

Title (en)

Device for winding a thread in random cross winding on a bobbin

Title (de)

Vorrichtung zum Aufwickeln eines Fadens in Wildwicklung auf eine Auflaufspule

Title (fr)

Dispositif pour bobiner un fil en bobinage croisé au hasard sur une bobine

Publication

**EP 0837023 A3 19990127 (DE)**

Application

**EP 97116949 A 19970930**

Priority

DE 19642618 A 19961016

Abstract (en)

[origin: EP0837023A2] The winding device winds a thread in alternating angles onto a spool. It has a reversible winding shaft (1) with an endless winding thread (2), and a thread guide providing a breather rise. The shaft has a double rise consisting of a forward rise (3) and a return rise (4). The double rise of the shaft has a set number of threads with mixed turning point and others with a pure turning point. The shaft has several reversals (5) on each side, which are offset from each other. The half winding number for a forward rise and that of the corresponding return rise coincide.

IPC 1-7

**B65H 54/38**

IPC 8 full level

**B65H 54/28** (2006.01); **B65H 54/38** (2006.01); **D01D 7/00** (2006.01)

CPC (source: EP KR US)

**B65H 54/38** (2013.01 - EP KR US); **B65H 2701/31** (2013.01 - EP KR US)

Citation (search report)

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- [Y] PATENT ABSTRACTS OF JAPAN vol. 15, no. 481 (M - 1187) 6 December 1991 (1991-12-06)

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AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

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**EP 0837023 A2 19980422**; **EP 0837023 A3 19990127**; **EP 0837023 B1 20001108**; AT E197443 T1 20001111; DE 19642618 A1 19980423; DE 59702598 D1 20001214; JP H10175775 A 19980630; KR 19980032817 A 19980725; TW 356822 U 19990421; US 5957403 A 19990928

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