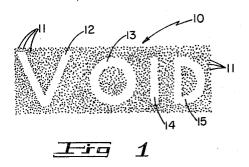
METHOD OF APPLYING SIGNATURES TO NEGOTIABLE INSTRUMENTS

Filed Nov. 1, 1963

3 Sheets-Sheet 1



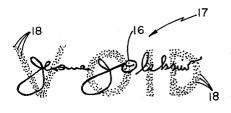


Fig 5

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Fig 7

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METHOD OF APPLYING SIGNATURES TO NEGOTIABLE INSTRUMENTS

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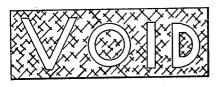
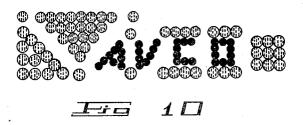


Fig A



Fig 9



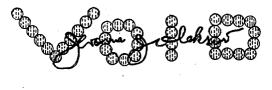


Fig 11

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United States Patent Office

3,282,720 METHOD OF APPLYING SIGNATURES TO NEGOTIABLE INSTRUMENTS Jerome J. Oleksiw, Weston, Mass., assignor to Avco Corporation, Cincinnati, Ohio, a corporation of Delaware Filed Nov. 1, 1963, Ser. No. 320,813 11 Claims. (Cl. 117—1)

This invention relates to negotiable instruments and more particularly to a method of mechanically applying 10 validating signatures to such instruments.

In offices and institutions where it is frequently or periodically necessary to issue a great number of negotiable instruments including checks and all other types of negotiable instruments, documents or papers to which it may 15 be desired to affix a validating signature, it is highly desirable to have the signature mechanically applied to such in-

struments by a suitable machine.

Such machines, such as for example conventional check signers, may be readily used to sign either one or any number of checks, drafts, etc. and may be used either by the signer or typically by some clerk under his supervision. Such machines are relatively simple in construction and operation so that relatively unskilled clerks may use it. It is considered essential, however, that such machines 25 contain several locking mechanisms in addition to safety features so that the machine cannot be used to affix a validating signature to a negotiable instrument without some positive action on the part of at least one and generally two people. The operation of a conventional check 30 signer of the general type disclosed in U.S. Patent No. 1,943,607 or No. 1,984,706 is usually controlled by at least two locks and two keys. One key is kept, for example, by the signing official and the other key is kept by the machine operator. The only protection, if it may be considered as such, against passing an unauthorized check through such an open and unlocked machine is a nonresettable counter which records each signature that is imprinted. In this way, the number of signatures that are imprinted may be checked against a signature-control 40 register. Obviously, this does not prevent a validating signature from being printed on an unauthorized check or document since it only provides a record after a signature has been stolen.

The typical check signer reproduces a signing official's 45 signature either with or without a background at a given location on a check, thereby authorizing the bank to make payment of the amount that may be entered on the check. Accordingly, anyone capable of unlocking or having access to an unlocked signing machine used in accordance 50 with present day practices can reproduce the validating or warranted signature. Thus, for all practical purposes, a "safe" location is required for present day signing machines. The present day system of locks and keys is genized persons other than the clerk-operator of the signing machine. As previously noted, the authorized executive responsible for check signing has one key and the clerkoperator has the other key. While this procedure theoretically permits control of the check signer against use 60 by unauthorized persons, an unscrupulous clerk-operator, for example, may still use the check signer to reproduce a validating signature for other than official business without any indication whatsoever that the signature was stolen. A check signing machine left open by the clerk- 65 operator is always a matter of paramount concern and, accordingly, considerable effort and frequent checking is necessary to insure that such signing machines are always locked when not in use.

The present invention is directed to a method of print- 70 ing a signature wherein an imprint comprising a partial background which defines at least in part a predetermined

word is imprinted on a negotiable instrument and thereafter at least part of a validating signature together with a further imprint arranged and adapted to complete the partial background and render the predetermined word indistinguishable in the background is imprinted. Thus, upon completion of the second step, there is provided a complete and warranted signature or signatures on a predetermined background. However, on all other negotiable instruments not containing this predetermined background, the same check signer used to complete the application of a validating signature imprints the predetermined word or arrangement of letters which designate that an instrument carrying such a signature is nonnegotiable. In accordance with the preferred embodiment of the present invention, on that area of the negotiable instrument reserved for the validating signature, there is imprinted a predetermined partial background having spaces which define a predetermined word, such as for example VOID, which designates nonnegotiability of the instrument. Stated differently, the partial background is imprinted with part of the background dropped out to define the letters V, O, I, and D, not unlike the letters in a stencil to define the word VOID. For the purpose of this disclosure, imprinting of such a partial background will be designated as negative reproduction. Accordingly, imprinting of this same word in the usual manner will be designated as positive reproduction.

