

Title (en)
Arcing chamber for safety switch

Title (de)
Lichtbogenkammer für einen Schutzschalter

Title (fr)
Chambre de coupure pour interrupteur de sécurité

Publication
EP 2416334 A1 20120208 (EN)

Application
EP 11187304 A 20051026

Priority

- EP 05851053 A 20051026
- NL 1027342 A 20041026

Abstract (en)

Arcing chamber for use in a safety switch (50), having a cavity (15) in a housing (31) where an arc can be produced when contacts (7, 35) of the safety switch are broken, a blow-out opening (44) that is in communication with the cavity (15) for discharging the increase in gas and/or pressure caused by the arc, and an extinguishing element (33) for splitting the arc into sub-arcs, wherein the extinguishing element (33) is positioned between the contacts (7, 35) and the blow-out opening (44) in the cavity (15). The arcing chamber is made up of an extinguishing element (33) installed in the cavity (15) and constructed as an independent unit, side walls of the housing (31) and a closure plate (34) which can be fixed to the extinguishing element (33). The closure plate (34) is provided with a predefined pattern of openings (67), and the extinguishing element (33) and the closure plate (34) are integrated in the housing (31) such that they can be removed.

IPC 8 full level
H01H 9/34 (2006.01)

CPC (source: EP)
H01H 9/342 (2013.01); **H01H 71/002** (2013.01); **H01H 2009/343** (2013.01)

Citation (applicant)
DE 10038642 A1 20020207 - SIEMENS AG [DE]

Citation (search report)

- [XY] US 6222147 B1 20010424 - DOUGHTY DENNIS JOHN [US], et al
- [Y] GB 803189 A 19581022 - REYROLLE A & CO LTD
- [Y] US 5756951 A 19980526 - MANTHE KARL-HEINZ [DE], et al
- [A] GB 2295275 A 19960522 - MATSUSHITA ELECTRIC WORKS LTD [JP]
- [A] GB 2268831 A 19940119 - SQUARE D CO [US]

Cited by
CN107293458A; WO2017166797A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2006065129 A1 20060622; EP 1805773 A1 20070711; EP 2416334 A1 20120208; NL 1027342 C2 20060427

DOCDB simple family (application)
NL 2005050025 W 20051026; EP 05851053 A 20051026; EP 11187304 A 20051026; NL 1027342 A 20041026