



(12) **EUROPEAN PATENT APPLICATION**

(21) Application number: **91121790.9**

(51) Int. Cl.<sup>5</sup>: **G07B 17/02**

(22) Date of filing: **19.12.91**

(30) Priority: **19.12.90 US 629898**

(43) Date of publication of application:  
**24.06.92 Bulletin 92/26**

(84) Designated Contracting States:  
**CH DE FR GB LI**

(88) Date of deferred publication of the search report:  
**22.07.92 Bulletin 92/30**

(71) Applicant: **PITNEY BOWES INC.**  
**World Headquarters One Elmcroft**  
**Stamford Connecticut 06926-0700(US)**

(72) Inventor: **Doeberl, Terrence M.**  
**111 Simpaug Turnpike**  
**West Redding, Connecticut 06896(US)**  
Inventor: **Donahue, Patrick J.**  
**95 Wildwood Drive**  
**Stratford, Connecticut 06497(US)**  
Inventor: **Field, Michael E.**  
**221 Fairview Avenue**  
**Fairfield, Connecticut 06430(US)**  
Inventor: **Hunter, Kevin D.**  
**440 Allyndale Drive**  
**Stratford, Connecticut 06497(US)**  
Inventor: **Mitchell, Paul H.**  
**85 Padanaram Road**  
**Danbury, Connecticut 06810(US)**

(74) Representative: **Ritter und Edler von Fischern,**  
**Bernhard, Dipl.-Ing. et al**  
**HOFFMANN - EITLE & PARTNER**  
**Arabellastrasse 4**  
**W-8000 München 81(DE)**

(54) **Embedded user-interface having multiple language capability.**

(57) A postage meter mailing machine (1) includes an embedded user interface system. The mailing machine includes a programmable microcontroller means having a non-volatile memory for storing data information and executable routine. The microcontroller is in bus communication with a visual display (7) and a plurality of soft keys (8). Stored in the memory are (i) a plurality of system screens for display on the visual display (7), (ii) a data window field and a prompt field and having descriptors for

each of the respective fields (iii) a plurality of text strings in a first language and a plurality of text strings in a second language, (iv) a plurality of graphic display run routines, (v) a plurality of routines for enabling the soft keys (8) and for identifying the respective subsequent screen. The user interface is programmed to enable a select one of the text strings in one of the languages for display on the display.

