

Title (en)
SAFETY VALVE

Publication
EP 0342410 A3 19901017 (DE)

Application
EP 89107713 A 19890427

Priority
DE 3817120 A 19880519

Abstract (en)
[origin: EP0342410A2] The invention relates to a hydraulically operated safety valve which is fitted with two electromagnetically operable servo valves. The safety valve has two coaxial valve bodies, which can be operated in opposite directions to one another. One of the two servo valves is designed as a proportional pressure difference valve and one of the two valve bodies is provided with fine control grooves. In consequence, it is possible, in the case of suitable driving of the proportional pressure difference valve, to release, via the fine control grooves, a corresponding cross-section of the pump connection to the working connection and from the working connection to the tank connection, as a result of which the speed and the pressure rise on a load, e.g. on a cylinder or a motor, which is connected to the working connection can be controlled. <IMAGE>

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F16K 31/40

IPC 8 full level
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CPC (source: EP US)
F15B 20/001 (2013.01 - EP US); **Y10T 137/87209** (2015.04 - EP US); **Y10T 137/87225** (2015.04 - EP US)

Citation (search report)
• [A] DE 3205860 A1 19830825 - REXROTH MANNESMANN GMBH [DE]
• [A] DE 2717384 A1 19781026 - REXROTH GMBH G L
• [A] US 3269416 A 19660830 - ADAMS CECIL E
• [AD] DE 3104957 C2 19861204

Cited by
CN103775411A; CN105201947A

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EP 0342410 A2 19891123; EP 0342410 A3 19901017; DE 3817120 A1 19891130; JP H0251682 A 19900221; US 4903727 A 19900227

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