

Title (en)

ELECTRIC CONTACT COMPRISING A METAL-GRAPHENE COMPOSITE LAYER

Title (de)

ELEKTRISCHER KONTAKT MIT EINER METALL-GRAPHEN-VERBUNDSCHICHT

Title (fr)

CONTACT ÉLECTRIQUE COMPRENANT UNE COUCHE COMPOSITE MÉTAL-GRAPHÈNE

Publication

**EP 3971928 A1 20220323 (EN)**

Application

**EP 20197503 A 20200922**

Priority

EP 20197503 A 20200922

Abstract (en)

The invention relates to an electric contact configured to repeatedly closing and opening a conducting path by breaking and connecting an electrical circuit. The electric contact comprises a metal-graphene composite layer in which functionalized graphene is dispersed in a matrix of the metal, wherein the functionalized graphene is present in an amount within the range of from 0.05 wt% to 3 wt%.

IPC 8 full level

**H01H 1/021** (2006.01); **B22F 1/00** (2022.01); **H01H 1/0237** (2006.01); **H01H 1/027** (2006.01); **H01H 11/04** (2006.01)

CPC (source: EP)

**B22F 1/0545** (2022.01); **B22F 1/10** (2022.01); **B22F 7/08** (2013.01); **C22C 1/05** (2013.01); **C22C 1/1026** (2013.01); **H01H 1/0203** (2013.01); **H01H 1/021** (2013.01); **H01H 1/0237** (2013.01); **H01H 1/027** (2013.01); **H01H 11/048** (2013.01); **B22F 2998/10** (2013.01); **B22F 2999/00** (2013.01); **H01H 2300/036** (2013.01)

Citation (search report)

- [X] WO 2018189146 A1 20181018 - ABB SCHWEIZ AG [CH]
- [X] CN 110484803 A 20191122 - UNIV HENAN SCIENCE & TECH

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3971928 A1 20220323**; EP 4218038 A1 20230802; WO 2022063757 A1 20220331

DOCDB simple family (application)

**EP 20197503 A 20200922**; EP 2021075892 W 20210921; EP 21770279 A 20210921