

Title (en)

Needling machine for consolidating a web

Title (de)

Nadelmaschine für die Vernadelung eines Vliesses

Title (fr)

Appareil d'aiguilletage pour consolider une nappe de fibres

Publication

EP 1736587 B1 20100120 (FR)

Application

EP 06290968 A 20060614

Priority

FR 0506301 A 20050622

Abstract (en)

[origin: EP1736587A1] The device has a moving part (36) to carry needles (47), and a driving mechanism including connecting rods (51a, 51b) to impart an elliptical type movement to the needles along a path (T). The path has a proximal part drawn towards a lap and along which a progressive component of the movement is in the progressive direction of the lap, and a distal part along which the progressive component is in a direction opposite to the progressive direction of the lap. The proximal part is larger than the distal part when the parts are measured parallel to a needle movement penetrating a component.

IPC 8 full level

D04H 18/00 (2012.01)

CPC (source: EP US)

D04H 18/00 (2013.01 - EP US); **D04H 18/02** (2013.01 - EP US)

Cited by

WO2018162370A1; FR2909104A1; FR3063746A1; FR2909103A1; EP1927692A1; EP3862476A1; US11499256B2; EP3901347A1; FR3109586A1; EP3901348A1; FR3109588A1; WO2008151961A1; US11505885B2

Designated contracting state (EPC)

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EP 1736587 A1 20061227; **EP 1736587 B1 20100120**; AT E455887 T1 20100215; CN 1891884 A 20070110; DE 602006011820 D1 20100311; FR 2887564 A1 20061229; FR 2887564 B1 20071026; US 2007006432 A1 20070111

DOCDB simple family (application)

EP 06290968 A 20060614; AT 06290968 T 20060614; CN 200610106043 A 20060622; DE 602006011820 T 20060614; FR 0506301 A 20050622; US 21866305 A 20050906