

Title (en)

Electrical switch/button mechanism or change-over switch with quick connection

Title (de)

Elektrischer Schalter-/Tastenmechanismus oder Umschalter mit Schnellverbindung

Title (fr)

Mécanisme de bouton/commutateur électrique ou commutateur à bascule doté d'une connexion rapide

Publication

EP 2109127 A3 20120815 (EN)

Application

EP 09380057 A 20090323

Priority

ES 200800712 U 20080408

Abstract (en)

[origin: EP2109127A2] It is made up of four quick connection keys -2-, two by two, on sides of the base -1- in a V shape, lateral cylindrical pins -17- being situated on semicylindrical seats -18- that the base -1- has in the sides of respective location housings -3- of each key -2-, swinging there from the horizontal position prior to placement until the initial vertical position of the electrical wire -19-connection, said key -2- being in this vertical position, until the bottom of the cylindrical hollow -20-, situated on its external face -21-. This key -2- is forkshaped at its internal face -2-, forming an upper aperture -23-, wherein is situated the front face of the corresponding knife contact -4- and -4a-, whose face is equipped with an aperture -4b-, which upon initiating the displacement of the key -2- towards inside the base, penetrates inside the aperture -23-cutting through both sides of the insulation of the wire -19- of the aperture -4b-, making contact with its core, and trapping it. In its initial stable position, the key -2- has two buffers, next to its edge, wherefrom a stub -24- is located inside a slot -25- of the base -1- and one stub -26- outside of the edge thereof. It also has another stub -27-, rested on a spring -28- of the base -1-, situated below the lower face of its lateral walls and is positioned, finally, behind said spring -28- by clipping. The base -1- has four teeth -13-, two by two, to situate the contacts -4- and -4a-, fitted into internal slots -14- of the cover -12-, base and cover remaining held shut and the mechanism closed. According to the switch and push button, it only needs requires three knife contacts, a moving contact -8-, which in its "non contact" position rests on a buffer -29- of the base -1-, comes into contact with the third -4a-. It has a light emitting device -30-, above the swinging element -11- equipped with contacts -31- which penetrate through apertures -16a- in the cover -12-.

IPC 8 full level

H01R 4/48 (2006.01); **H01H 1/58** (2006.01); **H01H 23/12** (2006.01); **H01H 23/30** (2006.01); **H01R 4/24** (2006.01); **H01R 13/717** (2006.01)

CPC (source: EP)

H01H 1/585 (2013.01); **H01H 23/12** (2013.01); **H01H 11/0006** (2013.01); **H01H 23/025** (2013.01)

Citation (search report)

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- [Y] FR 2899023 A1 20070928 - SIMON SA SOC DE DROIT ESPAGNOL [ES]
- [Y] WO 2007025745 A1 20070308 - PHOENIX CONTACT GMBH & CO [DE], et al
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EP3246991A1

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 TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

EP 2109127 A2 20091014; **EP 2109127 A3 20120815**; **EP 2109127 B1 20161130**; CN 101556875 A 20091014; CN 101556875 B 20140402; ES 1067727 U 20080616; ES 1067727 Y 20080916; ES 2614452 T3 20170531; MA 30855 B1 20091102; PL 2109127 T3 20170630; PT 2109127 T 20170214; RU 2009112276 A 20101010; RU 2516225 C2 20140520

DOCDB simple family (application)

EP 09380057 A 20090323; CN 200910133166 A 20090407; ES 09380057 T 20090323; ES 200800712 U 20080408; MA 31749 A 20090401; PL 09380057 T 20090323; PT 09380057 T 20090323; RU 2009112276 A 20090403