

Title (en)
SEALING DEVICE WITH COOLING FUNCTION

Title (de)
ABDICHTVORRICHTUNG MIT KÜHLUNG

Title (fr)
DISPOSITIF D'ÉTANCHÉITÉ AYANT UNE FONCTION DE REFROIDISSEMENT

Publication
EP 4025408 A1 20220713 (DE)

Application
EP 20764059 A 20200825

Priority
• DE 102019123608 A 20190904
• EP 2020073718 W 20200825

Abstract (en)
[origin: WO2021043630A1] The invention relates to a sealing device (100) for sealing the intermediate space between a housing (200) and a shaft (310) rotatably mounted in the housing, having a first plate-shaped body (110) with a front face, a rear face, and a first opening (120), which extends from the front face to the rear face and is suitable for feeding through the shaft (310), and having a cooling line (170), which runs in the body (110) and is suitable for conducting a cooling medium. The first body (110) is suitable for being tightly secured to the housing (200) such that the shaft (310) rotatably mounted in the housing (200) is guided through the first opening (120). The first opening (120) is suitable for introducing sealant (140) such that the sealant (140) seals an intermediate space between the shaft (310) and the first body (110). The cooling line (170) is guided around the first opening (120) between a cooling line inlet (172) and a cooling line outlet (174) for the cooling medium such that heat produced from rotating the shaft (310) can be dissipated by the cooling medium in a spatially homogenous manner.

IPC 8 full level
B29C 48/25 (2019.01); **B29C 48/395** (2019.01); **B29C 48/40** (2019.01); **B29C 48/92** (2019.01)

CPC (source: EP US)
B29C 48/2522 (2019.02 - EP); **B29C 48/254** (2019.02 - EP US); **B29C 48/397** (2019.02 - EP); **B29C 48/40** (2019.02 - EP); **B29C 48/402** (2019.02 - US); **B29C 48/85** (2019.02 - US); **B29C 48/92** (2019.02 - EP); **B33Y 80/00** (2014.12 - US); **F16J 15/182** (2013.01 - EP US); **F16J 15/183** (2013.01 - EP); **B29C 48/94** (2019.02 - EP); **B29C 2948/92704** (2019.02 - EP); **B29C 2948/92857** (2019.02 - EP); **B29C 2948/9299** (2019.02 - EP)

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)
DE 102019123608 A1 20210304; CN 114302799 A 20220408; CN 114302799 B 20240105; EP 4025408 A1 20220713; JP 2022547266 A 20221111; US 12042973 B2 20240723; US 2022288831 A1 20220915; WO 2021043630 A1 20210311

DOCDB simple family (application)
DE 102019123608 A 20190904; CN 202080059791 A 20200825; EP 2020073718 W 20200825; EP 20764059 A 20200825; JP 2022511349 A 20200825; US 202017636085 A 20200825