

Title (en)

ELLIPTIC NEEDLE LOOM WITH SEALED HOUSING AND TILTED BOX FOR GUIDING THE CROSSMEMBER

Title (de)

ELLIPTISCHE NADELWEBMASCHINE MIT ABGEDICHTETEM GEHÄUSE UND SCHWENKENDEM KREUZSCHIENEN-FÜHRUNGSTOPF

Title (fr)

AIGUILLETEUSE ELLIPTIQUE A CARTER ETANCHE ET POT DE GUIDAGE DE TRAVERSEE BASCULANT

Publication

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Application

EP 21169002 A 20210416

Priority

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Abstract (en)

[origin: CN113550077A] The invention relates to a needling device for achieving reinforcement by needling, in particular non-woven fiber yarns or fiber sheets. The apparatus includes: needle plates each having a needle field; the stand columns are provided with vertical longitudinal shafts and are connected to the corresponding needle plates; a drive device configured to impart a reciprocating motion to the needle plate and/or the needle such that the needle has an elliptical path traversing in one direction and then traverses the fiber yarn or the fiber sheet in the machine direction or the MD direction of advance to thereby reinforce; a housing accommodating the column or a part of the column and the driving device; and needle threading guide boxes arranged in respective openings of the sealed housing while being mounted at an inclination with respect to a respective inclination axis and fixed with respect to the housing and perpendicular to the longitudinal axis and the MD direction, the columns being slid in and through the housing by means of the needle threading guide boxes, and the driving means comprising a first longitudinal driving means, wherein the drive device is configured to apply a reciprocating motion, in particular only vertically reciprocating motion, to the column in a direction substantially parallel to the longitudinal axis.

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