When a check containing the aforementioned partial background is passed through a check signer adapted to imprint the required further imprint and at least part of a validating signature, a complete and full signature results. The positive reproduction of the word VOID on the check containing the partial background fills the negative or reverse of the word VOID in the partial background, thereby rendering the word VOID, previously defined by the partial background and further imprint, indistinguishable in the completed background, leaving only the full warranted signature of the signing official.

Accordingly, the provision and protection of a warranted signature in accordance with the present invention is not dependent upon the use of the usual locks and keys because the key to control of the warranted signature is the provision on a negotiable instrument of a partial background as described hereinabove. Prior to completing the partial background in accordance with the present invention, the negotiable instrument may be clearly branded as nonnegotiable because the partial background preferably defines a predetermined word or arrangement of letters, such as for example VOID, which designates nonnegotiability. After completing the partial background, the check acquires a complete authorized reproduction of the official signature without any indications of nonnegotiability. However, when any negotiable instrument which does not contain the aforementioned partial background erally used to prevent use of the check signer by unauthor- 55 is passed through a signer adapted to complete the background in accordance with the present invention, the negotiable instrument will contain the reproduction of a word such as VOID. This will, of course, clearly brand the document as nonnegotiable to anyone who can read English.

Accordingly, use of the present invention to mechanically apply a validating signature to negotiable instruments obviates the necessity of the usual locks and keys and surveillance involved in applying signatures to negotiable instruments. For example, the present invention permits the imprinting of a validating signature on a negotiable instrument in areas open to even the general public without fear that the signature will be stolen. Thus, unlocked and unattended signers adapted to complete the partial background may be used in the receiving department of corporate businesses and the like to pay for purchases at the time of receipt and thereby eliminate the tre-

mendous paper work typically involved with even trivial purchases ordered through a corporate purchasing department. Present day methods of applying validating signatures makes such a situation unthinkable.

The novel features that are considered characteristic 5 of the invention are set forth in the appended claims; the invention itself, however, both as to its organization and method of operation, together with additional objects and advantages thereof, will best be understood from the following description of specific embodiments which read in conjunction with the accompanying drawings, in which:

FIGURE 1 shows an imprint comprising a partial background of dots which negatively defines the word VOID;

FIGURE 2 shows an imprint comprising dots which positively defines the word VOID and completes the par- 15 tial background shown in FIGURE 1;

FIGURE 3 shows a validating signature comprising the combination of the imprints of FIGURE 1 and FIGURE 2 in accordance with the present invention;

FIGURE 4 shows an imprint comprising a negative 20 reproduction of the word VOID by means of lines in combination with part of a validating signature;

FIGURE 5 shows the further imprint which completes the partial background and signature of FIGURE 4;

FIGURE 6 shows an imprint comprising the negative 25 reproduction of the word VOID by means of a design;

FIGURE 7 shows an imprint comprising a signature and a positive reproduction of the word VOID which completes the partial background of FIGURE 6;

FIGURE 8 shows a partial background in color (orange 30 is designated) in accordance with the present invention;

FIGURE 9 shows a further imprint comprising a signature and a positive reproduction of the word VOID which completes the partial background of FIGURE 8;

FIGURE 10 shows a partial background in large dots 35 in one color which defines in part the word VOID by means of spaces and also defines a trademark by means of dots in a second color; and

FIGURE 11 shows an imprint comprising a signature and a positive reproduction of the word VOID which completes the partial background shown in FIGURE 10.

Directing attention now to FIGURE 1, there is shown an imprint comprising a partial background of dots which defines in part the word VOID. The imprint may be most conveniently applied by bringing a die into contact 45 with a negotiable instrument at the appropriate spot. It should be noted that the imprint generally designated by the number 10 is comprised of dots 11 which defines in part the word VOID. The space 12 forms the V, the annular space 13 forms the O, the space 14 forms the I, 50 and the annular space 15 forms the D.

The imprint 10 of FIGURE 1 may be applied at the time the negotiable instrument is printed by the printer or it may be applied to a negotiable instrument, such as for example a check, by a conventional check-signing 55 machine, or the like, provided with a die which reproduces the imprint disclosed in FIGURE 1.

