

Title (en)  
ELLIPTIC NEEDLE LOOM WITH SEALED HOUSING AND BOX FOR GUIDING THE CROSSMEMBER

Title (de)  
ELLIPTISCHE NADELWEBMASCHINE MIT ABGEDICHTETEM GEHÄUSE UND KREUZSCHIENEN-FÜHRUNGSTOPF

Title (fr)  
AIGUILLETEUSE ELLIPTIQUE A CARTER ETANCHE ET POT DE GUIDAGE DE TRAVERSEE

Publication  
**EP 3901348 C0 20230712 (FR)**

Application  
**EP 21169004 A 20210416**

Priority  
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Abstract (en)  
[origin: CN113550078A] The invention provides 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; a column having a vertical longitudinal axis connected to a respective needle plate; a driving device configured to apply a reciprocating motion to the needle plate and/or the needle; a sealed housing accommodating the column or a portion of the column and the driving device; and the needle threading guide box is arranged in the opening of the sealed shell, and each stand column penetrates through the shell through the needle threading guide box and slides in the shell. The driving device includes a longitudinal driving device configured to linearly reciprocate the column in a vertical direction. The driving device comprises a longitudinal driving device which is configured to enable each stand column to do linear reciprocating motion in the vertical direction. The stand column corresponding to each needle plate can be installed in an inclined mode. The driving device further includes a transverse driving device configured to reciprocate the needle plate or a point of the needle plate or an element integral with the needle plate in a direction substantially parallel to the MD direction.

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