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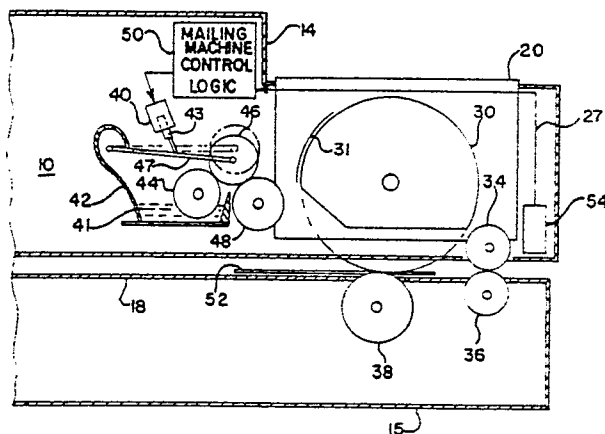
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CH DE FR GB LI(88) Date of deferred publication of the search report:  
07.01.88 Bulletin 88/01(71) Applicant: **PITNEY BOWES INC.**  
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(54) Automatic ink level control system.

(57) Method and apparatus for automatically controlling the inking level of the printed indicia of a value printing machine particularly suitable for postage meters. An ink (41) including a phosphorescent component is used to print the indicia and a sensing unit (54) measures the phosphorescent level of the resulting printed indicia. This measured phosphorescent level is used to control the transfer of ink (41) from an ink reservoir (42) to an inking roller (48) which inks the postage indicia die (31). The mailing machine (10) includes a document feeding bin, an automatic document feeder, a document transport mechanism and a postage meter (20), which when activated, prints postage indicia onto the document (52) using the method and apparatus for controlling the inking level.

FIG. 2.



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| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                        |                                                |                                                                              |
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| Category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Citation of document with indication, where appropriate, of relevant passages                                                                                                                                                                                                          | Relevant to claim                              | CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)                               |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | EP-A-0 143 744 (GRETAG)<br>* Abstract; figures 1-2; page 3, line 31 - page 4, line 7 *                                                                                                                                                                                                 | 1                                              | G 07 B 17/00<br>B 41 L 27/04                                                 |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                        | 2, 5-9,<br>12-14,<br>18-21                     |                                                                              |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DER POLYGRAPH, vol. 16, no. 11,<br>5th June 1963, pages 624-625,<br>Frankfurt/Main, DE;<br>"Automatische Farbkontrolle und<br>Farbsteuerung beim Bogendruck"<br>* Figure 1; page 624, column 2,<br>line 25 - column 3, line 4; page<br>625, column 2, line 30 - column<br>3, line 33 * | 1                                              |                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                        |                                                | TECHNICAL FIELDS<br>SEARCHED (Int. Cl. 4)                                    |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | US-A-3 835 777 (KRYGERIS)<br>* figure 1; column 1, line 61 -<br>column 2, line 2; column 3, line<br>33 - column 5, line 5 *                                                                                                                                                            | 1                                              | G 07 B<br>B 41 L<br>B 41 J<br>G 01 N<br>B 41 F<br>G 05 D<br>B 41 M<br>C 09 D |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                        | 2, 5-9,<br>12-14,<br>18-21                     |                                                                              |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | US-A-3 567 923 (HUTCHISON)<br>* Abstract; figure 1; column 3,<br>lines 13-69 *                                                                                                                                                                                                         | 1                                              |                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                        |                                                |                                                                              |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                        |                                                |                                                                              |
| Place of search<br>THE HAGUE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                        | Date of completion of the search<br>29-09-1987 | Examiner<br>NEILL A.P.                                                       |
| <p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone<br/> Y : particularly relevant if combined with another document of the same category<br/> A : technological background<br/> O : non-written disclosure<br/> P : intermediate document</p> <p>T : theory or principle underlying the invention<br/> E : earlier patent document, but published on, or after the filing date<br/> D : document cited in the application<br/> L : document cited for other reasons<br/> &amp; : member of the same patent family, corresponding document</p> |                                                                                                                                                                                                                                                                                        |                                                |                                                                              |





| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                  |                                                |                                               |
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| Category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Citation of document with indication, where appropriate, of relevant passages    | Relevant to claim                              | CLASSIFICATION OF THE APPLICATION (Int. Cl.4) |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ---                                                                              | 2-22                                           |                                               |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DE-A-3 241 489 (DICKFELD)<br>* Page 5, lines 11-25; figures 2,3 *                | 2-21                                           |                                               |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ---                                                                              | 22                                             |                                               |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DE-A-2 524 023 (PITNEY-BOWES)<br>* Page 8, line 1 - page 10, line 12; figure 1 * | 14-22                                          |                                               |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | GB-A-1 536 403 (PITNEY-BOWES)<br>* Page 1, line 6 - page 2, line 13 *            | 22                                             |                                               |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ---                                                                              | 2-12                                           |                                               |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | CH-A- 113 837 (BAER & CO.)<br>* Whole document *                                 | 1,9,14                                         |                                               |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | EP-A-0 129 768 (SIEMENS)<br>* Page 3, lines 9-13 *                               | 24                                             |                                               |
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| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                  |                                                |                                               |
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