

Title (en)
NEEDLING LOOM FEEDING WITH CONTINUOUS HELICAL STRIP

Title (de)
ENDLOSE SPIRALFÖRMIGE ZUFÜHRBAHN FÜR VERNADELUNGSMASCHINE

Title (fr)
ALIMENTATION AIGUILLETEUSE PAR BANDE SPIRALE CONTINUE

Publication
EP 1397544 A1 20040317 (FR)

Application
EP 02727699 A 20020426

Priority

- FR 0201454 W 20020426
- FR 0105796 A 20010430

Abstract (en)
[origin: US6363593B1] A machine for needling a textile structure built up from a wound strip of material to be needled that is delivered by strip supply means comprising a storage drum containing said wound strip of textile material, an unwinding assembly for continuously extracting said strip from said storage drum, and a helical chute or "twist" for taking up said extracted strip unwound from said drum and for bringing it up to a needling table where there are friction drive means. The storage drum and the helical chute have the same axis C as the needling table.

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D04H 18/00; **D04H 13/00**

IPC 8 full level
D04H 18/00 (2012.01); **D04H 18/02** (2012.01)

CPC (source: EP KR US)
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Cited by
EP3450606A1; FR3070696A1; US11193223B2; US11725318B2

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US 6363593 B1 20020402; AT E455200 T1 20100115; BR 0209323 A 20040720; CA 2445981 A1 20021107; CA 2445981 C 20080902; CN 1327065 C 20070718; CN 1505712 A 20040616; DE 60235082 D1 20100304; EP 1397544 A1 20040317; EP 1397544 B1 20100113; FR 2824084 A1 20021031; FR 2824084 B1 20030801; HU 227929 B1 20120628; HU P0400074 A2 20040428; HU P0400074 A3 20080828; IL 158391 A0 20040512; IL 158391 A 20100217; JP 2004533547 A 20041104; JP 4068465 B2 20080326; KR 100805420 B1 20080220; KR 20040025673 A 20040324; MX PA03009814 A 20040129; RU 2003131881 A 20050227; RU 2280722 C2 20060727; UA 75131 C2 20060315; WO 02088449 A1 20021107

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US 90027501 A 20010706; AT 02727699 T 20020426; BR 0209323 A 20020426; CA 2445981 A 20020426; CN 02809028 A 20020426; DE 60235082 T 20020426; EP 02727699 A 20020426; FR 0105796 A 20010430; FR 0201454 W 20020426; HU P0400074 A 20020426; IL 15839102 A 20020426; IL 15839103 A 20031013; JP 2002585722 A 20020426; KR 20037013872 A 20031023; MX PA03009814 A 20020426; RU 2003131881 A 20020426; UA 2003109724 A 20020426