

~~CONFIDENTIAL~~

IN THE UNITED STATES PATENT OFFICE

IN RE: Application of \*  
 WILLIAM F. FRIEDMAN \*

Serial Number \*  
 549,036 \* Division 53

Filed \*  
 11 August 1944 \* AMENDMENT

For \*  
 ELECTRICAL SYSTEM \*

\* \* \* \* \*

*a*

TO: The Honorable Commissioner of Patents  
 Washington 25, D. C.

Sir:

This is in response to Patent Office action of 14 December 1944  
 in the above-identified application for patent which is being prose-  
 cuted under the so-called three-year rule. Please amend the case as  
 follows:

IN THE SPECIFICATION

Page 3, line 21 - After "like" insert - by means of screws as  
 14" - .

Page 5, after  
 line 11 - Insert - The front and back covers when closed  
 are secured by means of hasps 23' and 23",  
 respectively. - .

14 - Change the period to a comma and add - which  
 are supported and strengthened by a rod 26C. - .

~~CONFIDENTIAL~~

*Handwritten  
to PO 10 Dec 47*

~~CONFIDENTIAL~~

Page 7, line 3 - Cancel "Figures 5 and" and insert - Figure - .

8 - After "keyboard" insert - 14 - .

15 - After "17E" insert - (Figure 7) - .

Page 8, after

line 27- Insert the following paragraph - It is, in other words, the cam face 55 engaged in a peripheral slot 56 and impelled by rotary motion imparted to it by plunger 38-39 which actually serves to step the rotor. The cam face cannot, however, enter into one of the notches until the cooperating pawl enters an auxiliary notch 55D. - .

Page 10, line 24- Change "consisting" to - consist - .

#### IN THE CLAIMS

Claim 1, line 2- Cancel "or the like".

Claim 2 - Cancel.

Claim 4 - Cancel.

Claim 7, line 2- Cancel "or the like".

Claim 8, line 4- Cancel "or the like".

Claim 9 - Cancel.

Claim 10, line 4- Cancel "or the like".

Claim 13, line 3- Cancel "utilizing" and insert - deriving - .

Claim 14, line 6- Cancel "utilizing" and insert - deriving - .

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

Claim 17, line 3 - Cancel "or the like".

Claim 18, line 2 - Cancel "or".

3 - Cancel "the like".

8 - After "indicator" insert - to show the enciphered character - .

Claim 19, line 3 - Cancel "or the like".

Claim 20 - Cancel.

Claim 21 - Cancel.

Claim 22, line 2 - Cancel "or the like".

Claim 23, line 2 - Cancel "or the like".

## REMARKS

The specification has been amended to include reference character 14" for the screwheads shown in Figures 2 and 8 and reference characters 23' and 23" for the hasps of Figure 2.

It is assumed that modification of the drawings can await the allowance of claims, and so no request has, as yet, been made to the Chief Draftsman. Further reason for delay in this matter is that the changes desired by the Examiner are not altogether clear. The "two parts to the right of '34' in figure 5" cannot be identified, and it is not known exactly how parts 26, 26A, 38, and 39 are to be illustrated. A simple sketch would be greatly appreciated.

The objectionable alternative expressions in the several claims have been cancelled.

The "predetermined" in Claim 1, line 8, relates to the rotation of the first cryptographic rotor. In the preferred embodiment, of course, the "predetermined angular displacement" of the first switch before the second switch steps will be  $360^\circ$ , but other arrangements are possible.

~~CONFIDENTIAL~~

It is assumed that Claim 2, in view of the amendments made to the specification, will be considered allowable as soon as the drawings can be corrected.

Claims 3 and 4 have been cancelled.

Claims 5, 6, and 7 appear not to be met by the patent to Korn, 1,705,641, except that the patented disclosure contains end contacts somewhat like those in the claims. The patent on the other hand shows neither indicators nor switches associated with each one thereof, and, of course, the circuits of Korn are entirely different from those of Claim 5. Hebern, 1,683,072, likewise fails to show the switch and indicator arrangement of the Applicant. It will be noted that, according to Hebern, only the output is actuated (Page 4, lines 58 through 72). Since the reference fails to show the circuit arrangement of Claim 5, upon which Claims 6 and 7 are based, it is believed that the latter two claims should not be objectionable.

Claim 9 has been cancelled.

With regard to the objection to Claims 11 and 12, Applicant admits that most cryptographs can be used for purposes of authentication, but it would not be accurate to say that most are especially adapted for this function. These claims clearly point out the novel feature of Applicant's authenticator, that being the circuit which always produces the enciphered equivalent of a predetermined input character. Lines 51 through 80 of Page 1 of the Scherbius patent, 1,657,411, it may be noted, are directed to synchronization and to the prevention of garbles and not to authentication.

Claims 13 and 14 have been amended to substitute "deriving" for utilizing. The use to which the output signals are put would seem to be of no more importance than the manner of using the output signals of a new method of telegraphy. In the matter of functionality, it is obvious that Applicant's method could be practiced with other machines and by hand.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

With reference to the rejection of Claim 15, the appearance in Korn, 1,705,641, and Scherbius, 1,657,411, of means for stressing the rotors is conceded, but Applicant's device is claimed specifically and does not seem to be fairly met by the references.

Insofar as Claims 16 and 17 are concerned, no reference shows a keyboard with keys and indicators arranged adjacent each other in pairs.

Claim 18 has been amended to point out the reason for energization of two indicators by means of each switch. The combination is not found in the prior art.

Claims 20 and 21 have been cancelled.

Continuation of prosecution under the three-year rule is desired.

Consideration and favorable action are requested.

Respectfully,

WILLIAM F. FRIEDMAN, Applicant

By \_\_\_\_\_  
His Attorney

~~CONFIDENTIAL~~