

Title (en)

Working cylinder and construction machine or lifting device

Title (de)

Arbeitszylinder und Baumaschine bzw. Hebezeug

Title (fr)

Vérin hydraulique et machine de construction ou engin de levage

Publication

EP 2789863 A3 20150610 (DE)

Application

EP 14000197 A 20140120

Priority

DE 102013006231 A 20130411

Abstract (en)

[origin: CN104100607A] The invention relates to a power cylinder and a construction machine or lifting gear, especially to a power cylinder comprising a piston-in-cylinder unit having at least one pressure connection, an integral valve arrangement for controlling the pressure volume flow from the pressure connection into the cylinder space and an integrated control and/or regulation unit for actuating the valve arrangement.

IPC 8 full level

F15B 15/20 (2006.01); **E02F 9/22** (2006.01)

CPC (source: EP US)

E02F 3/42 (2013.01 - EP US); **E02F 9/22** (2013.01 - US); **E02F 9/2228** (2013.01 - EP US); **E02F 9/2271** (2013.01 - EP US); **F15B 13/044** (2013.01 - US); **F15B 15/202** (2013.01 - EP US); **F15B 21/085** (2013.01 - US); **F15B 15/28** (2013.01 - EP US); **F15B 21/08** (2013.01 - EP US)

Citation (search report)

- [X] DE 4422528 A1 19960104 - FESTO KG [DE]
- [X] EP 1199479 A2 20020424 - FESTO AG & CO [DE]
- [X] WO 9631704 A1 19961010 - PETERS INDU PRODUKT ELEKTROTEC [DE], et al
- [X] WO 2011050969 A2 20110505 - NORGREN GMBH [DE], et al

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)

EP 2789863 A2 20141015; **EP 2789863 A3 20150610**; **EP 2789863 B1 20181017**; CN 104100607 A 20141015; DE 102013006231 A1 20141016; TR 201900477 T4 20190221; US 2014305117 A1 20141016

DOCDB simple family (application)

EP 14000197 A 20140120; CN 201410143385 A 20140410; DE 102013006231 A 20130411; TR 201900477 T 20140120; US 201414249599 A 20140410