

Title (en)

Circular needling loom for textile structure formed from annular fibrous preform

Title (de)

Vernadelungsmaschine für Textilstruktur aus ringförmigem vorgeformtem Fasermaterial

Title (fr)

Table d'aiguilletage circulaire d'une structure textile formée à partir d'une préforme fibreuse annulaire

Publication

EP 2341175 B1 20121212 (FR)

Application

EP 10195879 A 20101220

Priority

FR 0959469 A 20091223

Abstract (en)

[origin: EP2341175A1] The table comprises a horizontal annular plate (14) on which an annular fibrous preform is disposed (12), a unit for rotating the fibrous preform around the axis (16) of the plate, a needling device (22) having a needle head (24) extending on an angular sector of the plate and animated to a vertical movement relative to the plate, and a unit for guiding the preform under the needle head. Guiding bodies of the preform are connected to the plate to form a stripper roller inserted between the needle head and the plate, and formed by needles extending vertically towards the plate. The table comprises a horizontal annular plate (14) on which an annular fibrous preform is disposed (12), a unit for rotating the fibrous preform around the axis (16) of the plate, a needling device (22) having a needle head (24) extending on an angular sector of the plate and animated to a vertical movement relative to the plate, and a unit for guiding the preform under the needle head. Guiding bodies of the preform are connected to the plate to form a stripper roller inserted between the needle head and the plate, and formed by needles extending vertically towards the plate and angularly positioned to form an external and internal guide of the fibrous preform. Drillers are connected to each of the needles for guiding the stripper roller. The guiding bodies are further formed through internal and external walls vertically extending towards the plate. The internal and external walls are angularly connected to the plate to form the external and internal guide of the fibrous preform. A plate forming the stripper roller is inserted between the needle head and the plate. The external wall for guiding the preform has vertical notches for dropping the stripper roller.

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

EP2955260A1; EP3450605A1; FR3070695A1; EP2813610A1; FR3007043A1; US10081892B2; US9850606B2; US9783917B2; US9303343B2; EP3073004A1; EP3312326A1; US10781543B2

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