Title (en)

WORKING CYLINDER HAVING THREE POSITIONS

Publication

EP 0141106 B1 19870401 (DE)

Application

EP 84109969 A 19840822

Priority

DE 3336682 A 19831008

Abstract (en)

[origin: EP0141106A2] 1. Three-position working cylinder having the following features : a) there is provided a first piston (15, 18) which is provided with an operating member (3) and is guided in sealed manner in a cylinder (14) ; b) there is provided a second piston (7), constructed in the form of an annular piston, which is guided in sealed manner with respect to the inner wall of the cylinder and with respect to an outer surface of the first piston (15, 18) ; c) there is provided a stop (19) which is fixed with respect to the housing and limits the travel of the second piston (7) ; d) in order to limit the relative movement between the first piston (15, 18) and the second piston (7), each of those pistons has for each direction of movement stop (11, 12) that cooperates with a corresponding further stop (8, 9, 10) on the other piston, characterized by the following features : e) one of the stops is formed by a seal (22) arranged between the two pistons (15, 18; 7); f) the associated further stop (8, 9, 10) that cooperates with the seal (22) in order to limit the relative movement of the two pistons (15, 18; 7) is constructed in such a manner that it can be guided over the seal (22) in the manner of a snap connection when two pistons (15, 18; 7) are joined together.

IPC 1-7

F15B 15/14; F15B 11/12; F16J 9/00

IPC 8 full level

F15B 11/12 (2006.01); F15B 15/14 (2006.01); F16J 9/00 (2006.01)

CPC (source: EP) F15B 11/123 (2013.01)

Cited by

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EP 0141106 A2 19850515; EP 0141106 A3 19851106; EP 0141106 B1 19870401; AT E26328 T1 19870415; DE 3336682 A1 19850425; DE 3462938 D1 19870507; YU 161484 A 19900630; YU 44879 B 19910430

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