

Title (en)  
WINDING MACHINE, IN PARTICULAR FOR THERMOPLASTIC YARNS

Publication  
**EP 0000853 B1 19810902 (FR)**

Application  
**EP 78400069 A 19780802**

Priority  
FR 7723947 A 19770803

Abstract (en)  
[origin: ES472285A1] This winding-apparatus comprises a spindle or collet on which strand or roving is wound and an oscillating mechanism carrying a traverse guide and a follower. The follower is in contact with the circumference and activates an excitation element which continuously acts on a hydraulic or an electric motor which operates the oscillating apparatus. In this way, the oscillating apparatus moves progressively away and by a continuous motion from the spindle as the spool grows. The follower 14 is balanced around an oscillation axis Z-Z to exert a minimal force on the spool. The application disclosed is the winding of strand formed of glass filaments coming from a bushing.

IPC 1-7  
**B65H 54/36**

IPC 8 full level  
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**EP 0000853 A1 19790221**; **EP 0000853 B1 19810902**; AT 382134 B 19870112; AT A562178 A 19860615; CA 1097294 A 19810310; DE 2861011 D1 19811126; DK 144558 B 19820329; DK 144558 C 19820920; DK 342478 A 19790204; ES 472285 A1 19790216; FI 62807 B 19821130; FI 62807 C 19830310; FI 782359 A 19790204; FR 2399377 A1 19790302; FR 2399377 B1 19800222; IE 47215 B1 19840125; IE 781506 L 19790203; IT 1160572 B 19870311; IT 7868843 A0 19780802; JP S5430946 A 19790307; JP S6236951 B2 19870810; MX 145385 A 19820201; NO 145501 B 19811228; NO 145501 C 19820414; NO 782647 L 19790206; TR 20058 A 19800701; US 4235387 A 19801125; YU 187378 A 19820630

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