

Title (en)

NEEDLE REMOVING TOOL, NEEDLE REMOVING DEVICE, AND NEEDLE REMOVING METHOD

Title (de)

ENTNADELUNGSWERKZEUG, ENTNADELUNGSEINRICHTUNG UND ENTNADELUNGSVERFAHREN

Title (fr)

OUTIL DE RETRAIT D'AIGUILLES, DISPOSITIF DE RETRAIT D'AIGUILLES ET PROCÉDÉ DE RETRAIT D'AIGUILLES

Publication

EP 3368712 B1 20190911 (DE)

Application

EP 16791339 A 20161021

Priority

- DE 202015105693 U 20151026
- EP 2016075336 W 20161021

Abstract (en)

[origin: WO2017072037A1] The invention relates to a needle removing tool (2) and a needle removing device (1) for needles (4, 5) on needle boards (3) of needle looms. The needle removing tool (2) comprises a hollow mechanical extraction means (11) for intact and damaged needles (4, 5), said extraction means being motor-driven in such a way as to be rotationally and linearly movable and being provided with an elongate extraction sleeve (12) that has an axial hole (18) and a lateral axial slot (20) on the sleeve jacket (19). -

IPC 8 full level

D04H 18/02 (2012.01)

CPC (source: EP US)

D04H 18/02 (2013.01 - EP US)

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)

DE 202015105693 U1 20170127; CN 108350636 A 20180731; CN 108350636 B 20211008; EP 3368712 A1 20180905; EP 3368712 B1 20190911; JP 2018537598 A 20181220; US 10927484 B2 20210223; US 2018320299 A1 20181108; WO 2017072037 A1 20170504

DOCDB simple family (application)

DE 202015105693 U 20151026; CN 201680062880 A 20161021; EP 16791339 A 20161021; EP 2016075336 W 20161021; JP 2018521383 A 20161021; US 201615770912 A 20161021