

Title (en)

AXIAL PISTON MACHINE HAVING A SEAL RING WHICH IS SPHERICAL IN SECTIONS

Title (de)

AXIALE KOLBENMASCHINE MIT EINER ABSCHNITTSWEISE KUGELFÖRMIGEN DICHTRING

Title (fr)

MACHINE À PISTONS AXIAUX DOTÉE D'UNE BAGUE D'ÉTANCHÉITÉ SPHÉRIQUE DANS CERTAINES SECTIONS

Publication

EP 4172491 B1 20240807 (DE)

Application

EP 21734094 A 20210616

Priority

- DE 102020116656 A 20200624
- EP 2021066203 W 20210616

Abstract (en)

[origin: WO2021259723A1] The invention relates to an axial piston machine in which pistons carry out a stroke movement in cylinders and in which the pistons have a seal ring receptacle for a seal ring. In order to improve robustness, wear resistance, friction and stick-slip behavior, according to the invention, the seal ring is spherical, wherein the curvature radius of the seal ring, which is spherical in regions, substantially corresponds to half the diameter of the cylinder inner wall.

IPC 8 full level

F03C 1/28 (2006.01); **F04B 1/124** (2020.01); **F04B 53/14** (2006.01)

CPC (source: EP US)

F03C 1/0605 (2013.01 - EP); **F04B 1/124** (2013.01 - EP US); **F04B 53/143** (2013.01 - EP US)

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)

DE 102020116656 A1 20211230; CN 115768977 A 20230307; EP 4172491 A1 20230503; EP 4172491 B1 20240807;
US 2023228264 A1 20230720; WO 2021259723 A1 20211230

DOCDB simple family (application)

DE 102020116656 A 20200624; CN 202180044855 A 20210616; EP 2021066203 W 20210616; EP 21734094 A 20210616;
US 202118010405 A 20210616