

Title (en)
FUSE

Title (de)
SICHERUNG

Title (fr)
FUSIBLE

Publication
EP 2745303 A1 20140625 (DE)

Application
EP 12755965 A 20120817

Priority
• DE 102011052805 A 20110818
• EP 2012066093 W 20120817

Abstract (en)

[origin: WO2013024153A1] The subject matter of the invention is a fuse (3) for connection to a protection component (2) of a surge protection device (2), wherein the fuse (3) has a housing (3f), a first cap (3a), a second cap (3b) and a fusible wire (3d), which runs between the first cap (3a) and the second cap (3b) within the housing, wherein the first cap (3a) is designed for thermal and electrical connection to the protective component (2), wherein the fusible wire (3d) is held on the first cap (3a) by means of a soldered joint (3c), wherein the fusible wire (3d) is fastened on a connection electrode (4) with respect to the first cap (3a), wherein the connection electrode (4) is held in a guide (8) movably with respect to the body of the fuse (3) and is under mechanical prestress (6) with respect to the body of the fuse (3), wherein the fusible wire (3d) is designed in such a way that it fuses when a high I^2t is applied, and wherein the soldered joint (3c) is designed in such a way that the soldered joint (3c) fuses in the event of external heating by the surge protection device (2) to above a specified temperature owing to the thermal connection, and wherein the electrical contact between the first cap (3a) and the connection electrode (4) is released in the event of fusing of the fusible wire (3d) and the soldered joint (3c) owing to the mechanical prestress (6).

IPC 8 full level

H01C 7/12 (2006.01); **H01H 37/76** (2006.01); **H01H 85/143** (2006.01); **H01H 85/30** (2006.01); **H01H 85/36** (2006.01); **H01H 85/12** (2006.01)

CPC (source: EP US)

H01C 7/126 (2013.01 - EP US); **H01H 37/761** (2013.01 - EP US); **H01H 85/143** (2013.01 - US); **H01H 85/30** (2013.01 - US);
H01H 85/36 (2013.01 - EP US); **H01H 85/12** (2013.01 - EP US); **H01H 85/303** (2013.01 - EP US)

Citation (search report)

See references of WO 2013024153A1

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)

DE 102011052805 A1 20130221; DE 102011052805 B4 20130718; CN 103748651 A 20140423; CN 103748651 B 20170301;
EP 2745303 A1 20140625; EP 2745303 B1 20161102; SI 2745303 T1 20170131; US 2014218159 A1 20140807; US 9443689 B2 20160913;
WO 2013024153 A1 20130221

DOCDB simple family (application)

DE 102011052805 A 20110818; CN 201280040148 A 20120817; EP 12755965 A 20120817; EP 2012066093 W 20120817;
SI 201230778 A 20120817; US 201214239127 A 20120817