

Title (en)

WINDING APPARATUS FOR WINDING FILAMENTARY MATERIAL ON A SPOOL

Publication

**EP 0043366 B1 19860423 (DE)**

Application

**EP 81890105 A 19810624**

Priority

DE 3024094 A 19800627

Abstract (en)

[origin: ES8204390A1] A control device for obtaining a uniform or even winding is provided for a winding machine for winding strand-shaped winding material, and includes an electrical scanning device which detects the transition from a winding layer into a next higher winding layer by detecting the step that is formed during such transition. The scanning device does not make physical contact with the winding layer but relies on detection information furnished by opto-electrical or acousto-electrical sensing elements. This information is used to control the reversing of movement of a feed drive which effects the relative reciprocating traversing movement between the spool and a strand guide.

IPC 1-7

**B65H 54/28**

IPC 8 full level

**B65H 54/28** (2006.01)

CPC (source: EP US)

**B65H 54/2863** (2013.01 - EP US); **B65H 54/2875** (2013.01 - EP US); **B65H 2553/30** (2013.01 - EP US); **B65H 2553/416** (2013.01 - EP US); **B65H 2553/42** (2013.01 - EP US)

Citation (examination)

D.M. CONSIDINE, "Encyclopedia of instrumentation and control", 1971, McGraw-Hill, New York, S. 545 Stichwort "Proximity Switch"

Cited by

EP0337250A1; DE19950285A1; US4920738A; DE10311832A1; DE19726285A1; CN109196248A; EP1847498A1; EP0129926A3; US6443385B1; US6789762B1; WO0134509A1; WO9858865A1; WO2017167999A1

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