

~~CONFIDENTIAL~~

AS-71 AS-23 14 Feb 47 Patent Application

For information upon which to base a reply.

1 Incl  
 Disp Form dtd 11 Feb 47  
 fr Patents & Invs. Br,  
 Legal Branch

GEORGE A BICHER  
 Colonel, Signal Corps

THRU

AS-80

TO

AS-23 AS-71 19 Feb 47

1. Applications for patent, serial numbers 478,193,  
 478,868, and 551,172, are forwarded for your comments and  
 recommendations.

2. The Research and Development Division has no objection to the release of  
 the applications.

4 Incls  
 Added 3 incls

2. Appn SN 478,193
3. Appn SN 478,868
4. Appn SN 551,172

S. KULLBACK  
 Chief, Research and Development Division

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4. AS-20 AS-71 19 May 47 1. In response to the oral request by Captain Woehlke for recommendations and comments regarding patent applications of William F. Friedman, serial numbers 478,193, - 478,868, and 551,172, numbers 478,193 and 478,868 were circulated through AS-80 and AS-90.

2. Certain background information with respect to the two cases and brief descriptions of the inventions thereof appear in Comment 1.

3. AS-70 concurs with the conclusions of AS-80 and AS-90.

4. Serial Number 551,172 was not circulated since the application had never been classified. A draft of the case was considered before filing; the views of the interested branches and individuals may be found in an R & W, 24 July 1944, subject: Authenticating Device, through Chief, C Branch, to Commanding Officer, Signal Security Agency, and six subsequent actions, the final action being an approval by the Assistant Chief, Signal Security Agency, for the filing of an unclassified patent application.

5. Return of the copies of the applications is requested.

3 Incls

1. n/c

2. n/c

3. Pat Appn SN 551,172

S. KULLBACK, Chief

Research Laboratories Division

Ext. 284

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3. AS-70 AS-90 15 May 1947 Applications for Patent -SN 478, 193 and  
SN 478,868 (cont'd)

Operations Division has no objections to  
the declassifying and release of these patent  
applications.

2 Incls  
n/c

FRANK B. ROWLETT  
Chief, Operations Division  
Ext. 315

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THRU: AS-80

AS-90 AS-71 6 May 47 Applications for patent SN 478,193 and  
SN 478, 868

1. Inclosures 1 and 2 are forwarded for evaluation and return.
2. The applications are currently classified confidential. The question is whether the inventions may be declassified so that patents can issue and be exploited commercially.
3. Both disclosures relate to facsimile privacy apparatus.
  - a. Serial Number 478,193 involves the derivation of an on-off signal from a black and white message (picture) and another on-off signal from a dummy picture. The dummy message may or may not be intelligible in itself. The two signals are added by a system of relays so that, when message and dummy signals are alike (both "ons" or both "offs"), an off signal is transmitted while two unlike currents result in the transmission of an on signal. This is, in other words, according to the so-called Vernam rule. At a receiving station, the dummy message or key is subtracted.
  - b. Serial Number 478, 868 describes a system essentially like the above except that addition is accomplished by tubes instead of relays.
4. Further information about the subject applications may be obtained if necessary, from Chief, AS-72.

2 Incls

1. Pat Appn SN 478,193
2. Pat Appn SN 478,868

S. KULLBACK, Chief  
 Research Laboratories Division  
 Ext. 284

2. THRU: AS-80 9 May 47 The Security Division has no objection to the  
 AS-90 declassification and release of these patent applications.  
 TO  
 AS-71

2 Incls  
 n/c

A. SINKOV  
 Chief, Security Division  
 Extension 241

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HEADQUARTERS  
ARMY SECURITY AGENCY  
WASHINGTON 25 D C

WDGAS-71

11 October 1946

SUBJECT Patent Application of Friedman and Mauborgne, SN 478,868

TO Chief Signal Officer  
Director, Legal Division  
Patents and Inventions Branch  
4C 274, The Pentagon  
Washington 25, D. C.  
ATTENTION Mr. Harry M. Saragovitz

1. Inclosed herewith, in duplicate, is a proposed amendment to the subject application.

2. The amendment is due in the Patent Office 16 October 1946.

FOR THE CHIEF, ARMY SECURITY AGENCY

1 Incl  
Amendment in dup

/s/ S Kullback  
S KULLBACK  
Chief, Research and Development  
Division

SIGLG-3-HS (11 Oct '46) 1st Ind.

WD, OCSigO, Washington 25, D C , 15 October 1946

To Chief, Army Security Agency, The Pentagon Building, Washington 25, D C  
Attn Mr Stauffer

This is to advise that amendment covering subject case was filed in the Patent Office on 14 October 1946.

FOR THE CHIEF SIGNAL OFFICER

1 Incl  
w/d

/s/ Harry M. Saragovitz  
HARRY M. SARAGOVITZ  
Asst. Chief, Patents & Inventions Branch  
Legal Division.