

Title (en)

FUSE HAVING AN INTEGRATED MEASURING FUNCTION

Title (de)

SCHMELZSICHERUNG MIT INTEGRIERTER MESSFUNKTION

Title (fr)

FUSIBLE AVEC FONCTION DE MESURE INTÉGRÉE

Publication

**EP 3867939 B1 20230215 (DE)**

Application

**EP 19829138 A 20191218**

Priority

- DE 102018222560 A 20181220
- EP 2019085955 W 20191218

Abstract (en)

[origin: WO2020127486A1] The invention relates to a fuse having an integrated measuring function, said fuse comprising a fuse housing which in turn has a first receiving space delimited by a pressure body and a second receiving space which is spatially separated from the first receiving space and is delimited by a protective body, the first and second receiving spaces being arranged one behind the other in a direction of longitudinal extent. A fusible conductor is accommodated and mounted in the first receiving space and a measuring device is accommodated and mounted in the second receiving space. The measuring device has a current transformer and an electronic assembly which is electrically conductively connected to the current transformer, wherein the current transformer and the electronic assembly are arranged one behind the other in the direction of longitudinal extent. With the aid of the measuring device (120), it is possible to determine the electric current flowing through the fuse (100) in the immediate vicinity of the fuse (100). The energy required for this is generated from the primary current of the fuse (100) by electromagnetic induction with the aid of the current transformer (121), meaning that no external power source is required to supply the measuring device (120) with energy.

IPC 8 full level

**H01H 85/30** (2006.01); **H01H 85/02** (2006.01)

CPC (source: EP US)

**H01H 85/055** (2013.01 - US); **H01H 85/165** (2013.01 - US); **H01H 85/175** (2013.01 - US); **H01H 85/1755** (2013.01 - US);  
**H01H 85/30** (2013.01 - EP); **H01H 2085/0266** (2013.01 - EP US); **H01H 2085/0275** (2013.01 - EP US); **H01H 2085/0291** (2013.01 - EP US)

Citation (examination)

WO 0019475 A1 20000406 - ASCOM SYSTEC AG [CH], et al

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)

**WO 2020127486 A1 20200625**; CN 113196440 A 20210730; EP 3867939 A1 20210825; EP 3867939 B1 20230215; ES 2939155 T3 20230419;  
US 11508541 B2 20221122; US 2022059307 A1 20220224

DOCDB simple family (application)

**EP 2019085955 W 20191218**; CN 201980083806 A 20191218; EP 19829138 A 20191218; ES 19829138 T 20191218;  
US 201917414586 A 20191218