

Title (en)
HYDRAULIC JACK WITH LIMITED TRAVEL

Publication
EP 0182927 B1 19880921 (FR)

Application
EP 84114236 A 19841126

Priority
EP 84114236 A 19841126

Abstract (en)
[origin: EP0182927A1] 1. Hydraulic jack having a hand pump (14, 15) which sucks oil into a reserve (13) which is not under pressure to deliver it to a cylinder (2) in the bore (26) of which there slides a piston (4) provided with a rod (6) which passes through an upper bearing (8) in order to lift a load, moreover having a hydraulic travel limitation means ensuring that the pressure in the cylinder (2) is released when the piston (4) reaches the upper end of its travel, the said travel limiter is constructed by selection the size of the piston (4) such that it can abut against the upper bearing (8) and by mounting it in non-sealed manner and with an axial play at the narrowed lower end (17) of the rod (6), the upper end of the piston (4) bearing against a shoulder (22) provided below the rod (6) around its narrowed end (17), communication passages (29, 23, 24) being provided to allow the flow towards the reverse (13) of the oil which escapes between the said shoulder (22) and the said upper end of the piston at the upper end of travel of the jack, characterized in that a) a sheet gasket (21) is arranged in a groove made in one of the two opposing surfaces of the piston (4) and the shoulder (22), and in that the said sheet gasket (21) is a gasket of sufficient strength to support an elevated pressure, b) the said groove has a depth barely less than the thickness of the sheet gasket (21) in the compressed state, and c) radial notches (29) are made between this groove and the periphery of the corresponding element (6 or 4) to ensure passage of the oil between the piston (4) and the end bearing (8) when the said periphery abuts against the upper bearing (8).

IPC 1-7
B66F 3/32; **F15B 15/24**

IPC 8 full level
B66F 3/32 (2006.01); **F15B 15/24** (2006.01)

CPC (source: EP)
B66F 3/32 (2013.01); **F15B 15/24** (2013.01)

Designated contracting state (EPC)
DE GB IT SE

DOCDB simple family (publication)
EP 0182927 A1 19860604; **EP 0182927 B1 19880921**; DE 3474134 D1 19881027

DOCDB simple family (application)
EP 84114236 A 19841126; DE 3474134 T 19841126