

Title (en)

Assembly of piston shoes in radial-piston machines.

Title (de)

Kolbenschuhanordnung in einer Radialkolbenmaschine.

Title (fr)

Disposition de patin glissant pour machine à pistons radiaux.

Publication

EP 0064563 A1 19821117 (DE)

Application

EP 81103470 A 19810507

Priority

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Abstract (en)

1. Piston and piston shoe arrangement in a radial piston machine comprising one piece "H-shaped" piston shoes (10) ; radial webs (124) with extended part-cylindrical surfaces for guiding the piston (3) at the rotor (24) ; a pivotal mounting about a pivot axis (22) disposed parallel to the rotor axis (C) by means of a pivot surface (23) of the piston shoe pivot part (20), with the pivot surface having a constant radius about a common centre with the bearing seat (4) in the piston, and with the pivotal mounting being formed at a bearing surface (6) which matches the pivot surface (23) and which is provided at the bearing seat (4) in the piston (3) ; and slots (93, 94) in the piston shoe which extend from the peripheral ends up to the central web of the piston shoe above the pivot part (20) of the piston shoe and which are disposed between the lateral guide parts (14) of the piston shoe (10) which form the limbs of the "H-shaped" piston, characterised in that arms (1, 2) are provided which contact the pivot surface (23) of the pivot part (20) of the piston shoe (10) in places with the bearing surface (6) at its ends, which extend outwardly radial to the rotor axis and which slide, at least in places on the radial webs (124) of the rotor (24) ; and in that the piston arms (1, 2) extend radially outwardly from the part of the piston (3) which forms the bearing seat (4) past the pivotal mounting (20, 23) of the piston shoe (10) and project into the slots (93, 94) of the piston shoe (10).

Abstract (de)

Eine Radialkolbenmaschine besitzt in einem Rotor (24) radial geführte Kolben (73), an deren radial äußeren Enden H-förmige Kolbenschuhe (10) angeordnet sind, die auf einer inneren Führungsfläche (27) eines exzentrisch zur Rotorachse angeordneten Kolbenhubringes (35) gleiten. Um auch bei keinem Rotordurchmesser und großen Kolbenhüben eine einwandfreie Kolbenführung zu erreichen, besitzen die Kolben (73) Kolbenarme (1, 2), die in Fortsetzung eines den Kolbenschuhzentralsteg (21) schwenkfähig aufnehmenden Schwenkbettes (Lagerfläche 6) am Kolben (73) angeordnet sind und denselben verlängern.

IPC 1-7

F03C 1/04

IPC 8 full level

F03C 1/04 (2006.01)

CPC (source: EP)

F03C 1/0428 (2013.01)

Citation (search report)

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