

Title (en)
Sewing machine

Title (de)
Nähmaschine

Title (fr)
Machine à coudre

Publication
EP 2226419 A1 20100908 (EN)

Application
EP 10154761 A 20100226

Priority
JP 2009045528 A 20090227

Abstract (en)
The invention relates to a sewing machine (1). The sewing machine (1) includes a needle up-down movement mechanism which moves a needle bar (12), a thread take-up bar (14) which reciprocates in synchronization with up and down movements of the needle bar (12), an upper thread drawing mechanism (40) which draws an upper thread using an upper thread drawing member (41), a cloth feed mechanism (50) which moves a workpiece in synchronization with the needle bar (12) and by an optional moving amount, an operation control means (70) which controls a cloth moving motor (52, 53) during a sewing operation such that the workpiece is moved by a preset moving amount, and a data memory (74) which stores sewing pattern data in which an upper thread drawing amount is set. The upper thread drawing mechanism (40) has an upper thread drawing motor (44) which moves the upper thread drawing member (41). The operation control means (70) controls the upper thread drawing motor (44) based on the sewing pattern data such that the upper thread drawing member (41) is moved by an optionally set amount for each stitch during the sewing operation.

IPC 8 full level
D05B 19/12 (2006.01); **D05B 47/04** (2006.01)

CPC (source: EP KR)
D05B 3/06 (2013.01 - KR); **D05B 19/12** (2013.01 - EP KR); **D05B 47/04** (2013.01 - EP KR)

Citation (applicant)
• US 4791877 A 19881220 - HORIE FUJIO [JP], et al
• DE 3021450 A1 19801211 - JANOME SEWING MACHINE CO LTD
• US 4215641 A 19800805 - DOBRJANSKYJ LEO [US], et al

Citation (search report)
• [A] US 4791877 A 19881220 - HORIE FUJIO [JP], et al
• [A] DE 3021450 A1 19801211 - JANOME SEWING MACHINE CO LTD
• [A] US 4215641 A 19800805 - DOBRJANSKYJ LEO [US], et al
• [A] US 4566396 A 19860128 - SAKUMA KUNIHARU [JP], et al
• [A] US 4693193 A 19870915 - HANYU SUSUMU [JP], et al
• [A] JP S60119982 A 19850627 - TOKYO JUKI INDUSTRIAL CO LTD
• [A] DE 2924018 A1 19800103 - JANOME SEWING MACHINE CO LTD
• [A] DE 10304780 A1 20031106 - JUKI KK [JP]

Cited by
ITAN20090099A1

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 RS

DOCDB simple family (publication)
EP 2226419 A1 20100908; EP 2226419 B1 20120125; AT E542940 T1 20120215; CN 101818416 A 20100901; CN 101818416 B 20130619; JP 2010194235 A 20100909; JP 5427438 B2 20140226; KR 101707158 B1 20170215; KR 20100098345 A 20100906

DOCDB simple family (application)
EP 10154761 A 20100226; AT 10154761 T 20100226; CN 201010122765 A 20100226; JP 2009045528 A 20090227; KR 20100018229 A 20100226