

Title (en)
AXIAL PISTON HYDRAULIC ROTATING MACHINE

Title (de)
HYDRAULISCHE AXIALKOLBENDREHMASCHINE

Title (fr)
MACHINE ROTATIVE HYDRAULIQUE À PISTONS AXIAUX

Publication
EP 2495441 A1 20120905 (EN)

Application
EP 10826644 A 20101022

Priority
• JP 2009246508 A 20091027
• JP 2010068736 W 20101022

Abstract (en)
PROBLEM TO BE SOLVED: To provide an axial piston hydraulic rotating machine having high stability of a piston shoe. SOLUTION: A circular internal static pressure pocket 23 communicated with a filler opening 9A, an inner peripheral land portion 22 formed on the outer periphery of the internal static pressure pocket 23, an external static pressure pocket 24 formed on the outer periphery of the inner peripheral land portion 22, and an outer peripheral land portion 25 formed on the outer periphery of the external static pressure pocket 24 are formed on the sliding surface in contact a piston shoe 9 with the swash palate 10. The inner peripheral land portion 22 is annularly formed around the filler opening 9A. Oil passing grooves 27 through which the internal static pressure pocket 23 communicates with the external static pressure pocket 24 are formed in parts of the inner peripheral land portion 22 on straight lines, passing through the center of the filler opening 9A. The oil passing grooves 27 are inclined with respect to the straight line A-B passing through the center of the filler opening 9A. An inner wall surface and an outer wall surface of the inner peripheral land portion 22 are disposed on the straight lines that connect the center of the filler opening 9A to the center of the oil passing groove 27.

IPC 8 full level
F03C 1/253 (2006.01); **F04B 1/22** (2006.01)

CPC (source: EP KR US)
F03C 1/0605 (2013.01 - KR); **F03C 1/0607** (2013.01 - KR); **F03C 1/0668** (2013.01 - KR); **F04B 1/124** (2013.01 - KR); **F04B 1/126** (2013.01 - EP US); **F04B 1/128** (2013.01 - KR); **F04B 1/2078** (2013.01 - KR); **F04B 1/22** (2013.01 - EP US); **F05B 2210/11** (2013.01 - KR)

Citation (search report)
See references of WO 2011052512A1

Cited by
CN113586382A; US10352322B2; US10288051B2; US10711780B2; EP3109468A1

Designated contracting state (EPC)
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