Title (en)
    Joining structures, electrical contacts, and their manufacturing means

Title (de)
    Verbindungsstrukturen, elektrische Kontakte und ihre Herstellungsmittel

Title (fr)
    Structures de jonction, contacts électriques et moyens de fabrication associés

Publication
    EP 2575149 A2 20130403 (EN)

Application
    EP 12179082 A 20120802

Priority
    JP 2011210080 A 20110927

Abstract (en)
    A joining structure includes plural members and an adhered and deposited layer formed by depositing powder containing metal over the plurality of members. The plural members are joined via coupling with alloying by thermal and mechanical activation between the plural members and the adhered and deposited layer. A substrate is made of a metal of high electrical conductivity. A member to be joined is formed in a cup shape and made of metal of high electrical conductivity. The adhered and deposited layer is a contact layer including fire-resistant metal or compound and metal of high electrical conductivity. One surface of the substrate and a cup-shaped opened end of the member to be joined are joined with the alloying by thermal and mechanical activation.

IPC 8 full level
    H01H 1/02 (2006.01); **H01H 11/04** (2006.01); **H01H 33/664** (2006.01)

CPC (source: EP KR)
    H01H 1/06 (2013.01 - KR); **H01H 11/048** (2013.01 - EP); **H01H 33/664** (2013.01 - EP KR); H01H 1/0206 (2013.01 - EP)

Citation (applicant)
    JP 2007157666 A 20070621 - HITACHI LTD

Cited by
    WO2017050533A1

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)
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DOCDB simple family (application)
    EP 12179082 A 20120802; CN 201210276116 A 20120803; JP 2011210080 A 20110927; KR 20120084765 A 20120802