

Title (en)

Switching device with symmetrical percussion making use of a snap action overcentre device.

Title (de)

Schaltvorrichtung mit symmetrischer Perkussion unter Verwendung eines Sprungwerkes mit Überschreitung eines Totpunktes.

Title (fr)

Dispositif de commutation à percussion symétrique, utilisant un dispositif à dépassement de point mort.

Publication

EP 0256901 A1 19880224 (FR)

Application

EP 87401599 A 19870708

Priority

FR 8611737 A 19860814

Abstract (en)

[origin: US4841106A] A symmetric percussion switching device is provided using a bistable dead point over-run device including an actuator movable between at least two positions and a control member whose movement causes rocking of the actuator from one to other of the two positions, after passing through the dead point, said device further comprising two switches whose actuating members cooperate with the actuator, respectively in the fractions of the stroke thereof adjacent said positions, said switches then being actuated by percussion so that the drawbacks of the conventional switching devices of this kind are avoided in which the pressure of the mobile contact on the fixed contact is substantially zero in the vicinity of the dead point changeover.

Abstract (fr)

Le dispositif selon l'invention utilise un dispositif bistable à dépassement de point mort comprenant un actionneur (11) mobile entre au moins deux positions et un organe de commande (12, 13, 14) dont le déplacement provoque un basculement de l'actionneur (11) de l'une à l'autre des deux positions, après franchissement du point mort. Il comprend en outre deux interrupteurs (15, 19, 21 - 16, 20, 22) dont les organes d'actionnement (23, 24) coopèrent avec l'actionneur (11), respectivement dans les fractions de la course de celui-ci, attenante auxdites positions. Les interrupteurs sont alors actionnés par percussion de sorte que l'on évite les inconvénients des dispositifs de commutation classiques de ce genre dans lesquels la pression du contact mobile sur le contact fixe est quasiment nulle au voisinage du passage de point mort.

IPC 1-7

H01H 5/06; H01H 83/22

IPC 8 full level

G05G 5/00 (2006.01); G05G 5/05 (2006.01); H01H 9/00 (2006.01); H01H 5/06 (2006.01); H01H 83/22 (2006.01); H01H 5/12 (2006.01)

CPC (source: EP KR US)

**H01H 5/06 (2013.01 - EP US); H01H 9/00 (2013.01 - KR); H01H 83/223 (2013.01 - EP US); H01H 5/12 (2013.01 - EP US);
H01H 2071/109 (2013.01 - EP US)**

Citation (search report)

- [Y] EP 0053194 A1 19820609 - SQUARE D STARKSTROM GMBH [DE]
- [Y] FR 2536906 A1 19840601 - TELEMECANIQUE ELECTRIQUE [FR]
- [A] DE 1907420 A1 19710121 - DANFOSS AS
- [A] DE 2043740 A1 19720302 - SIEMENS AG

Cited by

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Designated contracting state (EPC)

AT DE NL SE

DOCDB simple family (publication)

**EP 0256901 A1 19880224; EP 0256901 B1 19920129; AT E72357 T1 19920215; AU 595348 B2 19900329; AU 7596387 A 19880218;
BE 1004511 A4 19921208; BR 8703920 A 19880405; CA 1274563 A 19900925; CH 673173 A5 19900215; DE 3776459 D1 19920312;
DK 169244 B1 19940919; DK 426287 A 19880215; DK 426287 D0 19870814; ES 2008175 A6 19890716; FI 873515 A0 19870813;
FI 873515 A 19880215; FI 88085 B 19921215; FI 88085 C 19930325; FR 2602908 A1 19880219; FR 2602908 B1 19930924;
GB 2193842 A 19880217; GB 2193842 B 19900214; GB 8716807 D0 19870819; IN 172195 B 19930501; IT 1222112 B 19900831;
IT 8721419 A0 19870723; JP H07101574 B2 19951101; JP S6348713 A 19880301; KR 880003358 A 19880516; KR 900005868 B1 19900813;
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FI 873515 A 19870813; FR 8611737 A 19860814; GB 8716807 A 19870716; IN 587DE1987 A 19870713; IT 2141987 A 19870723;
JP 20298887 A 19870814; KR 870008902 A 19870813; MY P119871030 A 19870716; US 8473087 A 19870813; ZA 875460 A 19870724**