

Title (en)
Piston cylinder unit

Title (de)
Kolbenzylindereinheit

Title (fr)
Ensemble cylindre piston

Publication
EP 2743492 B1 20190227 (DE)

Application
EP 13188691 A 20131015

Priority
DE 102012223334 A 20121217

Abstract (en)
[origin: EP2743492A1] The cylinder unit (10) has a cylinder (11) whose one side is provided with a hydraulic pressure lubricant to lubricate a surface between the cylinder and a piston (15). A peripheral surface (23) of piston is extended in a direction of a longitudinal axis (21) to form a longitudinal recess (25). Other side of cylinder is provided with an entry region (28) of piston into a hole (13) formed in cylinder. The entry region in operational position of piston is hydraulically separated from one side of cylinder, and spaced away from an end region (27) of recess.

IPC 8 full level
F02M 59/44 (2006.01)

CPC (source: EP)
F02M 59/442 (2013.01)

Citation (examination)
• EP 0789145 A1 19970813 - TOYODA AUTOMATIC LOOM WORKS [JP]
• DE 102004007513 A1 20050901 - BOSCH GMBH ROBERT [DE]

Designated contracting state (EPC)
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DOCDB simple family (publication)
EP 2743492 A1 20140618; EP 2743492 B1 20190227; CN 103867711 A 20140618; CN 103867711 B 20171121;
DE 102012223334 A1 20140618

DOCDB simple family (application)
EP 13188691 A 20131015; CN 201310685752 A 20131216; DE 102012223334 A 20121217