

Title (en)
SAFETY SWITCH

Title (de)
SICHERHEITSSCHALTER

Title (fr)
INTERRUPTEUR DE SECURITE

Publication
EP 0801801 B1 19980603 (DE)

Application
EP 94922260 A 19940705

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• DE 4328297 A 19930823
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Abstract (en)
[origin: US5760353A] PCT No. PCT/EP94/02202 Sec. 371 Date Jun. 26, 1996 Sec. 102(e) Date Jun. 26, 1996 PCT Filed Jul. 5, 1994 PCT Pub. No. WO95/06323 PCT Pub. Date Mar. 2, 1995A compact safety switch comprises a housing having an axially sliding ram mounted therein. The lower end of the ram is in contact with an actuating rod of a switch, which is aligned with the ram. The upper end of the ram lies against a cam formed in the outer surface of an indexing wheel. A pre-tensioned helical spring surrounds the lower end of the ram for holding the ram in place. The indexing wheel is provided on one end of the cam with a radial notch for locking a key inserted into the keyway and at an opposite end of the cam with a resting notch. The safety switch further includes an interlocking mechanism having a stator located concentric to the ram and an armature integral with the ram. With the key inserted in the keyway, the armature is pushed out of the stator and the upper end of the ram is held in engagement with the resting notch. The key cannot be removed from the keyway at this time and is not released upon shutting of the machine, as the corresponding rotation of the indexing wheel is prevented by the ram. Only when the machine comes to a standstill is the stator energized and the ram lifted from the resting notch. The upper end of the ram proceeds to travel along the cam on its high side, causing the lower end of the cam to be pushed against the switch, thereby forcing the switching circuit in the control circuit of the machine open.

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IPC 8 full level
H01H 9/28 (2006.01); **H01H 27/00** (2006.01)

CPC (source: EP US)
H01H 27/007 (2013.01 - EP US)

Cited by
DE102010035765A1; DE102011119413A1; DE102009059050A1; WO2013075812A1; DE102010035765B4; EP1533826A1; FR2862810A1; DE102009059050B4; US6982391B2; US9477211B2; DE202012013631U1

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