Directing attention now to FIGURE 2, there is shown a complete signature 16 together with a further imprint generally designated by the number 17 comprising dots 60 18 which positively defines the word VOID. The dots 18 are arranged and adapted to complete the partial background shown in FIGURE 1 and render the negative reproduction of VOID in FIGURE 1 and the positive reproduction of VOID in FIGURE 2 indistinguishable in 65 a composite background (see FIGURE 3) comprising the imprints of FIGURE 1 and FIGURE 2. When applied to a negotiable instrument containing the partial background of FIGURE 1, the dots 18 of FIGURE 2 fill the spaces 12-15 of FIGURE 1 which define in part the word 70 VOID, the validating signature 16 appearing in the composite background 19 of FIGURE 3 in conventional manner.

The application of the imprint of FIGURE 2 (even with a complete signature) preferably defines a word, 75 black being used).

such as for example VOID, which clearly designates nonnegotiability of any instrument carrying the imprint of FIGURE 2 but not the imprint of FIGURE 1.

FIGURE 3 shows the validating signature 16 together with the imprints of FIGURE 1 and FIGURE 2 in accordance with the present invention. The proper location of the imprint of FIGURE 2 with respect to the imprint of FIGURE 1 may be achieved in any conventional manner, such as for example that used in conventional checksigning machines to provide a precise location of a conventional signature. Thus, irrespective of the manner in which the partial background is first applied, a conventional die for reproducing the second imprint and precisely locating it with respect to the partial background may be provided and used in conventional manner. It should be noted that both the negative and positive reproduction of the word VOID in respectively FIGURES 1 and 2 is indistinguishable in the background of FIGURE 3 and that any negotiable instrument carrying such imprints would contain a validating signature which clearly renders the instrument negotiable.

As has been previously noted, the imprint of FIGURE 1 may be applied by the printer on that area reserved for the signing official's signature or it may be applied at the same location by a conventional check-signing machine. When a check or the like with the imprint of FIGURE 1 is passed through a check-signing machine adapted to imprint the second imprint of FIGURE 2 in its proper relationship with respect to the imprint of FIGURE 1 in accordance with the present invention, a

complete validating signature is produced.

If desired, the above procedure may be reversed, i.e., the positive reproduction of the word VOID or the like, as per FIGURE 2 for example, with all, part, or none of a validating signature, may be first imprinted on the negotiable instrument and a further imprint comprising the negative reproduction of this same word, as per FIG-URE 1 for example, with any missing portion of the validating signature or signatures thereafter applied. The signing official's signature, which is to say the validating signature, may be segmented or split in any way that is desired or convenient. If a positive reproduction is applied first, splitting the validating signature is recommended.

FIGURE 4 shows an imprint 21 comprising a negative reproduction in lines 22 which fully defines the word VOID and the top half 23 of the validating signature. FIGURE 5 shows the further imprint 27 and the bottom half 28 of the signature which completed the partial background and validating signature of FIGURE 4 when applied thereto in the manner previously described. The combination of the imprints of FIGURES 4 and 5 provide a complete and full validating signature similar to that shown in FIGURE 3.

FIGURE 6 shows a modification of the imprint of FIGURE 4 wherein the partial background is in the form of a design and FIGURE 7 shows the further imprint which completes the partial background of FIGURE 6. The combination of FIGURES 6 and 7 provides a complete and full validating signature.

FIGURE 8 shows a further modification wherein the partial background is a solid color (designated by way of example as orange) and FIGURE 9 shows the further imprint (also designated as orange) together with a validating signature which completes the partial background of FIGURE 8. FIGURES 8 and 9 are combined in the same manner as FIGURES 1 and 2.

FIGURE 10 shows a still further modification of the partial background in relatively large colored dots (the designation for violet or purple being used) which fully defines (negatively however) the word VOID and which also positively defines a trademark, such as for example AVCO, in different colored dots (the designation for

FIGURE 11 shows the further imprint which completes the partial background of FIGURE 10, the positive reproduction of the word VOID being shown in dots having the same size and color (violet or purple) as the first mentioned dots comprising the partial background of 5 FIGURE 10.

