

Office Memorandum • UNITED STATES GOVERNMENT

TO : Mr. William F. Friedman, AFSA-OOT

FROM : Mr. Henry B. Stauffer, AFSA-O3A5

SUBJECT: Hebern Infringement Claim

DATE: 2 October 1950

In order to bring your copy of the report relative to the subject claim into conformity with the revised draft, it is suggested that:

- a. Page 3 of the report should be cancelled, and Inclosure 1 substituted therefor;
 - b. Page 13 of the report should be cancelled, and Inclosure 2 substituted therefor;
 - c. Page 14 of the report should be cancelled, and Inclosure 3 substituted therefor;
- and
- d. Exhibit B of the report should be amended to include the patent to RYMTOWTF-PRINCE, United States, 17 November 1890, 15 March 1892, 470,871.

Declassified and approved for release by NSA on
09-13-2013 pursuant to E.O. 13526

3 Incls

1. New pg 3
2. New pg 13
3. New pg 14

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Henry B. Stauffer
HENRY B. STAUFFER
AFSA-O3A5

I have ordered an extra copy of Rymtowitz Prince and will forward it to you when received. HBS

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alignments which are possible. Still others (39 and 41 through 46) define it in a somewhat different manner, i.e., by specifying that, after each code wheel has made not less than half nor more than a full revolution, the code wheel of next lower speed is advanced one position. The type of rotor movement covered by these claims is not used for cryptographic purposes in any military equipment except, perhaps, in an occasional laboratory or exhibit device, and it is believed, therefore, that the claims of this group are not infringed;

b. Claims 6 and 7 are probably infringed by a single machine, the SIGROT. These claims are directed to a mechanism for stepping the rotors of a cryptographic maze. The construction disclosed in Hebern, 1,663,072, is specifically different from that of the SIGROT, but the principles and functions of the two are identical, and the claims read well upon the Army device. The claims appear to be anticipated by the patent to Rystowitt-Prinze, 470,871. Claims 8 through 15, all directed to subject matter similar to that of Claims 6 and 7, contain additional limitations, and are believed not to be infringed;

c. Claims 17 through 22 are directed to means for controlling the stepping of the several rotors' wheels and code wheels which

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k. Claims 56 and 57 are directed specifically to a structure wherein the cryptographic rotors are "oscillated" as a group to provide a stepwise displacement of one or more of the rotors. These claims clearly are not infringed as in none of the machines of Exhibit A are the rotors moved out of their normal axis; and

l. Claim 61 is infringed by the SIGABA, GCM, SIGBRAT, and SIGROD. The claim is apparently invalid for functionality, however, and is anticipated by several patents, an example being A. B. Cryptograph (French), 548,093.

6. To recapitulate briefly, this study has indicated that but two of the patents identified in the Hebern claim are pertinent to Army cryptographic machines, these being (Hebern) Nos. 1,683,072, and 1,861,877. These two patents contain several claims appearing to be infringed by one or more military machines; but all infringed claims are reasonably met by prior patents, and additional defenses of functionality and double patenting are available as to some of them. Still further anticipatory material could probably be found by investigation of the early work of the manufacturers of the so-called Enigma in Germany, there being reason to believe that anticipating devices were, in fact, in existence and known to the public more than two years prior to the filing dates of the applications for the patents in question.

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7. Contracts covering involved machines have been studied. Most of such contracts contained so-called save-harmless indemnity clauses, but, with one exception, these clauses relieved the contractors of liability whenever their work was based on definite Government specifications, and this was the usual case. The exception is Contract W2124-cc-16897, for the SIGFOY procurement, and this contract contained no such relief from liability. The contractor was notified of the claim and has already offered assistance in the matter.

8. A list of the most significant patents considered in connection with the Hebern claim is appended, Exhibit B.

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