 Apr 46, subj: "Release of Cryptographic Principles"

[Signature]

HAROLD G. HALE
Colonel, Signal Corps
Chief, Army Security Agency
MEMORANDUM FOR THE CHIEF, ARMY SECURITY AGENCY:

SUBJECT: Release of Cryptographic Principles.

1. The following policy is announced to be effective immediately:

   a. Cryptographic principles or devices developed by officers, enlisted men, or civilians employed in any War Department Agency, or patents or patent applications on such principles or devices which are owned by, assigned to, or licensed for use of the War Department will not be released for use of foreign governments or for foreign or domestic commercial or private use until such time as necessary information is available and a procedure established in the Army Security Agency whereby information which is cryptographed by means of such principles or devices can be cryptanalyzed and read under any and all circumstances.

   b. Where it is in the interest of the Government of the United States that an employee have no patent rights in cryptographic principles or devices to dispose of, and for the Government to own the entire interest for security reasons throughout any foreseeable future; and where discovery or invention of cryptographic principles or devices has been made by a civilian employee and does not relate to a matter as to which the employee was specifically directed to experiment with a view to suggesting improvements nor was produced as a result of any specific employment or contract to invent a specific device or article; and where an application for patent on such principles or devices has been filed with an assignment-in-trust to the Government for the purpose of maintaining such application in secrecy, the Military Intelligence Division will support, subject to the availability of appropriations, any reasonable request for purchase of all commercially exploitable reversionary rights of the inventor in the patent application.

   /s/ CARTER W. CLARKE
   Colonel, GSC
   Acting Deputy A.G. of S., G-2