STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO Mr. Friedman

FROM Mr. Stauffer

SUBJECT Application 478,193

DATE 20 December 1950

Told Stauffer no to forget it now for further use if need be

The decision of the Board of Appeals in your application 478,193 is attached. The Examiner has been affirmed.

I still think that we're entitled as much to rely upon dictionary definitions as the Examiner is, and I feel that the Board of Appeals skipped over the crux of the matter (page 5), but I seriously doubt that further prosecution of the case would be worthwhile.

Will you let me have your views?

Henry B. Stauffer

HENRY B. STAUFFER

Paper No. 22

Appeal No. 21,161 DH

IN THE UNITED STATES PATENT OFFICE

BEFORE THE BOARD OF APPEALS

Ex parte William F. Friedman

Application for Patent filed March 6, 1943, Serial No. 478,193. System for Enciphering Facsimile.

Mr. Henry B. Stauffer for appellant.

This is an appeal from the final rejection of claim 14. Claims 5, 6, 7, 13, and 15, the remaining claims in the case, stand allowed.

The appealed claim is:

14. Means for secretly transmitting graphic information comprising a device for scanning and representing said graphic information as a series of electric impulses of varying intensity, a camouflage message, a second device arranged for scanning said camouflage message and reproducing the same as a second series of electric impulses of varying intensity the impulses of said second series being nonsynchronous with the impulses of said first series, an electromechanical interlock connected under the control of both of said series of impulses for energization whenever predetermined combinations of impulses occur in the two said series of impulses, and a transmitter controlled by said interlock and adapted to emit impulses whenever said interlock is energized.

The references relied upon are:

Vernam,	1,310,719,	July 22, 1919,
Cartier,	1,868,967,	July 26, 1932.

The appealed claim is drawn to a facsimile enciphering system wherein a dummy or camouflage picture is scanned concurrently with a picture or other subject matter containing the message to be transmitted and wherein the two signals are interacted to produce an enciphered facsimile signal. Appellant's apparatus and method of operation have been described in detail in the Examiner's Statement, to which reference is made.

The appealed claim has been rejected as unpatentable over Cartier or Vernam.

The Examiner applies the references to the claim and contends that the means for secretly transmitting graphic information is clearly disclosed by the references since they relate to secret telegraphy systems. He also contends that these references disclose a "device for scanning" since a tape transmitter is a "device for scanning" because it senses successive portions of a tape. The Examiner also states that the references disclose "and representing said graphic information as a series of electric impulses of varying intensity," since the impulse to be conveyed is translated through the medium of the tape in the transmitter of the references into a series of impulses of varying intensity, that is, in Cartier the intensity of the pulses varies from a negative value to a positive value and in Vernam the intensity of the pulses varies from a maximum voltage to no voltage. The Examiner also states that both of the references disclose "a camouflage message" as well as "a second device arranged for scanning said camouflage message and reproducing the same as a second series of elec-

tric impulses of varying intensity." The Examiner also contends that the references disclose "the impulses of said second series being nonsynchronous with the impulses of said first series" since the operation of the bars K with respect to the bars K1 of Cartier, for example, is nonsynchronous within the meaning of the term as defined in Webster's New International Dictionary, Unabridged 1940 Edition. The Examiner also states that the references disclose the electromechanical interlock as set forth in the claim as well as the transmitter controlled by the interlock.

The appellant contends that the Examiner's position, that since the references relate to telegraphy they involve the transmission of graphic information, is only loosely true. He states that originally a telegraph system produced marks on a paper at the receiver and may do so today, although frequently the received signal perforates a tape, but that neither of these systems includes the transmission of graphic information which implies the formation of a replica or facsimile of the original message.

We do not agree with appellant's contention in this respect since a perforated tape is a graphic representation of a message, especially to one sufficiently informed as to the meaning of the perforations. While we do not agree that the transmission of graphic information necessarily implies the formation upon reception of a facsimile of the original message, nevertheless it is very old in the telegraph art to reproduce at the receiver a reperforation of the tape used at the transmitter, this being especially so in secret systems wherein the reperfor-

ated tape is subsequently used in connection with the coding tape to produce the desired message.

Appellant also states that the Examiner is in error in his holding that a tape transmitter is a device for scanning. Appellant contends that "scan" and "scanning" are technical terms having established meanings, and he cites two definitions of the words from Webster's New International Dictionary, Second Edition.

We find no error in the Examiner's holding that the tape transmitter comprises a device for scanning since the tape is fed step-by-step longitudinally through the transmitter and at each step the presence or absence of a perforation is sensed by the transmitter pins. We are of the opinion that this progressive sensing of successive portions of the tape is broadly a scanning of the tape since it is the successive exposure of small portions of the tape in a communication system and hence does not disagree with the definition of scanning cited by appellant. It is well known that some facsimile systems spirally scan the image to be transmitted by means of a feeler electrode, which is obviously a sensing device. From this it is seen that there is no absolute distinction, even in facsimile systems, between a sensing device and a scanning device. If appellant had desired that a more limited meaning be given to the word "scanning", he could have done so by a proper statement in the specification. It is well established that limitations cannot be read into a claim for the purpose of avoiding the prior art even though the specification discloses such limitations. In re Unger, 508 O.G. 574.

Appellant also points out that the appealed claim requires that the impulses of one series be nonsynchronous with the impulses of the other. He contends that the references disclose apparatus in which the two signal sequences must be synchronous in order that, combined, they may result in the five-unit (or seven-unit) Baudot code the equipments are adapted to handle, whereas, in appellant's device there is no necessary time relationship between the impulses of the message and camouflage sequences.

It is not clear to us just what is meant by the statement in the claim that the impulses of the second series are nonsynchronous with the impulses of the first series. It is clear from appellant's specification that in order for both of the relays 14 and 15 to be simultaneously energized or simultaneously deenergized, the impulses must occur simultaneously or not occur simultaneously and in this sense they are synchronously produced. This is also true of the references. On the other hand, when it is desired to have one of the relays 14 or 15 energized and the other deenergized, the impulses of both series cannot occur simultaneously and in this sense they are nonsynchronous; but this is also true of the references. Whatever may be the intended meaning, we think that the references disclose structure which is essentially equivalent to that disclosed by appellant.

After careful consideration of appellant's argument, we are of the opinion that the appealed claim was properly rejected as unpatentable over the cited references.

The decision of the Examiner is affirmed.

#21,161

In event of appeal, attention is directed to In re Boyce, 32 CCPA 718; 144 F.(2d) 896; 1944 C.D. 609; 568 O.G. 568; 63 USPQ 80, in regard to specifically including in the appeal notice all grounds of rejection in the Examiner's Statement not expressly overruled by the Board.

MARK TAYLOR
Examiner-in-Chief

L. P. McCANN
Examiner-in-Chief

R. G. NILSON
Examiner-in-Chief
(Acting)

BOARD OF APPEALS

December 8, 1950

Mr. Henry B. Stauffer
Army Security Agency
The Pentagon
Washington 25, D.C.