

Title (en)
DOUBLE ACTION PISTON-CYLINDER UNITY

Publication
EP 0151650 A3 19851030 (DE)

Application
EP 83111456 A 19831116

Priority
DE 3330670 A 19830825

Abstract (en)
[origin: US4633665A] A double action piston/cylinder unit has a piston guided in a cylinder and attached to a piston rod, the piston to be charged with a pressure agent, particularly hydraulic fluid at a first end face, the hydraulic fluid to be conducted in a controlled manner into the cylinder via a first fitting disposed at an end section of the cylinder and is to be charged at its other, second end face with a pressure agent which is located in an annular chamber formed by a central section of the piston rod and the inner wall of the cylinder, the second end face of the piston and a cylinder end piece, the annular chamber is in communication with a pressure agent reservoir which is connected to the annular chamber via a second fitting disposed at the other end section of the cylinder. A connecting line by way of which a pressure compensation can occur when the piston is charged at its first end face is provided between the first fitting and the second fitting, the connection being interrupted when the piston is not charged by the pressure agent under pressure at its first end face.

IPC 1-7
F15B 15/20; F16J 1/00; F03C 1/00

IPC 8 full level
F03C 1/00 (2006.01); **F15B 1/02** (2006.01); **F15B 15/14** (2006.01); **F15B 15/20** (2006.01); **F16J 1/00** (2006.01)

CPC (source: EP US)
F15B 1/02 (2013.01 - EP US); **F15B 15/1447** (2013.01 - EP US); **F15B 15/1476** (2013.01 - EP US); **F15B 15/149** (2013.01 - EP US)

Citation (search report)
• [X] DE 6801286 U 19690807 - WALDENMAIER J E H [DE]
• [Y] GB 1142172 A 19690205 - PAUL SNOWDEN
• [Y] US 3192717 A 19650706 - NORMAN LEE
• [A] DE 3233739 A1 19830421 - HOERBIGER VENTILWERKE AG [AT]
• [A] US 2194209 A 19400319 - MOTT CARL W

Cited by
DE102008025480B3; EP0478841A1; US10066645B2; WO2014079528A1; EP1619430A1

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
US 4633665 A 19870106; AT E37932 T1 19881015; DE 3330670 A1 19850314; DE 3378224 D1 19881117; EP 0151650 A2 19850821; EP 0151650 A3 19851030; EP 0151650 B1 19881012

DOCDB simple family (application)
US 68484684 A 19841221; AT 83111456 T 19831116; DE 3330670 A 19830825; DE 3378224 T 19831116; EP 83111456 A 19831116