

Title (en)
Sewing machine

Title (de)
Nähmaschine

Title (fr)
Machine à coudre

Publication
EP 2570542 A1 20130320 (EN)

Application
EP 12184525 A 20120914

Priority
JP 2011201267 A 20110915

Abstract (en)

A sewing machine (100) includes a cloth feeding mechanism (20) configured to feed a workpiece (CU, CD) in a cloth feeding direction, a lateral-feeding mechanism (30, 36) configured to move the workpiece (CU, CD) in a seam allowance direction (X), cloth edge detection means (40, 60) for detecting a side edge portion of the workpiece (CU, CD) along the cloth feeding direction (Y), a controller (13) configured to control the lateral-feeding mechanism (30, 36) to control a seam allowance of the workpiece (CU, CD). The cloth edge detection means (40, 60) includes a light source (431, 631) for irradiating a reflector plate (12), a detector (45, 65) having a plurality of light receiving devices arranged along the seam allowance direction (X) to receive the light reflected by the reflector plate (12) and optical means (44, 64, 632) for collimating the light emitted by the light source (431, 631) and for directing the collimated light in a direction orthogonal to the seam allowance direction (X) and inclined with respect to the cloth feeding direction (Y) toward the reflector plate (12) to irradiate the reflector plate (12) over a range along the seam allowance direction (X).

IPC 8 full level
D05B 35/02 (2006.01); **D05B 35/10** (2006.01)

CPC (source: EP)
D05B 35/02 (2013.01); **D05B 35/102** (2013.01)

Citation (applicant)

- JP H1133255 A 19990209 - JUKI KK
- JP H06335582 A 19941206 - JUKI KK

Citation (search report)

- [AD] JP H1133255 A 19990209 - JUKI KK
- [A] US 5031552 A 19910716 - HANSBERRY MITCHELL L [US]
- [A] DE 102007058934 A1 20080703 - JUKI KK [JP]
- [A] US 5765495 A 19980616 - ADAMSKI JR MAXIMILIAN [US]
- [A] US 5010833 A 19910430 - SPENCER III JAMES T [US], et al

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

DOCDB simple family (publication)

EP 2570542 A1 20130320; EP 2570542 B1 20140514; CN 102995309 A 20130327; CN 102995309 B 20161221; JP 2013059577 A 20130404;
JP 5925451 B2 20160525

DOCDB simple family (application)

EP 12184525 A 20120914; CN 201210342529 A 20120914; JP 2011201267 A 20110915