

Title (en)

SEWING MACHINE WITH A FEED DOG DEVICE

Title (de)

NÄHMASCHINE MIT STOFFSCHIEBERVORRICHTUNG

Title (fr)

MACHINE À COUDRE AVEC DISPOSITIF DE GRIFFE D'ENTRAÎNEMENT

Publication

EP 4144905 A1 20230308 (EN)

Application

EP 22150275 A 20220105

Priority

TW 110132468 A 20210901

Abstract (en)

A feed dog device of a sewing machine includes a driving unit (1), a needle plate unit (2), a feed dog unit (3), an up-down transmitting unit (4), a horizontal transmitting unit (5) and a direction adjusting unit (6). The direction adjusting unit (6) includes a stepper motor (63) with a variable rotational speed controlled in accordance with a speed of the driving shaft (12) of the driving unit (1), and a linkage mechanism (64) actuable by the stepper motor (63) to be moved to different positions so as to interfere with a horizontal reciprocating motion by the horizontal transmitting unit (5) such that the horizontal reciprocating motion cooperates with the up-down reciprocating motion by the up-down transmitting unit (4) to bring the feed dog unit (3) into performing a variable moving course.

IPC 8 full level

D05B 27/02 (2006.01)

CPC (source: EP US)

D05B 27/02 (2013.01 - EP US); **D05B 73/12** (2013.01 - US)

Citation (search report)

- [I] CN 207130441 U 20180323 - ZHEJIANG WINWAY MACHINERY CO LTD
- [I] TW 201009153 A 20100301 - S S INDUSTRY CO LTD [TW]
- [I] JP H07328259 A 19951219 - JUKI KK

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4144905 A1 20230308; TW 202311590 A 20230316; TW I782686 B 20221101; US 2023062017 A1 20230302

DOCDB simple family (application)

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