

Title (en)

APPARATUS FOR NEEDLING A FIBROUS WEB

Title (de)

VORRICHTUNG ZUM VERNADELN EINER FASERBAHN

Title (fr)

DISPOSITIF D'AIGUILLETAGE D'UNE NAPPE DE FIBRES

Publication

**EP 2265757 B1 20190626 (DE)**

Application

**EP 09731796 A 20090401**

Priority

- EP 2009053894 W 20090401
- DE 102008019217 A 20080417

Abstract (en)

[origin: WO2009127520A1] An apparatus is described for needling a fibrous web having at least one needle bar. On its underside, the needle bar carries a needle board with a multiplicity of needles, wherein the needle bar is guided via a movably held bar carrier. The bar carrier is driven in an oscillating manner with a superimposed horizontal and vertical movement by a crank mechanism drive. To this end, a phase shifting device is provided, by which the crankshafts of the crank mechanism drive can be adjusted depending on the phase relation. Here, the movement of the bar carrier is guided by a guide device. In order to obtain stable guidance with high flexibility in every situation, according to the invention the guide device is formed by a steering rod which is connected at one end to the bar carrier by a rotary joint and which is coupled with the other end to a steering gear by a second rotary joint.

IPC 8 full level

**D04H 18/02** (2012.01); **D04H 18/00** (2012.01)

CPC (source: EP US)

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

Designated contracting state (EPC)

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 SE SI SK TR

DOCDB simple family (publication)

**WO 2009127520 A1 20091022**; CN 101981243 A 20110223; EP 2265757 A1 20101229; EP 2265757 B1 20190626; US 2011179611 A1 20110728; US 8495805 B2 20130730

DOCDB simple family (application)

**EP 2009053894 W 20090401**; CN 200980111338 A 20090401; EP 09731796 A 20090401; US 93784109 A 20090401