

Title (en)

METHOD AND DEVICE FOR MECHANICALLY SEWING A DOUBLE CHAIN STITCH SEAM

Title (de)

VERFAHREN UND VORRICHTUNG ZUM MASCHINELLEN NÄHEN EINER DOPPELKETTENSTICHNAHT

Title (fr)

PROCEDE ET DISPOSITIF POUR REALISER A LA MACHINE UNE COUTURE A POINT DE CHAINETTE DOUBLE

Publication

**EP 1257706 B1 20041117 (DE)**

Application

**EP 00990581 A 20001221**

Priority

- DE 0004626 W 20001221
- DE 10001611 A 20000117

Abstract (en)

[origin: WO0153591A1] The aim of the invention is to provide a method for mechanically locking a double chain stitch seam. The chain stitch is produced by means of an industrial sewing machine comprising a sewing needle and a sewing thread as well as by a main gripper comprising a gripper thread. The sewing direction is reversed for locking purposes. The aim of the invention is also to guarantee that the chain stitch seam is sewn in a simple and very precise manner by means of the inventive method and even when the sewing speed is high. According to the inventive method and after the sewing direction has been reversed, the thread loop which is formed by the sewing needle underneath the web of fabric is received by the main gripper in the stitching rhythm of the sewing needle. The thread loop is subsequently pushed on the main gripper against the working direction thereof by means of an auxiliary component that is driven in a synchronous manner by the sewing machine. The needle thread which forms the thread loop is then joined with the gripper head and held in this position underneath the sewing level at a distance from the needle and the main gripper in front of said needle and gripper and in the forward sewing direction by means of said auxiliary component. The joined thread area is moved in the forward sewing direction and a thread triangle formed by the needle thread rope that forms the loop is stretched in the gripper thread area that extends in parallel in relation to the main gripper and in the gripper thread area that leads to the joined area. The sewing needle stitches into said triangle. The thread triangle is subsequently held open by means of the auxiliary component until the next thread loop of the needle thread is formed. The joined thread area is released by the auxiliary component approximately at the same time.

IPC 1-7

**D05B 61/00; D05B 1/10**

IPC 8 full level

**D05B 1/10 (2006.01); D05B 61/00 (2006.01)**

CPC (source: EP KR US)

**D05B 1/10 (2013.01 - EP US); D05B 61/00 (2013.01 - EP KR US)**

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**WO 0153591 A1 20010726;** AR 027233 A1 20030319; AT E282730 T1 20041215; AU 3001701 A 20010731; AU 771029 B2 20040311; BR 0016963 A 20021015; CA 2387118 A1 20010726; CA 2387118 C 20061212; CN 100334284 C 20070829; CN 1423715 A 20030611; CZ 20021553 A3 20020911; CZ 301876 B6 20100714; DE 10001611 A1 20010802; DE 10001611 C2 20011108; DE 50008707 D1 20041223; EE 04530 B1 20050815; EE 200200258 A 20030616; EG 23216 A 20040831; EP 1257706 A1 20021120; EP 1257706 B1 20041117; ES 2226975 T3 20050401; GT 20010006 A 20020325; HR P20020289 A2 20030630; HU P0202583 A2 20071228; IL 149130 A0 20021110; IL 149130 A 20051120; JP 2001239082 A 20010904; JP 4692797 B2 20110601; KR 100650234 B1 20061127; KR 20020076258 A 20021009; MX PA02002726 A 20021023; MY 127132 A 20061130; PL 202071 B1 20090529; PL 357368 A1 20040726; PT 1257706 E 20050131; TR 200201803 T2 20021223; TW 541375 B 20030711; US 2001011518 A1 20010809; US 6390004 B2 20020521; YU 19602 A 20030430; YU 49325 B 20050610

DOCDB simple family (application)

**DE 0004626 W 20001221;** AR P010100200 A 20010117; AT 00990581 T 20001221; AU 3001701 A 20001221; BR 0016963 A 20001221; CA 2387118 A 20001221; CN 00818446 A 20001221; CZ 20021553 A 20001221; DE 10001611 A 20000117; DE 50008707 T 20001221; EE P200200258 A 20001221; EG 20010054 A 20010117; EP 00990581 A 20001221; ES 00990581 T 20001221; GT 20010006 A 20010116; HR P20020289 A 20020405; HU P0202583 A 20001221; IL 14913000 A 20001221; JP 2000404714 A 20001228; KR 20027009157 A 20020716; MX PA02002726 A 20001221; MY PI20010221 A 20010117; PL 35736800 A 20001221; PT 00990581 T 20001221; TR 200201803 T 20001221; TW 90100819 A 20010115; US 76668401 A 20010117; YU P19602 A 20001221