

Title (en)

TWO-THREAD LOCK STITCH SEWING MACHINE OR MULTI-HEAD SEWING MACHINE WITH ROTATING SHUTTLE

Title (de)

EIN- ODER MEHRKOPFSTICKMASCHINE MIT EINEM DOPPELSTEPPSTICH-UMLAUF-GREIFER

Title (fr)

MACHINE À COUDRE OU MACHINE À COUDRE MULTI-TÊTE À POINT NOUÉ DEUX FILS À NAVETTE ROTATIVE

Publication

**EP 2550387 B1 20160831 (DE)**

Application

**EP 11712469 A 20110319**

Priority

- DE 102010013016 A 20100324
- EP 2011001369 W 20110319

Abstract (en)

[origin: WO2011116912A2] The invention relates to a single-head or multi-head embroidery machine including stitch-forming tools which are each formed by a thread-guiding needle interacting with a two-thread lockstitch looper for forming stitches, and also including a feeding device for achieving relative movements between the material to be embroidered and the stitch-forming tools, which take place as a function of the movements of the needle. In order to avoid a temporal overlap of the stitch-forming phase with the feeding movement of the material to be embroidered the two-thread lockstitch looper rotates at a speed which corresponds to n times the speed of the main shaft of the machine, where n is a whole number which is greater than the number 2.

IPC 8 full level

**D05B 69/00** (2006.01); **D05B 19/12** (2006.01); **D05C 11/08** (2006.01)

CPC (source: EP KR)

**D05B 19/12** (2013.01 - EP KR); **D05B 69/00** (2013.01 - EP KR); **D05C 11/08** (2013.01 - EP KR)

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 102010013016 A1 20110929**; CN 102918193 A 20130206; CN 102918193 B 20150610; EP 2550387 A2 20130130;  
EP 2550387 B1 20160831; ES 2606033 T3 20170317; JP 2013521957 A 20130613; JP 5828884 B2 20151209; KR 101951200 B1 20190422;  
KR 20130009991 A 20130124; TW 201139775 A 20111116; TW I530602 B 20160421; WO 2011116912 A2 20110929;  
WO 2011116912 A3 20120405

DOCDB simple family (application)

**DE 102010013016 A 20100324**; CN 201180015321 A 20110319; EP 11712469 A 20110319; EP 2011001369 W 20110319;  
ES 11712469 T 20110319; JP 2013500377 A 20110319; KR 20127027574 A 20110319; TW 100108686 A 20110315