

## [12] Patent

[11] Patent No.: GC 0000144	Number of the Decision to Grant the Patent: 4/710
[45] Date of Publishing the Grant of the Patent: 29/06/2005 4/2005	Date of the Decision to Grant the Patent: 19/04/2004
[21] Application No.: GCC/P/2000/986 [22] Filing Date: 31/10/2000 [30] Priority: [31] Priority No. [32] Priority date [33] State 19992373 03/11/1999 FI [72] Inventors: 1- Seppo Takala, 2- Marek Warcholinski [73] Owner: Oy KWH Pipe Ab, P.O. BOX 21, Fin-65101 Vasa, Finland [74] Agent: Suleiman Ibrahim Al-Ammar	[51] Int. Cl. <sup>7</sup> : B29C 53/64, 53/78 [56] Cited Documents: - WO 9322126 A1 (OY KWH PIPE AB) 11 November 1993 - US 5261988 A (BYRON DIKIS et al.) 16 November 1993 - JP 8192472 A (KANEO S) 30 July 1996

### [54] METHOD FOR MAKING A SPIRALLY-WOUND TUBE

[57] Abstract: This invention concerns a method and an apparatus for making a spirally-wound tube from a hollow thermoplastic profile (1) having a substantially rectangular cross-section, which method comprises the steps of: winding the thermoplastic profile (1) around a drum (2) and joining adjacent loops together by welding, and smoothing the outer weld joint (13) by means of extra heat and a smoothing body resting against the weld joint (13). The invention is characterized in that the thermoplastic profile (1), when fed to the drum (2), comes onto a stationary first section (3) comprising spaced sliding means (5) arranged along the periphery, on which section welding is performed, after which an inner weld joint (11) thus formed is arranged to run along a spiral groove (14) running around the stationary first section (3), whereby the inner weld joint (11), as well as the outer weld joint (13), are treated by using extra heat and a stationary smoothing body (10) resting against it, and that the tube, once both of the welded surfaces (11, 13) have been smoothed, is transferred to a rotary driven drum section (4) causing the tube to rotate and generating the winding motion of the thermoplastic profile (1).

No. of claims: 11

No. of figures: 3

