

Title (en)
DRIVE DEVICE FOR AN ELEMENT TO BE DRIVEN

Title (de)
ANTRIEBSVORRICHTUNG FÜR EIN ANZUTREIBENDES ELEMENT

Title (fr)
DISPOSITIF D'ENTRAÎNEMENT POUR UN ÉLÉMENT À ENTRAÎNER

Publication
EP 3538730 B1 20201230 (DE)

Application
EP 16801397 A 20161111

Priority
EP 2016077457 W 20161111

Abstract (en)
[origin: WO2018086705A1] The invention relates to a drive device (18) for driving an element, having the following: - a toothed belt drive with a toothed belt (20), - a frame element (72) which forms two opposite connection plates (44) and a connection wall (76) that connects the two connection plates (44) together, - at least three elongated force driving elements (22) which are secured to the toothed belt (20) and are aligned parallel to the width (B) of the toothed belt (20) and parallel to one another and which are arranged within the frame element (72), wherein a central force driving element (22-1) is rotationally fixed to the two connection plates (44), and the end sections of each adjacent outer force driving element (22) extend through curved elongated holes (48) of the connection plate (44), whereby the outer force driving element (22-2, 22-3) can be pivoted and the end faces of the outer force driving elements (22-2, 22-3) have cylindrical projections, which are designed as axle stubs and each of which has a roller (80), outside of one of the connection plates (44), - a toothed disc (26) with tooth recesses (40) for catching teeth of the toothed belt (20) and force driving element recesses (42) for catching the force driving elements (22), - a non-linear guide path (60), at least some sections of which run parallel to the extension of the toothed belt (20) and in which the rollers (80) arranged on the outer force driving elements (22-2, 22-3) are guided, and - a drive means (90) which is connected to the frame element (72) and is used to connect to the element to be driven.

IPC 8 full level
E05F 15/646 (2015.01); **E05D 15/10** (2006.01)

CPC (source: EP US)
E05D 15/1047 (2013.01 - US); **E05F 15/646** (2015.01 - EP US); **E05F 15/655** (2015.01 - US); **E05F 15/681** (2015.01 - US); **E05D 15/1047** (2013.01 - EP); **E05D 2015/1026** (2013.01 - US); **E05D 2015/1055** (2013.01 - EP); **E05D 2015/1057** (2013.01 - EP US); **E05F 15/681** (2015.01 - EP); **E05Y 2900/506** (2013.01 - EP); **E05Y 2900/51** (2013.01 - EP); **E05Y 2900/531** (2013.01 - US)

Citation (examination)
EP 3239448 A1 20171101 - BENCINA DANIEL [DE]

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)
WO 2018086705 A1 20180517; CN 109963998 A 20190702; CN 109963998 B 20210126; EP 3538730 A1 20190918; EP 3538730 B1 20201230; ES 2856693 T3 20210928; PL 3538730 T3 20210614; US 11447994 B2 20220920; US 2020165853 A1 20200528

DOCDB simple family (application)
EP 2016077457 W 20161111; CN 201680090717 A 20161111; EP 16801397 A 20161111; ES 16801397 T 20161111; PL 16801397 T 20161111; US 201616349288 A 20161111