REF ID:A363574

Division 53

Room

253

Jata: 22 ph phy mil

## IN THE

## UNITED STATES PATENT OFFICE

IN RE: Application of WILLIAM F. FRIEDMAN

Serial No. - 551,172 -

Filed 25 August 1944

AUTHENTICATING DEVICE

AMENDMENT

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

Sir:

This is in response to Patent Office action dated 3 February 1945 in the above identified application.

## IN THE CLATES:

Claim 1 - Cancel

Claim 3, Line 5 - Cancel "another switch" and insert - a selector -.

Line 6 - Change "sources" to - source - .

Claim 4 - Cancel

Claim 5, Line 2 - Cancel "or the like".

Line 5 - Cancel "a contact" and insert - one of a limited number of contacts - .

Please add the following claim:

6. In a device of the nature described, a source of current, a series of cryptographic rotors having a plurality of inputs and a plurality of outputs, a selector adapted to make successive circuits between said source of current and a limited number of preselected inputs to said

series, an indicator for each of said outputs adapted to be energized by said source, and means for assigning variable values to said indicators said means comprising a holding member adjacent said indicators and a card or the like slidably held thereby said card bearing indicia which may be variously juxtaposed with the said indicators.

## REMARKS:

One of the references cited by the Examiner is identified as Friedman, 2,090,416, which is erroneous, No. 2,090,416 being a patent to Hull for Refrigerating Apparatus. The reference may be Patent No. 2,080,416 to Friedman. If the reference in question is to be relied upon, its proper citation is desired.

Since the "multiple contact switches" and "cryptographic rotors" of Applicant's description and claims and means for mounting the same are familiar to the art, and since no specific mounting means or rotor construction is claimed, it is not apparent what purpose will be served by additional drawings. Reconsideration of the requirement therefor is requested. Reference is made to any of the cited patents.

Referring to the objection to Claim 2 as failing to define the invention in the "means" of lines 7 and 8 thereof, the expression has reference to the structure 111-112, the former being slidable within the latter
and replaceable, thus to provide a means for changing the values of the
several lamps 101 through 110. The function of the strip is explained on
page 3, first and last paragraphs.

Claim 3 has been amended to point out that the "other switch" referred to is selector 90-97. It should be noted that this selector does
not close all of the inputs to the rotor bank but to a predetermined number of selected inputs. This arrangement is not found in any of the reference patents and probably would not be used except in an authenticator (as
distinguished from a cryptograph).

REF ID: A363574

It may be noted, in response to the Examiner's query as to the difference between an authenticator and a cryptograph, that the former is a special case of the latter. While most cryptographs can be used to authenticate, the contrary is not true except that one or a small number of characters usually are enciphered in an authenticating operation. A further distinction is that no purpose is served in an authenticator by any means for <u>deciphering</u> as both correspondents normally perform exactly the same steps in authenticating a communication.

In Claim 5, in addition to the cancellation of the expression "or the like", the claim as amended brings out the selection by the last-mentioned switch of a contact of a group of a limited number.

Claim 6 specifically includes the structure 111-112 of Figure 2.

It differentiates from the references as explained below.

With regard to the references cited, none of them shows the selector-type switch called for by most of the claims nor the device of preselecting a limited number of inputs to the rotor maze, nor the means, either broadly or specifically, for varying the values of the output indicators, the latter two of which features are of particular importance.

Reconsideration and favorable action are requested.

Continued prosecution under the three-year rule is desired.

Respectfully.

WILLIAM F. FRIEDMAN, Applicant .

By Denry B. Stauffer