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| <div>(30) Priority: 04.07.2003 JP 2003271069</div>                                                                                                                                         | <div>(74) Representative:<br/>von Samson-Himmelstjerna, Friedrich et al<br/>SAMSON &amp; PARTNER<br/>Widenmayerstrasse 5<br/>80538 München (DE)</div> |
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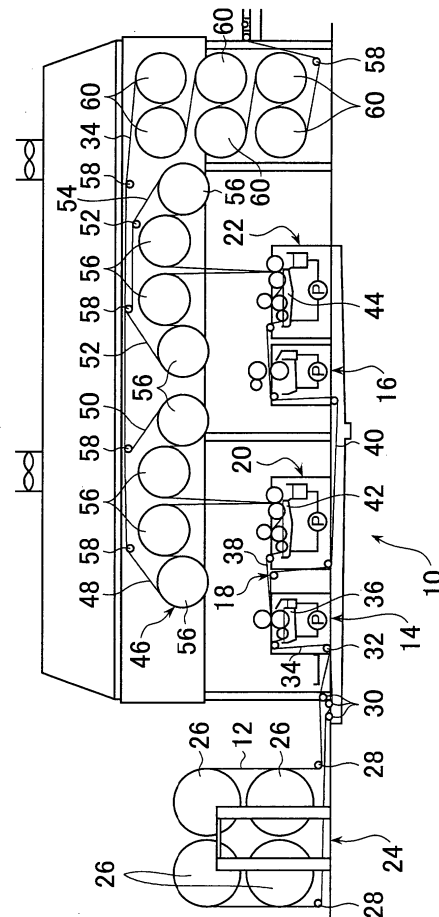
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Method and apparatus for sizing the warp

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A warp sizing method performs pretreatment to adhere the pretreatment liquid (36) to a plurality of warps (12) arranged in a sheet-like form and squeeze, and divides the pretreated plural warps (12) into a plurality of warp groups (38, 40) to adhere a sizing liquid (42) to each of the divided warp groups (38, 40). A dividing treatment includes bringing the warps (12) of the warp group (38, 40) to be divided into contact with a guide roller (80, 82) of each warp group (38, 40). A pretreatment liquid (36) contains a sizing liquid (42) having the same or less size concentration as or than that of the sizing liquid (42) to be used in the sizing treatment or water.

Fig. 1





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| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                         |                                                          |                                                             |
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| Place of search<br><b>The Hague</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                         | Date of completion of the search<br><b>5 August 2005</b> | Examiner<br><b>D'Hulster, E</b>                             |
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