

Title (en)
SEAL FOR A PISTON-CYLINDER UNIT

Title (de)
DICHTUNGSANORDNUNG AN EINER KOLBEN-ZYLINDER-EINHEIT

Title (fr)
DISPOSITIF D'ETANCHEITE POUR UNITE PISTON-CYLINDRE

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Application
EP 95935791 A 19951109

Priority
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• CH 339294 A 19941114

Abstract (en)
[origin: WO9615368A1] The device comprises a cylinder (3) and a piston (7) which is contactlessly guided in relation to the cylinder (3). Between the jacket surfaces (15, 14) of the cylinder (3) and the piston (7) there is a gap seal (12) with a very thin uniform annular cross-section. The surface areas (14, 15) of the cylinder liner (4) and the piston (7) are substantially smooth and consist of a material with a lower coefficient of linear expansion than steel. The sealing gap and central guidance of the piston (7) in the cylinder liner (4) is ensured by two guides (8, 9) rigidly secured to the housing (5). Said guides (8, 9) are elastic along the central axis (2) of the piston-cylinder unit and very rigid in transversely to the central axis (2). The arrangement of a gap seal between the piston (7) and the cylinder (3) formed with the aid of these guides (8, 9) is contactless with the minimum gap and there is no frictional wear on the sealing materials, the movements of the piston (7) being guided completely centrally in relation to the cylinder (3).

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