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| (51) International Patent Classification <sup>6</sup> :<br><b>B29C 57/04, B29B 13/02 // B29K 227:06</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>A1</b> | (11) International Publication Number: <b>WO 97/33739</b><br>(43) International Publication Date: 18 September 1997 (18.09.97)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| (21) International Application Number: <b>PCT/NL97/00117</b><br>(22) International Filing Date: <b>10 March 1997 (10.03.97)</b><br>(30) Priority Data:<br>1002604          13 March 1996 (13.03.96)          NL<br>(71) Applicant (for all designated States except US): <b>WAVIN B.V.</b><br>[NL/NL]; Stationsplein 3, NL-8011 CW Zwolle (NL).<br>(72) Inventor; and<br>(75) Inventor/Applicant (for US only): <b>VISSCHER, Jan [NL/NL];</b><br>Dedemvaartseweg N.92, NL-7775 AK Lutten (NL).<br>(74) Agent: <b>BROOKHUIS, H., J., A.; Van Exter Polak &amp; Charlouis</b><br>B.V., P.O. Box 3241, NL-2280 GE Rijswijk (NL).                                                                                                                                                                                                                                                                                                                       |           | (81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, <b>SG</b> , SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).<br><br>Published<br>With international search report. |
| (54) Title: <b>METHOD FOR FORMING A SOCKET ON A PIPE OF BIAXIALY ORIENTED POLYVINYL CHLORIDE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <p>The graph plots temperature in degrees Celsius against time. The y-axis ranges from 20 to 140 in increments of 20. The x-axis is labeled 'time' with an arrow pointing right. The curve begins at a temperature of about 25°C, rises steadily to approximately 75°C, where it levels off for a short period. It then rises again, passing through 100°C, and reaches a final plateau at approximately 120°C.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| (57) Abstract<br><br>The method comprises the successive steps of: placing a support in an end section of the pipe, heating the pipe in the region of the end section; deforming the pipe to produce a socket in the region of the heated end section; the heated end section being supported internally while the socket is being formed; cooling the pipe in the region of the end section, the end section being supported internally during the cooling operation; and removing the support from the pipe, for the purpose of heating the internally supported end section of the pipe, said end section first being heated until said end section has reached, substantially homogeneously, the glass transition temperature of polyvinyl chloride and then being further heated until the end section has reached, substantially homogeneously, a temperature near, preferably just above, the orientation temperature of polyvinyl chloride. |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |