

Title (en)  
Pump

Title (de)  
Pumpe

Title (fr)  
Pompe

Publication  
**EP 2455615 B1 20170816 (DE)**

Application  
**EP 11187213 A 20111031**

Priority  
• DE 102010044167 A 20101119  
• DE 102011079897 A 20110727

Abstract (en)  
[origin: EP2455615A2] The pump (1) has an impeller (3) that is located on a pump shaft (2). An adjustable slider (4) is displaced over the impeller to control delivery rate of fluid pressure from a main portion. A displacement pump (6) is arranged on pump shaft to set steering fluid pressure in main portion. A valve (7) is provided to separate the suction side and pressure side of the displacement pump.

IPC 8 full level  
**F04D 15/00** (2006.01)

CPC (source: EP KR)  
**F01P 5/10** (2013.01 - KR); **F01P 7/14** (2013.01 - KR); **F01P 11/00** (2013.01 - KR); **F04D 5/002** (2013.01 - EP); **F04D 15/0038** (2013.01 - EP); **F05D 2270/64** (2013.01 - EP)

Cited by  
US9080573B2; CN108350886A; EP3290713A1; US2012204818A1; EP2489881A3; US10508650B2; US10982676B2; WO2017076645A1; WO2017076524A1

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)  
**EP 2455615 A2 20120523; EP 2455615 A3 20140409; EP 2455615 B1 20170816**; CN 102477996 A 20120530; CN 102477996 B 20160330; KR 101819750 B1 20180117; KR 20120054537 A 20120530

DOCDB simple family (application)  
**EP 11187213 A 20111031**; CN 201110371741 A 20111121; KR 20110120308 A 20111117