Title (en)

TEMPERATURE-DEPENDENT SWITCH

Title (de)

TEMPERATURABHÄNGIGER SCHALTER

Title (fr)

COMMUTATEUR DÉPENDANT DE LA TEMPÉRATURE

Publication

EP 3796358 B1 20240103 (DE)

Application

EP 20196416 A 20200916

Priority

DE 102019125452 A 20190920

Abstract (en)

[origin: CN112542350A] A temperature-dependent switch comprises first and second stationary contacts and a temperature-dependent switching mechanism having a movable contact member and a temperature-dependent snap-action part, which transitions between geometric low- and high-temperature configurations based on a temperature of the switch. Switching the snap-action part from its geometric low- to high-temperature configuration moves the switching mechanism from a first to a second switching position and thereby opens the switch. A closing lock prevents the switch once having opened from closing again by keeping it in its second switching position. The closing lock comprises a fusible medium which melts when a melting temperature of the medium is exceeded, contacts, in a molten state, a part of the switching mechanism when it is in its second switching position, and solidifies again and thereby locks it in its second switching position when the temperature of the switch falls below the melting temperature ofthe medium again.

IPC 8 full level

H01H 37/54 (2006.01); **H01H 37/00** (2006.01); **H01H 37/74** (2006.01)

CPC (source: CN EP US)

H01H 9/104 (2013.01 - CN); **H01H 37/002** (2013.01 - CN EP); **H01H 37/04** (2013.01 - CN US); **H01H 37/52** (2013.01 - CN US); **H01H 37/5409** (2013.01 - EP US); **H01H 37/60** (2013.01 - US); **H01H 37/64** (2013.01 - CN US); **H01H 37/74** (2013.01 - EP US); H01H 37/5427 (2013.01 - EP); H01H 2011/0043 (2013.01 - EP)

Cited by

DE102023104836B3

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3796358 A1 20210324; **EP 3796358 B1 20240103**; CN 112542350 A 20210323; CN 112542350 B 20231226; DE 102019125452 A1 20210325; DE 102019125452 B4 20210422; DK 3796358 T3 20240402; US 11264194 B2 20220301; US 2021090833 A1 20210325

DOCDB simple family (application)

EP 20196416 A 20200916; CN 202010950464 A 20200910; DE 102019125452 A 20190920; DK 20196416 T 20200916; US 202017024237 A 20200917