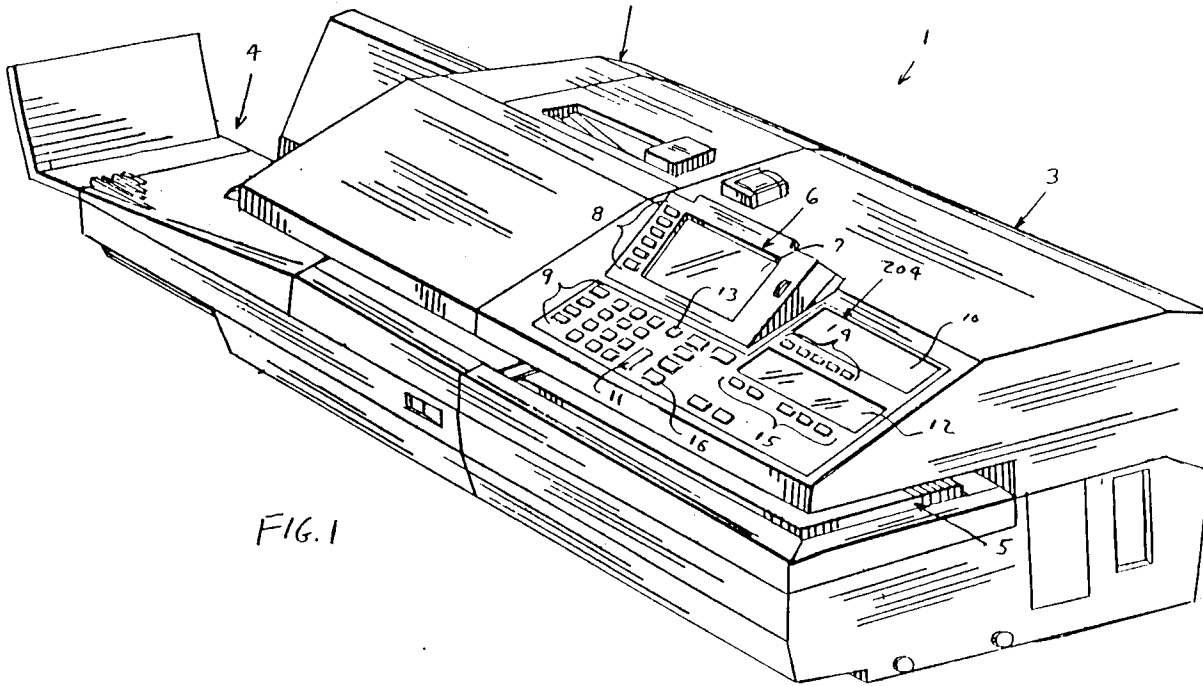


FIG. 1



European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number

EP 91 12 1790

| 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                                                                                                                                                                                                                                                      | GB-A-2 119 992 (KABUSHIKI KAISHA)<br>* page 6, line 67 - page 7, line 66 *<br>* page 8, line 15 - line 110 *<br>* page 10, line 94 - line 105; figures 13,16-21 * | 1, 2, 4, 11                                                                                                                                                                                                                                                                           | G07B17/02                                     |
| Y                                                                                                                                                                                                                                                      |                                                                                                                                                                   | 6, 7, 9, 12                                                                                                                                                                                                                                                                           |                                               |
| A                                                                                                                                                                                                                                                      |                                                                                                                                                                   | 3, 5, 8, 10                                                                                                                                                                                                                                                                           |                                               |
|                                                                                                                                                                                                                                                        | ---                                                                                                                                                               |                                                                                                                                                                                                                                                                                       |                                               |
| Y                                                                                                                                                                                                                                                      | GB-A-2 132 138 (PITNEY BOWES)<br>* page 3, line 7 - page 4, line 126; figures *                                                                                   | 6, 7, 9, 12                                                                                                                                                                                                                                                                           |                                               |
| A                                                                                                                                                                                                                                                      |                                                                                                                                                                   | 1, 4                                                                                                                                                                                                                                                                                  |                                               |
|                                                                                                                                                                                                                                                        | ---                                                                                                                                                               |                                                                                                                                                                                                                                                                                       |                                               |
| A                                                                                                                                                                                                                                                      | US-A-4 449 186 (KELLY ET AL.)<br>* column 3, line 67 - column 4, line 68 *<br>* column 103, line 34 - column 105, line 5; figures *                               | 1-12                                                                                                                                                                                                                                                                                  |                                               |
|                                                                                                                                                                                                                                                        | ---                                                                                                                                                               |                                                                                                                                                                                                                                                                                       |                                               |
| A                                                                                                                                                                                                                                                      | EP-A-0 336 589 (W & T AVERY LTD)<br>* page 2, column 2, line 5 - page 3, column 3, line 58; figures *                                                             | 1, 4, 6-12                                                                                                                                                                                                                                                                            |                                               |
|                                                                                                                                                                                                                                                        | -----                                                                                                                                                             |                                                                                                                                                                                                                                                                                       |                                               |
| The present search report has been drawn up for all claims                                                                                                                                                                                             |                                                                                                                                                                   |                                                                                                                                                                                                                                                                                       | TECHNICAL FIELDS SEARCHED (Int. Cl.5)         |
|                                                                                                                                                                                                                                                        |                                                                                                                                                                   |                                                                                                                                                                                                                                                                                       | G07B<br>G07F<br>G05B                          |
| Place of search<br>THE HAGUE                                                                                                                                                                                                                           |                                                                                                                                                                   | Date of completion of the search<br>25 MAY 1992                                                                                                                                                                                                                                       | Examiner<br>RAKOTON DRAJADNA C.               |
| CATEGORY OF CITED DOCUMENTS<br>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 |                                                                                                                                                                   | 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>.....<br>& : member of the same patent family, corresponding document |                                               |