

Title (en)
METHOD AND CONTROL DEVICE FOR ADVANCING A NEEDLE PUNCHED FIBROUS SHEET

Title (de)
VERFAHREN UND ANTRIEBSANORDNUNG FÜR DIE VORSCHUBBEWEGUNG EINES NADELVLIES

Title (fr)
PROCEDE ET DISPOSITIF DE COMMANDE D'AVANCE DE PLAQUE FIBREUSE AIGUILLETEE.

Publication
EP 1373622 B1 20110601 (FR)

Application
EP 02704894 A 20020226

Priority
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• FR 0102555 A 20010226

Abstract (en)
[origin: FR2821367A1] A felting procedure, in which a fibre structure (10) is advanced under a reciprocating felting head (24) with needles (28), has the instantaneous speed of advance decreasing in response to the penetration of the needles into the structure and increasing after the needles withdraw, so that the force applied to the needles by the structure is limited without completely interrupting the advance during the whole duration of the needles' presence in the structure. A felting procedure, in which a fibre structure (10) is advanced under a reciprocating felting head (24) with needles (28), has the instantaneous speed of advance decreasing in response to the penetration of the needles into the structure and increasing after the needles withdraw, so that the force applied to the needles by the structure is limited without completely interrupting the advance during the whole duration of the needles' presence in the structure. The advance of the fibre structure can be produced by a constant-speed motor and a transmission system with a belt, tensioner roller and a variable-pressure pneumatic damper. It has mechanical clearance able to absorb the decrease in the speed of advance created by a resistance exercised by the penetrating felting needles. The decrease in the speed of advance with the needles' penetration is compensated for by an acceleration after they have withdrawn.

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CPC (source: EP KR)
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FR 2821367 A1 20020830; FR 2821367 B1 20040130; AT E511561 T1 20110615; BR 0207504 A 20040727; BR 0207504 B1 20120124; CA 2439238 A1 20020906; CA 2439238 C 20081104; CN 1320190 C 20070606; CN 1494616 A 20040505; EP 1373622 A1 20040102; EP 1373622 B1 20110601; HU P0303337 A2 20040128; HU P0303337 A3 20080828; IL 157421 A0 20040328; JP 2004522871 A 20040729; JP 4290988 B2 20090708; KR 100841485 B1 20080625; KR 20040025665 A 20040324; MX PA03007567 A 20041015; RU 2003126179 A 20050227; RU 2281351 C2 20060810; UA 76447 C2 20060815

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