

Title (en)
Snap-in locking device

Title (de)
Rastschaltvorrichtung

Title (fr)
Dispositif à crans

Publication
EP 0735275 A3 19980422 (DE)

Application
EP 96100338 A 19960111

Priority
DE 19511522 A 19950329

Abstract (en)
[origin: US5699714A] A switching device controlling at least one hydraulically operating apparatus has two check valves working in opposition to one another in a feed conduit and a discharge conduit, respectively. The conduits are connected to the operating apparatus, as well as to a pilot valve. Two openable nonreturn valves are connected parallel to the two check valves. The control line of one openable nonreturn valve is connected to the blocking connection of the other openable nonreturn valve. The switching device is especially for controlling a hydraulic cylinder to provide a float setting at low cost, with reliable operation, and with few components.

IPC 1-7
F15B 13/02

IPC 8 full level
F15B 9/02 (2006.01); **F15B 11/02** (2006.01); **F15B 13/01** (2006.01); **F15B 13/02** (2006.01)

CPC (source: EP US)
F15B 13/01 (2013.01 - EP US)

Citation (search report)

- [A] US 4169490 A 19791002 - TAPLIN JOHN F [US]
- [A] US 3463187 A 19690826 - RUE ROBERT W
- [DA] DE 3524759 A1 19870122 - BOSCH GMBH ROBERT [DE]
- [A] PATENT ABSTRACTS OF JAPAN vol. 005, no. 135 (M - 085) 27 August 1981 (1981-08-27)

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

DOCDB simple family (publication)
US 5699714 A 19971223; AT E224510 T1 20021015; DE 19511522 C1 19960718; DE 59609666 D1 20021024; EP 0735275 A2 19961002; EP 0735275 A3 19980422; EP 0735275 B1 20020918; JP H08320001 A 19961203

DOCDB simple family (application)
US 61489596 A 19960313; AT 96100338 T 19960111; DE 19511522 A 19950329; DE 59609666 T 19960111; EP 96100338 A 19960111; JP 7426496 A 19960328