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(54) **Procedure of manufacturing a warp beam for clothing and elastic fabric obtained**

(57) Commencing with a warping machine with "déroulé" spools, with olefin or polyolefin monofilament or multifilament thread located on a creel, with predetermined tension, the threads of which are wound on a loom beam and where the winding on the loom beam consists of: a first phase in which the diameter of the said spools is calculated, and the tension, transmitting it to a CPU, a second phase in which the friction at the union of the threads is calculated, transmitting it to a CPU, a third

phase in which the loom beam diameter is calculated, together with the thread tension, transmitting it to a CPU, and a fourth phase in which the CPU calculates the revolutions of the spools and loom beam in order to increase or decrease the said revolutions so that the thread tension remains constant during the winding of the thread on the loom beam

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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 (IPC)         |
| D,A  | EP 0 496 888 A (KANEBO LTD)<br>5 August 1992 (1992-08-05)<br>* the whole document *                           | 1-12   | INV.<br>D02H13/14<br>D02H3/00<br>D03D15/08      |
| A  | -----<br>US 4 525 905 A (BOGUCKI-LAND ET AL)<br>2 July 1985 (1985-07-02)<br>* the whole document *            | 1-12   |   |
| A  | -----<br>US 6 375 111 B1 (MYCIELSKI JACEK ZYGMUNT ET AL) 23 April 2002 (2002-04-23)<br>* abstract *           | 1-12   |   |
| A  | -----<br>US 6 125 515 A (BOLIEK ET AL)<br>3 October 2000 (2000-10-03)<br>* the whole document *               | 1-12   |   |
| A  | -----<br>US 5 027 484 A (BABA ET AL)<br>2 July 1991 (1991-07-02)<br>* the whole document *                    | 1-12   |   |
| A  | -----<br>US 2003/228815 A1 (BHATNAGAR ASHOK ET AL)<br>11 December 2003 (2003-12-11)<br>* the whole document * | 8-12   |   |
| The present search report has been drawn up for all claims   |   |  | TECHNICAL FIELDS SEARCHED (IPC)<br>D02H<br>D03D |
| Place of search<br>The Hague   |   | Date of completion of the search<br>2 May 2006 | Examiner<br>Pussemier, B                        |
| <p>CATEGORY OF CITED DOCUMENTS</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</p> <p>.....<br/>                     &amp; : member of the same patent family, corresponding document</p> |   |  |   |

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

EP 05 38 0118

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
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02-05-2006

| Patent document cited in search report |    | Publication date |    | Patent family member(s) | Publication date |
|--|----|------------------|----|-------------------------|------------------|
| EP 0496888                             | A  | 05-08-1992       | DE | 69121874 D1             | 10-10-1996       |
|  |    |                  | DE | 69121874 T2             | 13-02-1997       |
|  |    |                  | WO | 9200408 A1              | 09-01-1992       |
|  |    |                  | KR | 184236 B1               | 01-05-1999       |
| -----                                  |    |                  |    |                         |                  |
| US 4525905                             | A  | 02-07-1985       | DE | 3128538 A1              | 03-02-1983       |
|  |    |                  | JP | 1046427 B               | 09-10-1989       |
|  |    |                  | JP | 1566883 C               | 25-06-1990       |
|  |    |                  | JP | 58026769 A              | 17-02-1983       |
| -----                                  |    |                  |    |                         |                  |
| US 6375111                             | B1 | 23-04-2002       | BR | 9916600 A               | 13-11-2001       |
|  |    |                  | CN | 1332815 A               | 23-01-2002       |
|  |    |                  | DE | 69925501 D1             | 30-06-2005       |
|  |    |                  | DE | 69925501 T2             | 02-02-2006       |
|  |    |                  | EP | 1129243 A2              | 05-09-2001       |
|  |    |                  | JP | 2002529615 T            | 10-09-2002       |
|  |    |                  | TW | 477839 B                | 01-03-2002       |
|  |    |                  | WO | 0028119 A2              | 18-05-2000       |
|  |    |                  | US | 6126102 A               | 03-10-2000       |
| -----                                  |    |                  |    |                         |                  |
| US 6125515                             | A  | 03-10-2000       | CN | 1361836 A               | 31-07-2002       |
|  |    |                  | DE | 60007129 D1             | 22-01-2004       |
|  |    |                  | DE | 60007129 T2             | 28-10-2004       |
|  |    |                  | EP | 1196647 A1              | 17-04-2002       |
|  |    |                  | ES | 2209858 T3              | 01-07-2004       |
|  |    |                  | JP | 3590793 B2              | 17-11-2004       |
|  |    |                  | JP | 2003505615 T            | 12-02-2003       |
|  |    |                  | WO | 0107697 A1              | 01-02-2001       |
| -----                                  |    |                  |    |                         |                  |
| US 5027484                             | A  | 02-07-1991       | CH | 683432 A5               | 15-03-1994       |
|  |    |                  | DE | 4002545 A1              | 09-08-1990       |
|  |    |                  | JP | 1731662 C               | 29-01-1993       |
|  |    |                  | JP | 2200834 A               | 09-08-1990       |
|  |    |                  | JP | 4015295 B               | 17-03-1992       |
| -----                                  |    |                  |    |                         |                  |
| US 2003228815                          | A1 | 11-12-2003       | AU | 2003304363 A1           | 17-03-2005       |
|  |    |                  | CA | 2500733 A1              | 31-03-2005       |
|  |    |                  | EP | 1585853 A2              | 19-10-2005       |
|  |    |                  | MX | PA04012304 A            | 30-05-2005       |
|  |    |                  | WO | 2005028724 A2           | 31-03-2005       |
|  |    |                  | US | 2005081571 A1           | 21-04-2005       |
| -----                                  |    |                  |    |                         |                  |