In use, the imprint defining a partial background (or the further imprint) is first applied to a negotiable instrument at the proper location in any suitable manner as by When the 10 comprising: the printer or by a check-signing machine. negotiable instrument is to be validated and issued, the imprint which completes the partial background (or further imprint as the case may be) is applied typically by a check-signing machine. The provision of a validating signature is most conveniently provided by the 15 insertion in a conventional check-signing machine of a die adapted to provide the appropriate imprint at the appropriate spot so that the word or letters designating nonnegotiability will disappear in the completed background.

By way of example, checks as supplied from the printer may contain the partial background or the partial background may be applied by a purchasing agent at the time off-the-shelf items or the like are ordered. When the items are delivered, presumably by the seller, a receiving 25 clerk can complete the validating signature with a conventional check-signer and deliver the check directly to the agent of the seller, thereby eliminating the large volume of in-house paper work typical of such purchases and the necessity of mailing the check to the seller. Con- 30 ventional procedures for signing checks cannot be used in such a system because of the risk involved. Further, continual surveillance of the check-signing machine or the like used to carry out the present invention is not essential since its operation per se will not produce a warranted signature. Still further, the usual locks and keys, if any, for a check signer used in accordance with the present invention need be used only for secondary control by the clerk-operator and to prevent tampering with the interior of the machine.

The various features and advantages of the invention are thought to be clear from the foregoing description. Various other features and advantages not specifically enumerated will undoubtedly occur to those versed in the art, as likewise will many variations and modifications of the preferred embodiment illustrated, all of which may be achieved without departing from the spirit and scope of the invention as defined by the following claims:

1. In the method of printing a signature the steps comprising:

(a) imprinting on a negotiable instrument an imprint comprising a partial background which defines at least in part a predetermined word; and

(b) imprinting at least part of a validating signature 55 together with a further imprint arranged and adapted to complete said background and render said predetermined word indistinguishable in said background.

2. In the method of printing a signature the steps comprising:

(a) imprinting on a negotiable instrument an imprint comprising a partial background which defines at least in part a predetermined word indicating invalidity of said negotiable instrument; and

- (b) imprinting at least part of a validating signature together with a further imprint arranged and adapted to complete said background and render said predetermined word indistinguishable in said background.
- 3. In the method of printing a signature the steps comprising:
 - (a) imprinting on a negotiable instrument an imprint

comprising a partial background which defines at least in part a predetermined word designating nonnegotiability of said negotiable instrument; and

(b) imprinting a validating signature together with a further imprint arranged and adapted to define said predetermined word, complete said background, and render said predetermined word indistinguished in said background.

4. In the method of printing a signature the steps

(a) imprinting on a negotiable instrument marks spaced one from another comprising a partial background which defines at least in part a predetermined word; and

(b) imprinting at least part of a validating signature together with further marks arranged and adapted to define said predetermined word, complete said background, and render said predetermined word indistinguishable in said background.

5. In the method of printing a signature the steps comprising:

(a) imprinting on a negotiable instrument marks comprising a partial background having spaces which define at least in part a predetermined word; and

(b) imprinting in said background further marks arranged and adapted to define said predetermined word, fill said spaces, and complete said background together with a validating signature over said background.

6. In the method of printing signatures the steps comprising:

(a) imprinting on a negotiable instrument marks comprising a partial background having spaces which define a predetermined word; and

(b) imprinting in said background further marks arranged and adapted to define said predetermined word, fill said spaces, complete said background, and render said word indistinguishable in said background together with a validating signature over said completed background.

7. In the method of printing a signature over a printed

background the steps comprising:

(a) imprinting on a negotiable instrument an imprint comprising a partial background having spaces which define at least in part a predetermined arrangement of letters designating nonnegotiability of said instrument; and

(b) imprinting in said partial background a further imprint arranged and adapted to define said predetermined word, fill said spaces, complete said background, and render said predetermined arrangement of letters indistinguishable in said background together with at least part of a validating signature over said completed background.

3. The combination as defined in claim 7 wherein said completed background includes dots.

9. The combination as defined in claim 7 wherein said completed background includes lines.

10. The combination as defined in claim 7 wherein said completed background is a design.

11. The combination as defined in claim 7 wherein said completed background is a single solid color.

References Cited by the Examiner

UNITED STATES PATENTS

1 680 303	10/1028	Smith 117—1 X
. , ,		
1,692,405	11/1928	Freeman 117—1
1,943,607	1/1934	Hedman 101—20
1,984,706	12/1934	Slettevold 101—20
3.088.841	5/1963	Guertim 117—1

MURRAY KATZ, Primary Examiner.