

Title (en)  
FUSE HAVING AN INTEGRATED MEASURING FUNCTION

Title (de)  
SCHMELZSICHERUNG MIT INTEGRIERTER MESSFUNKTION

Title (fr)  
FUSIBLE AVEC FONCTION DE MESURE INTÉGRÉE

Publication  
**EP 3844792 B1 20230125 (DE)**

Application  
**EP 19829139 A 20191218**

Priority  
• DE 102018222552 A 20181220  
• EP 2019085958 W 20191218

Abstract (en)  
[origin: WO2020127488A1] The invention relates to a fuse (100) having an integrated measuring function, said fuse comprising a fuse housing (110) which has a first receiving space (115) delimited by a pressure body (113) and a second receiving space (116) spatially separated from the first receiving space (115). A fusible conductor (105) is accommodated and mounted in the first receiving space (115) and a measuring device (120) is accommodated and mounted in the second receiving space (116). The measuring device (120) has a current transformer (121) and an electronic assembly (122) which is electrically conductively connected to the current transformer (121). Viewed in a direction of longitudinal extent (L), the height (H) of the current transformer (121) essentially corresponds to the height of the second receiving space (116), which is why the electronic assembly (122) is arranged to the side of the current transformer (121) in a direction orthogonal to the direction of longitudinal extent (L). 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 85/0241** (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 2020127488 A1 20200625**; CN 113196439 A 20210730; EP 3844792 A1 20210707; EP 3844792 B1 20230125; ES 2937138 T3 20230324; US 2022093356 A1 20220324

DOCDB simple family (application)  
**EP 2019085958 W 20191218**; CN 201980083713 A 20191218; EP 19829139 A 20191218; ES 19829139 T 20191218; US 201917414412 A 20191218