

Title (en)

Stitch forming process for an embroidery machine and embroidery machine for performing said process

Title (de)

Verfahren zur Stichbildung bei einer Stickmaschine und Stickmaschine zur Durchführung des Verfahrens

Title (fr)

Procédé de formation du point dans une machine à broder et machine à broder pour la mise en oeuvre dudit procédé

Publication

EP 1209273 A3 20030102 (DE)

Application

EP 01811102 A 20011116

Priority

CH 22632000 A 20001121

Abstract (en)

[origin: EP1209273A2] In a process to form a stitch, a sewing machine has a supply of thread (11) withdrawn over a roller (13) aided by a roller power drive. The torque applied to the roller is regulated especially in accordance with the stitching program data for each individual type of stitch. Also claimed is a sewing machine with a clutch (31) drive to the roller (13). The roller clutch is engaged by thread movement of the roller. The roller is powered by the needle plunger drive shaft (41), moving the swivel lever (43) and rod (42) synchronised with the needle action. When thread is static the clutch ensures that torque can only be applied in one direction via the gear (39,40) to the roller (13). Because the same time lapse for each cycle is always the same irrespective of the stitch length, the roller turns at higher speeds for longer stitches than shorter. The clutch is regulated in accordance with the type of stitch required and maintains the thread tension irrespective of the stitch length.

IPC 1-7

D05C 11/08

IPC 8 full level

D05C 11/08 (2006.01)

CPC (source: EP)

D05C 11/08 (2013.01)

Citation (search report)

- [DA] EP 0795638 A1 19970917 - LAESSER FRANZ AG [CH]
- [DA] EP 0014897 A1 19800903 - HEINZLE AUGUST
- [DA] EP 0666351 A1 19950809 - SAURER STICKSYSTEME AG [CH]
- [DA] EP 0906982 A2 19990407 - HIRAOKA KOGYO CO LTD [JP]
- [DA] CH 115089 A 19260601 - HERTENSTEIN ALFRED [CH]
- [DA] GB 177317 A 19220330 - LIONEL STEPHEN DISNEY

Cited by

EP1295977A3

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

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