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(54) **Machine for the cross coupling of webs of carded, not woven fibers, provided with rotary unloading belt**

(57) The invention is a new machine for the coupling of webs, to be used for the production of not woven fabrics. The edge of a belt travels orthogonally to the motion

of the collection belt, in such a way as to lay more layers of webs onto the first layer. The travel of the webs to be laid down is such as to guarantee a product with constant characteristics.

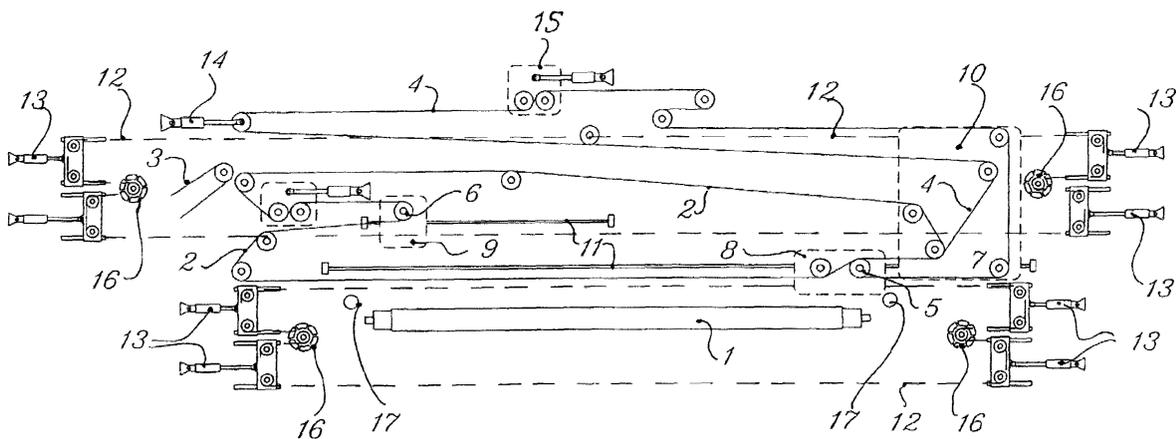


Fig. 1



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EUROPEAN SEARCH REPORT

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| DOCUMENTS CONSIDERED TO BE RELEVANT  |  |   |   |
|--|--|---|---|
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| -The present search report has been drawn up for all claims  |  |   |   |
| Place of search<br><b>MUNICH</b>   |  | Date of completion of the search<br><b>1 August 2002</b>  | Examiner<br><b>Demay, S</b>                                     |
| 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 |   |

EPO FORM 1503 03.82 (P04001)

**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing more than ten claims.

- Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

**LACK OF UNITY OF INVENTION**

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1 - 9



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EUROPEAN SEARCH REPORT

Application Number  
EP 98 10 2497

| DOCUMENTS CONSIDERED TO BE RELEVANT   |  |   |  |
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| <del>The present search report has been drawn up for all claims</del>   |  |   |  |
| Place of search   |  | Date of completion of the search  | Examiner                                     |
| MUNICH  |  | 1 August 2002   | Demay, S                                     |
| CATEGORY OF CITED DOCUMENTS   |  |   |  |
| 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 |  |

EPO FORM 1503 03/92 (P04C01)



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-9

Claims 1-9 disclose a two-belt crosslapping device which sandwiches a web of carded nonwoven fibers between an unloading belt and a conveyor belt until the web is unloaded on a third belt called collection belt (claim 1). Special arrangements of the machine are claimed in claims 2-9 dealing with coupling, unloading and recovery trolleys, tighteners and motors in order to get a web lapping of good quality and as regular as possible.

2. Claim : 10

Claim 10 relates to a crosslapping machine using a new type of rotary support for the rollers which have considerable length in order to reduce the bending of the rollers when belts exert strong tensions on them.

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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