

Title (en)
INTERNAL GEAR PUMP

Title (de)
INTERNE GETRIEBEPUMPE

Title (fr)
POMPE À ENGRENAGE INTERNE

Publication
EP 3828415 A4 20210721 (EN)

Application
EP 18941686 A 20181126

Priority
JP 2018043438 W 20181126

Abstract (en)
[origin: EP3828415A1] An internal gear pump (1) includes: a pinion gear (3); a ring gear (4); a housing (5) including a crescent (54) and a slide surface (51) on which an outer circumferential surface (41) of the ring gear slides; a high-pressure oil supply (8) having an introduction port (81) open to the slide surface to supply high-pressure hydraulic oil; and a recess (9) in the slide surface so as to increase the distance between the outer circumferential surface of the ring gear and the slide surface. The introduction port is located in the increasing pressure region, whereas the recess is located in the high-pressure region.

IPC 8 full level
F04C 2/10 (2006.01); **F04C 2/08** (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP)
F04C 2/086 (2013.01); **F04C 2/101** (2013.01); **F04C 2/102** (2013.01); **F04C 15/0088** (2013.01); **F04C 2240/56** (2013.01)

Citation (search report)

- [YD] JP S61179385 U 19861108
- [Y] DE 102012215023 A1 20140102 - BOSCH GMBH ROBERT [DE]
- See references of WO 2020110180A1

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 3828415 A1 20210602; **EP 3828415 A4 20210721**; **EP 3828415 B1 20220803**; CN 112639290 A 20210409; CN 112639290 B 20211008; JP 6526371 B1 20190605; JP WO2020110180 A1 20210215; WO 2020110180 A1 20200604

DOCDB simple family (application)
EP 18941686 A 20181126; CN 201880097168 A 20181126; JP 2018043438 W 20181126; JP 2019513468 A 20181126