

Title (en)
PISTON PUMP

Title (de)
KOLBENPUMPE

Title (fr)
POMPE À PISTON

Publication
EP 2823177 A1 20150114 (DE)

Application
EP 13700489 A 20130107

Priority
• DE 102012203428 A 20120305
• EP 2013050145 W 20130107

Abstract (en)
[origin: WO2013131662A1] The invention relates to a piston pump, in particular a high-pressure fuel pump, comprising a housing (1), a piston and a drive shaft (2) having a cam section (3) on which the piston is at least indirectly supported via a guide roller (5) that is rotatably mounted in a roller plunger (4), wherein laterally on either of the two sides of the cam section (3) a rim (6) is provided that protrudes in the radial direction beyond the cam section (3), wherein the rim (6) tapers on one front face directed towards the guide roller (5) to an outer circumference of the rim (6), wherein the rim (6) is in particular conical, so that an angular opening results, wherein the cam roller comprises a convex curvature directed towards the rim (6), preferably with a radius (r). Alternatively, also the rim can have a convex curvature and the roller can taper conically.

IPC 8 full level
F02M 59/10 (2006.01); **F04B 1/04** (2006.01)

CPC (source: EP)
F02M 59/102 (2013.01); **F04B 1/0404** (2013.01); **F04B 1/0426** (2013.01); **F04B 1/0435** (2013.01); **F04B 1/0439** (2013.01)

Citation (search report)
See references of WO 2013131662A1

Cited by
WO2023174892A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
DE 102012203428 A1 20130905; CN 104145114 A 20141112; CN 104145114 B 20170728; EP 2823177 A1 20150114; EP 2823177 B1 20160406; IN 6231DEN2014 A 20151023; WO 2013131662 A1 20130912

DOCDB simple family (application)
DE 102012203428 A 20120305; CN 201380011975 A 20130107; EP 13700489 A 20130107; EP 2013050145 W 20130107; IN 6231DEN2014 A 20140723