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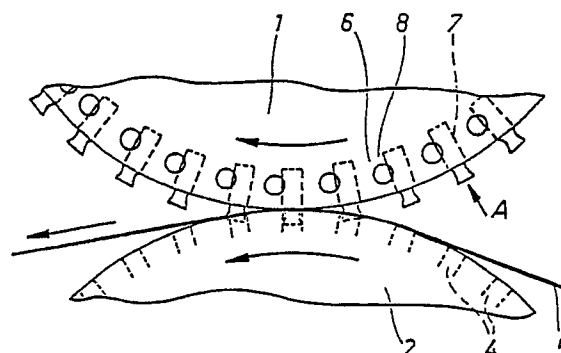
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54 **Fastening assembly for piercing pins in a paper blanks perforating unit.**

57 The invention relates to a fastening assembly for piercing pins in a paper blanks perforating unit, comprising at least two rotating discs, namely a padded disc (2) whose periphery is provided with a circumferential array of holes (4) and a piercing disc (1) whose periphery is fitted with a circumferential array of piercing pins (3) which, as the discs are rotating, find their way into the holes (4) of said padded disc for piercing a paper passing therebetween, said piercing pins (3) being embedded in radially directed holes (7) in the rim of said piercing disc (1) and retained therein by means of retaining members (6) which are transverse relative to said holes.



**Fig.1**



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| 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.4) |
| P,X                                                                                                                                                                                                                                                                                   | US-A-4688459 (DIDDE GRAPHICS SYSTEMS)<br>* the whole document *               | 1, 4                                                | B26F1/14                                      |
| A                                                                                                                                                                                                                                                                                     | ---                                                                           | 7, 9, 10                                            |                                               |
| A                                                                                                                                                                                                                                                                                     | US-A-1809823 (ALTVATER)<br>* figures 2, 3 *                                   | 1, 4                                                |                                               |
| A                                                                                                                                                                                                                                                                                     | ---                                                                           |                                                     |                                               |
| A                                                                                                                                                                                                                                                                                     | US-A-2364401 (STELLIN)<br>* page 4, left hand column, lines 43-65 *           | 1, 6, 9                                             |                                               |
| A                                                                                                                                                                                                                                                                                     | ---                                                                           |                                                     |                                               |
| A                                                                                                                                                                                                                                                                                     | US-A-4604931 (HARRIS GRAPHICS)<br>* figures *                                 | 1                                                   |                                               |
| A                                                                                                                                                                                                                                                                                     | ---                                                                           |                                                     |                                               |
| A                                                                                                                                                                                                                                                                                     | US-A-1833236 (HARDSOGG WONDER DRILL)<br>-----                                 |                                                     |                                               |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                            |                                                                               |                                                     |                                               |
| Place of search<br>THE HAGUE                                                                                                                                                                                                                                                          |                                                                               | Date of completion of the search<br>16 OCTOBER 1990 | Examiner<br>RIS M.                            |
| <b>CATEGORY OF CITED DOCUMENTS</b>                                                                                                                                                                                                                                                    |                                                                               |                                                     |                                               |
| 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 |                                                                               |                                                     |                                               |