

Title (en)
Hydraulic pump assembly

Title (de)
Hydraulikpumpenanordnung

Title (fr)
Agencement de pompe hydraulique

Publication
EP 2592273 A3 20131218 (DE)

Application
EP 12185270 A 20120920

Priority
DE 102011055194 A 20111110

Abstract (en)
[origin: EP2592273A2] The pump assembly has hydraulic pump (1) with two flow directions, including first and second hydraulic connection portions (3,4). The first inlet (5) and first outlet (6) are connected with first hydraulic connection portion and second inlet (7) and second outlet (8) are connected with second hydraulic connection portion. A non return valve (9-12) is arranged in each inlet and outlet. An independent claim is included for gear box.

IPC 8 full level
F04C 2/14 (2006.01); **F04C 2/18** (2006.01); **F04C 14/04** (2006.01)

CPC (source: EP US)
F04B 9/02 (2013.01 - US); **F04C 2/14** (2013.01 - EP US); **F04C 2/18** (2013.01 - EP US); **F04C 14/04** (2013.01 - EP US)

Citation (search report)

- [XII] DE 102007022216 A1 20081113 - BOSCH GMBH ROBERT [DE]
- [XII] US 1717814 A 19290618 - SCHENCK STRONG WILLIAM EDWARD, et al
- [XII] US 2299824 A 19421027 - ALBERT KALIN
- [XY] US 3192860 A 19650706 - HARDISON LESLIE C
- [YA] WO 2009123489 A2 20091008 - MILOVANOVIC ZIVOSLAV [RS]
- [A] US 1478417 A 19231225 - WOTTRING SYLVANUS L, 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 2592273 A2 20130515; EP 2592273 A3 20131218; DE 102011055194 A1 20130516; DE 102011055194 B4 20180118;
US 2013121854 A1 20130516

DOCDB simple family (application)
EP 12185270 A 20120920; DE 102011055194 A 20111110; US 201213671846 A 20121108