

Title (en)
Hydraulic cylinder

Title (de)
Hydraulikzylinder

Title (fr)
Vérin hydraulique

Publication
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Application
EP 01305519 A 20010626

Priority
EP 01305519 A 20010626

Abstract (en)
A hydraulic cylinder comprises a cylinder body (1), a piston (2) slidably received in the cylinder body (1) to partition a rod side chamber (A) from a counter rod side chamber (R), a rod body (3) having an end connected to the piston (2), and a head member (4) at an end of the rod side chamber (A) opposite to the piston (2), the head member (4) having a bearing (5) in sliding contact with the outer circumference of the rod body (3) and a dust seal (6). The hydraulic cylinder extends when pressurized liquid (P) is supplied to the counter rod side chamber (R) and contracts when the pressurized liquid (P) is released from the counter rod side chamber (R). The head member (4) includes lubrication means (7) in sliding contact with the outer circumference of the rod body (3) between the bearing (5) and the dust seal (6), and an oil seal (8) in sliding contact with the outer circumference of the rod body (3) between the lubrication means (7) and the dust seal (6). The lubrication means (7) lubricates the inner surface of the bearing (5) and the outer surface of the rod body (3) to provide a smooth sliding operation with low friction and without rusting or scratching of the outer surface of the rod body (3) which might abrade the bearing (5) or damage the dust seal (6). The oil seal (8) retains the lubricant within the cylinder body (1) to prevent excessive cumulative loss of lubricant as the hydraulic cylinder repeatedly expands and contracts. <IMAGE>

IPC 1-7
F15B 15/14

IPC 8 full level
F15B 15/14 (2006.01)

CPC (source: EP)
F15B 15/1433 (2013.01)

Citation (search report)
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• [AY] US 5517898 A 19960521 - KIM HYOUNG-EUI [KR], et al
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• [AY] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 11 28 November 1997 (1997-11-28)

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