

Title (en)

Fluid pressure cylinder, switch valve and pressure actuated work unit

Title (de)

Druckmittelzylinder, Weichenventil und druckmittelbetätigte Arbeitseinheit

Title (fr)

Cylindre à pression fluïdique, soupape de commutation et unité de travail entraînée par pression

Publication

**EP 0984170 B1 20040218 (DE)**

Application

**EP 99890249 A 19990723**

Priority

AT 134498 A 19980804

Abstract (en)

[origin: EP0984170A2] Pneumatic cylinder assembly has a direction change valve (V) and a system of bleed valves (24a, 24b) (27a, 27b) to pass pressure to the working zones of the cylinder (A) in a smaller valve structure. The pneumatic cylinder assembly, to convert pneumatic pressure into mechanical energy, has a let-off opening fitted with a valve (13a,13b) controlled by the pressure of the working medium at the feed opening. A direction change valve (V), and especially in a rocker valve structure, has at least one entry and one outlet for the working medium and a let-off channel between the valve unit and at least one outlet. The channel has an outlet and bleed control valve which is controlled electrically or by the pressure. The unit, which is operated by the pneumatic system, has a pneumatic working cylinder (A) with bleed valves (27a,27b), a direction change valve (V) and bleed control valves (24a,24b), and a pressure line (29a,29b) to each working zone of the cylinder (A).

IPC 1-7

**F15B 15/14**; **F15B 13/042**; **F15B 11/08**

IPC 8 full level

**F15B 11/08** (2006.01); **F15B 13/04** (2006.01); **F15B 15/14** (2006.01)

CPC (source: EP US)

**F15B 11/08** (2013.01 - EP US); **F15B 13/0405** (2013.01 - EP US); **F15B 15/1433** (2013.01 - EP US); **F15B 15/149** (2013.01 - EP US); **F15B 2211/3052** (2013.01 - EP US); **F15B 2211/30565** (2013.01 - EP US); **F15B 2211/329** (2013.01 - EP US); **F15B 2211/7053** (2013.01 - EP US); **F15B 2211/8855** (2013.01 - EP US); **Y10T 137/86847** (2015.04 - EP US); **Y10T 137/87201** (2015.04 - EP US)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**EP 0984170 A2 20000308**; **EP 0984170 A3 20010808**; **EP 0984170 B1 20040218**; AT 407661 B 20010525; AT A134498 A 20000915; AT E259939 T1 20040315; DE 59908562 D1 20040325; ES 2216481 T3 20041016; JP 2000065012 A 20000303; US 2001018860 A1 20010906; US 6276257 B1 20010821; US 6679162 B2 20040120

DOCDB simple family (application)

**EP 99890249 A 19990723**; AT 134498 A 19980804; AT 99890249 T 19990723; DE 59908562 T 19990723; ES 99890249 T 19990723; JP 22160599 A 19990804; US 36672599 A 19990804; US 85950601 A 20010518