

Title (en)
HIGH-PRESSURE ROTOR NOZZLE

Title (de)
HOCHDRUCK-ROTORDÜSE

Title (fr)
BUSE ROTATIVE À HAUTE PRESSION

Publication
EP 3439789 B1 20210526 (DE)

Application
EP 17716818 A 20170405

Priority

- DE 102016106376 A 20160407
- EP 2017058052 W 20170405

Abstract (en)
[origin: WO2017174622A1] The invention relates to a high-pressure rotor nozzle comprising a main body (1) having a channel (3) for supplying a highly pressurised fluid, a nozzle holder (2) which can be rotationally driven for this purpose via a hydraulically generated torque, and which has at least one nozzle (4, 5) connected to the channel (3) in a manner open for fluid and acting in accordance with an axial recoil, wherein a leakage chamber (11) forming a hydraulic axial bearing during operation is provided between the main body (1) and the nozzle holder (2) that can be axially adjusted in relation to same in a recoil-dependent manner, with said leakage chamber being connected to a first gap seal (6) between the main body (1) and the nozzle holder (2) guiding a leakage fluid, wherein the high-pressure rotor nozzle is designed in such a way that the leakage chamber (11) transitions into at least one throttle gap (12) circumferentially surrounding the nozzle holder (2) in an axial sub-region and varying in the axial extension thereof according to the movement path of the nozzle holder (2), wherein the throttle gap (12) remains the same height over the axial length thereof.

IPC 8 full level
B05B 3/00 (2006.01); **B05B 3/04** (2006.01); **B05B 3/06** (2006.01)

CPC (source: EP US)
B05B 3/002 (2013.01 - EP US); **B05B 3/003** (2013.01 - US); **B05B 3/06** (2013.01 - EP US); **B05B 3/003** (2013.01 - EP); **B05B 3/0427** (2013.01 - 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

DOCDB simple family (publication)
WO 2017174622 A1 20171012; DE 102016106376 A1 20171012; DK 3439789 T3 20210809; EP 3439789 A1 20190213; EP 3439789 B1 20210526; ES 2883625 T3 20211209; PL 3439789 T3 20210927; US 11077453 B2 20210803; US 2020222924 A1 20200716

DOCDB simple family (application)
EP 2017058052 W 20170405; DE 102016106376 A 20160407; DK 17716818 T 20170405; EP 17716818 A 20170405; ES 17716818 T 20170405; PL 17716818 T 20170405; US 201716082082 A 20170405