

Title (en)
Tumbler switch

Title (de)
Bahn-Kippschalter

Title (fr)
Commutateur à bascule

Publication
EP 2187415 B1 20190227 (DE)

Application
EP 09009753 A 20090728

Priority
DE 102008057148 A 20081113

Abstract (en)
[origin: EP2187415A2] A railroad toggle switch (1) for a set of switching positions, comprises a housing (2), an operating lever (3) supported on the housing (2) and having a pivot axis (4), a switching cylinder (5) supported on the housing (2) and having a rotational axis (6), a set of microswitches (7) and an engaging mechanism (8) for engagement of the operating lever (3) in the switching positions, the housing (2) comprising a housing top side (27) and the switching cylinder (5) including a set of cam disks (9) for operating the microswitches (7). A railroad toggle switch (1) for a set of switching positions, comprises a housing (2), an operating lever (3) supported on the housing (2) and having a pivot axis (4), a switching cylinder (5) supported on the housing (2) and having a rotational axis (6), a set of microswitches (7) and an engaging mechanism (8) for engagement of the operating lever (3) in the switching positions, the housing (2) comprising a housing top side (27) and the switching cylinder (5) including a set of cam disks (9) for operating the microswitches (7), characterized in that the pivot axis (4) of the operating lever (3) is located in the area of the housing top side (27) and differs from the rotational axis (6) of the switching cylinder (5), and furthermore the operating lever (3) is in engagement with the switching cylinder (5).

IPC 8 full level
H01H 23/16 (2006.01); **B60L 15/00** (2006.01); **H01H 3/40** (2006.01); **H01H 23/06** (2006.01); **H01H 23/14** (2006.01)

CPC (source: EP US)
H01H 23/168 (2013.01 - EP US); **H01H 3/40** (2013.01 - EP US); **H01H 11/0006** (2013.01 - EP US); **H01H 23/06** (2013.01 - EP US); **H01H 23/146** (2013.01 - EP US); **H01H 2011/0043** (2013.01 - EP US)

Citation (examination)
DE 3047680 C2 19830203

Cited by
CN107464718A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
EP 2187415 A2 20100519; **EP 2187415 A3 20130807**; **EP 2187415 B1 20190227**; DE 102008057148 A1 20100527;
DE 102008057148 B4 20110105; ES 2718778 T3 20190704; HU E042232 T2 20190628; PL 2187415 T3 20190830; RU 2009136385 A 20110327;
RU 2501111 C2 20131210; US 2010116636 A1 20100513; US 8178809 B2 20120515

DOCDB simple family (application)
EP 09009753 A 20090728; DE 102008057148 A 20081113; ES 09009753 T 20090728; HU E09009753 A 20090728; PL 09009753 T 20090728;
RU 2009136385 A 20090923; US 61602209 A 20091110