

Title (en)
SPRING ENERGY ACCUMULATOR DRIVE FOR A HIGH VOLTAGE SWITCH

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EP 0460390 A3 19920722 (DE)

Application
EP 91106649 A 19910425

Priority
CH 192990 A 19900608

Abstract (en)
[origin: EP0460390A2] The spring energy accumulator drive (210) for the high-voltage switch (218) has a spiral spring (216) which can be tensioned by means of the tensioning device (212). The high-voltage switch (218) can be switched on once and off once using the energy stored in the tensioned spiral spring (216). The energy stored in the fluid-pressure accumulator (258) is sufficiently large to charge the spiral spring (216) at least once. The operating stroke movement of the piston rod (242) in the direction of the arrow (A) is converted via the toothed wheel segment (236) into a rotation of the toothed wheel (232), which engages therewith, through 360 DEG . In this way, the spiral spring (216) is tensioned via the tensioning lever (230). When the three-way valve (256) changes over, the cylinder-piston unit (214) is connected in terms of flow to the low-pressure reservoir (266), as a result of which the toothed wheel segment (236) is pivoted back under the force of the restoring spring (250), and the cylinder-piston unit (214) is moved back into the quiescent position. Relief of the tension on the spiral spring (216) is prevented by the return lock (232), and the coupling between the tensioning lever (230) and the toothed wheel (232) is neutralised by a free wheel. The cylinder-piston unit (214) can be driven using thin hydraulic oil, which allows reliable operation over a wide temperature range. <IMAGE>

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H01H 3/30

IPC 8 full level
H01H 3/24 (2006.01); **H01H 3/30** (2006.01); **H01H 33/30** (2006.01)

CPC (source: EP)
H01H 3/301 (2013.01)

Citation (search report)
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• [X] FR 1108630 A 19560116 - ELETTROMECCANICHE GALILEO DI B
• [X] GB 889248 A 19620214 - ASEA AB

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CN111108573A; CN107731624A; CN105931864A; CN112727815A; US11342136B2

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