

Title (en)
SEWING UNIT

Title (de)
NÄHANLAGE

Title (fr)
INSTALLATION DE COUTURE

Publication
EP 3365485 B1 20240110 (DE)

Application
EP 16782234 A 20161018

Priority
• DE 102015220332 A 20151019
• EP 2016074922 W 20161018

Abstract (en)
[origin: CA3002269A1] A sewing unit (1) for sewing seams located multidimensionally in space has a sewing head. The latter has a needle bar upper part (12) in which a needle bar (11) is mounted so as to be driven up and down along its longitudinal axis (13). At least one sewing needle (9, 10) is held, as a stitch-forming tool, on the needle bar (11). The needle bar upper part (12) is mounted in a pivotable manner in a sewing head upper part (14) so as to be driven about the needle bar longitudinal axis (13). At least one gripper is mounted, as a stitch-forming tool driven synchronously with the sewing needle (9, 10), on a gripper lower part (17) of the sewing head. The gripper lower part (17) is mounted in a pivotable manner in a sewing head lower part (18) so as to be driven about the needle bar longitudinal axis (13) synchronously with the needle bar upper part (12). Motor components (19, 69) for driving the up and down movement of the needle bar (11), for pivoting the needle bar upper part (12), for driving the gripper synchronously with the needle bar (11) and for pivoting the gripper lower part (17) are arranged outside the needle bar upper part (12) and outside the gripper lower part (17). This results in a sewing unit with which even parts that are to be sewn in a topographically irregular manner are made accessible for sewing.

IPC 8 full level
D05B 55/14 (2006.01); **D05B 57/30** (2006.01); **D05B 69/00** (2006.01)

CPC (source: EP US)
D05B 21/00 (2013.01 - US); **D05B 29/12** (2013.01 - US); **D05B 55/14** (2013.01 - EP US); **D05B 57/30** (2013.01 - EP US); **D05B 69/00** (2013.01 - EP US); **D05B 69/30** (2013.01 - US)

Citation (examination)
• DE 3625881 A1 19880204 - KOCHS ADLER AG [DE]
• EP 0520076 A1 19921230 - YASKAWA DENKI SEISAKUSHO KK [JP]

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 102015220332 A1 20170420; CA 3002269 A1 20170427; CA 3002269 C 20230905; EP 3365485 A1 20180829; EP 3365485 B1 20240110; EP 3365485 C0 20240110; ES 2971047 T3 20240603; JP 2018531119 A 20181025; JP 6905980 B2 20210721; MX 2018004758 A 20190516; US 10851483 B2 20201201; US 2018313012 A1 20181101; WO 2017067900 A1 20170427

DOCDB simple family (application)
DE 102015220332 A 20151019; CA 3002269 A 20161018; EP 16782234 A 20161018; EP 2016074922 W 20161018; ES 16782234 T 20161018; JP 2018521304 A 20161018; MX 2018004758 A 20161018; US 201615769224 A 20161018