

Title (en)

DEVICE FOR CONTROLLING THE MOVEMENT OF THE NEEDLES OF A NEEDLE LOOM, IN PARTICULAR AN ELLIPTIC NEEDLE LOOM, AND NEEDLE LOOM COMPRISING SUCH A DEVICE

Title (de)

VORRICHTUNG ZUR STEUERUNG DER BEWEGUNG DER NADELN EINER NADELWEBMASCHINE, INSBESONDERE EINER ELLIPTISCHEN, UND NADELWEBMASCHINE MIT EINER SOLCHEN VORRICHTUNG

Title (fr)

DISPOSITIF DE COMMANDE DU MOUVEMENT DES AIGUILLES D'UNE AIGUILLETEUSE, NOTAMMENT ELLIPTIQUE, ET AIGUILLETEUSE COMPORTANT UN TEL DISPOSITIF

Publication

EP 3901349 B1 20230712 (FR)

Application

EP 21169008 A 20210416

Priority

FR 2004062 A 20200423

Abstract (en)

[origin: CN113550079A] The invention relates to a device for controlling the component force of movement along the path of the needles of a needling device, intended to achieve reinforcement by needling a nonwoven fibrous yarn or fibrous sheet. The device comprises a drive rod (27) adapted to be connected to the needle and/or the needle plate and/or to an element fixed to the needle plate or to the needle for reciprocating movement in one direction, an eccentric shaft (21) and a connecting rod (22), the eccentric shaft driving the connecting rod to rotate along an axis of rotation, in particular in the vertical direction and in the direction of extension of the vertical direction, the connecting rod (22) is connected to the drive rod (27) via an intermediate lever element (23) which can be rotated about an axis of rotation (24), in particular parallel to the axis of rotation of the eccentric shaft. On one hand, the lever is hinged to the driving rod, in particular along the axis parallel to the pivot and is kept at a certain distance from the driving rod. On the other hand, the lever is hinged to the driving rod, in particular at a point which is kept at a certain distance from the pivot, so that the driving rod reciprocates in one direction.

IPC 8 full level

D04H 18/02 (2012.01)

CPC (source: CN EP KR US)

D04H 18/02 (2013.01 - CN EP KR US); **D06H 5/00** (2013.01 - KR)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3901349 A1 20211027; **EP 3901349 B1 20230712**; **EP 3901349 C0 20230712**; CN 113550079 A 20211026; ES 2961698 T3 20240313; FR 3109587 A1 20211029; FR 3109587 B1 20220520; KR 20210131255 A 20211102; TW 202202687 A 20220116; US 11643765 B2 20230509; US 2021332515 A1 20211028

DOCDB simple family (application)

EP 21169008 A 20210416; CN 202110443613 A 20210423; ES 21169008 T 20210416; FR 2004062 A 20200423; KR 20210052763 A 20210423; TW 110114665 A 20210423; US 202117237522 A 20210422