

Title (en)
UPPER-AND-LOWER FEED SEWING MACHINE

Title (de)
NÄHMASCHINE MIT ZUFUHR VON OBEN UND UNTEN

Title (fr)
MACHINE À COUDRE À ALIMENTATION SUPÉRIEURE ET INFÉRIEURE

Publication
EP 2241661 A2 20101020 (EN)

Application
EP 10159730 A 20100413

Priority
JP 2009097783 A 20090414

Abstract (en)
The invention relates to an upper-and-lower feed sewing machine (100). The upper-and-lower feed sewing machine (100) includes a feed dog (1) which feeds a lower workpiece (C1), a feed foot (2) which feeds an upper workpiece (C2), a lower roller (3) moves the lower workpiece (C1) in a direction intersecting a cloth feed direction, lower driving means (4) for rotating the lower roller (3), an upper roller (7) which moves the upper workpiece (C2) in the direction intersecting the cloth feed direction, upper driving means (8) for rotating the upper roller (7), a separating plate (11) which holds the lower workpiece (C1) and the upper workpiece (C2) in cooperation with the lower roller (3) and the upper roller (7), detecting means (12) for detecting whether the workpieces (C1, C2) are in respective positions, and a control means (13) for controlling the respective driving means. The upper-and-lower feed sewing machine (100) further includes lower pressing means (6) for pressing the lower roller (3) against the lower workpiece (C1), and upper pressing means (10) for pressing the upper roller (7) against the upper workpiece (C2). The control means (13) individually controls respective amounts of current applied to the pressing means (6, 10).

IPC 8 full level
D05B 27/00 (2006.01); **D05B 35/10** (2006.01)

CPC (source: EP KR)
D05B 27/00 (2013.01 - EP KR); **D05B 27/10** (2013.01 - KR); **D05B 27/16** (2013.01 - KR); **D05B 35/00** (2013.01 - KR);
D05B 35/10 (2013.01 - EP KR)

Citation (applicant)
• JP S58192576 A 19831110 - TOKYO JUKI INDUSTRIAL CO LTD
• JP S5914881 A 19840125 - TOKYO JUKI INDUSTRIAL CO LTD

Cited by
CN106087281A; CN108589073A; CN108589067A; CN109594218A

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 SM TR

Designated extension state (EPC)
AL BA ME RS

DOCDB simple family (publication)
EP 2241661 A2 20101020; **EP 2241661 A3 20150325**; **EP 2241661 B1 20160817**; CN 101864644 A 20101020; CN 101864644 B 20130717;
JP 2010246668 A 20101104; JP 5519172 B2 20140611; KR 101726347 B1 20170412; KR 20100113986 A 20101022

DOCDB simple family (application)
EP 10159730 A 20100413; CN 201010148597 A 20100414; JP 2009097783 A 20090414; KR 20100033728 A 20100413