

Title (en)

PUMP UNIT WITH A MAIN PUMP AND A CHARGING PUMP WITH A VARIABLE PUMP CAPACITY

Title (de)

PUMPENEINHEIT MIT EINER HAUPTPUMPE UND EINER IN IHREM FÖRDERVOLUMEN VERSTELLBAREN LADEPUMPE

Title (fr)

UNITÉ DE POMPAGE POURVUE D'UNE POMPE PRINCIPALE ET D'UNE POMPE D'ALIMENTATION À VOLUME DE REFOULEMENT RÉGLABLE

Publication

**EP 2147212 A1 20100127 (DE)**

Application

**EP 08736460 A 20080422**

Priority

- EP 2008054864 W 20080422
- DE 102007022949 A 20070516
- DE 102007032103 A 20070710

Abstract (en)

[origin: WO2008138711A1] The invention relates to a pump unit (1) with a main pump (4) and a charging pump (5) with a variable pump capacity. A lifting ring (23) is provided for varying the capacity of the charging pump (5). A regulating power, which depends on the inlet pressure of the main pump (4), acts on the lifting ring (23).

IPC 8 full level

**F04B 23/10** (2006.01); **F04B 49/12** (2006.01); **F04C 14/02** (2006.01)

CPC (source: EP US)

**F04B 1/07** (2013.01 - EP US); **F04B 23/106** (2013.01 - EP US); **F04B 23/12** (2013.01 - EP US); **F04B 49/12** (2013.01 - EP US); **F04C 14/02** (2013.01 - EP US); **F04B 2205/01** (2013.01 - EP US); **F04B 2205/06** (2013.01 - EP US)

Citation (search report)

See references of WO 2008138711A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**DE 102007032103 A1 20081120**; **DE 102007032103 B4 20220224**; CN 101680437 A 20100324; CN 101680437 B 20120718; EP 2147212 A1 20100127; US 2010119383 A1 20100513; US 8231359 B2 20120731; WO 2008138711 A1 20081120

DOCDB simple family (application)

**DE 102007032103 A 20070710**; CN 200880016036 A 20080422; EP 08736460 A 20080422; EP 2008054864 W 20080422; US 59554708 A 20080422