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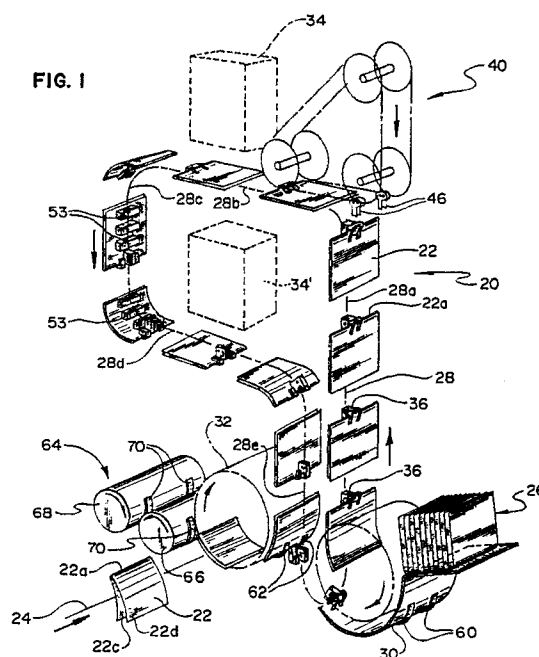
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(54) **Apparatus and method for individually printing signatures during delivery to a bindery line.**

(57) An apparatus and method for individually printing signatures during delivery to a bindery line where a plurality of signatures are provided at a feeding station (26) for delivery to a binding line conveyor (24). The signatures are transferred by a transfer conveyor (28) which extends from a point near the feeding station to a point near a binding line conveyor. A main drum assembly (30) preferably moves the signatures one at a time from the feeding station to the transfer conveyor which follows a path to a delivery drum (32) assembly where the signatures are delivered one at a time from the transfer conveyor to the binding line conveyor. The transfer conveyor is adapted to receive one signature at a time from the main drum assembly after which the transfer conveyor carries the signatures to the delivery drum assembly which delivers signatures one at a time for deposit on the binding line conveyor. In addition, the signatures are individually printed by a non-contact printer (34) in a direction perpendicular to the backbones thereof during the course of signature transfer by the transfer conveyor.

FIG. 1

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EUROPEAN SEARCH REPORT

EP 90 10 0295

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|---|--|--|---|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int. Cl.5) |
| X,D,Y,D- A, | US-A-4 121 818 (R. R. DONNELLEY & SONS CO.) * column 4, line 49 - column 6, line 34 ** column 12, line 56 - column 15, line 17; figures 1, 3, 4A, 4B, 6 * - - - - | 21,23-25, 1-7,12, 22,13 | B 42 C 1/00 B 41 F 17/02 |
| Y,A | US-A-4 405 122 (H. G. FALTIN) * the whole document * - - - - | 1-7,12, 22,13 | |
| Y,A | US-A-3 717 337 (W. B. MCCAIN ET AL) * column 7, line 30 - column 8, line 67; figures 5, 6 * - - - - | 1-7,12,13 | |
| Y,A | US-A-2 773 585 (J. R. CAULFIELD) * the whole document * - - - - - | 3,6,12,13 | |
| | | | TECHNICAL FIELDS SEARCHED (Int. Cl.5) |
| | | | B 42 C B 41 F B 65 H B 42 B |
| The present search report has been drawn up for all claims | | | |
| Place of search The Hague | | Date of completion of search 13 February 91 | Examiner DELZOR F.N.M. |
| <div>CATEGORY OF CITED DOCUMENTS</div> <div>X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention</div> <div>E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons ----- &: member of the same patent family, corresponding document</div> | | | |