

Title (en)

CONTACT MEMBER FOR MICRO-LOAD SWITCHING CONTACT

Title (de)

KONTAKTELEMENT FÜR MIKROLAST-SCHALTKONTAKT

Title (fr)

ÉLÉMENT DE CONTACT POUR CONTACT DE COMMUTATION DE MICROCHARGE

Publication

**EP 4333008 A1 20240306 (EN)**

Application

**EP 23192933 A 20230823**

Priority

- JP 2022137422 A 20220831
- CN 202211488752 A 20221125

Abstract (en)

The present invention relates to a contact member for a micro-load switching contact including a surface contact layer of a Au alloy thin film formed on a substrate. The Au alloy thin film constituting the surface contact layer includes 15% by mass or more and 30% by mass or less of a first additive metal containing Ag, and 0.5% by mass or more and 3% by mass or less of a second additive metal containing any one or more of Cr, Mn, Fe, Co, Ni, Cu, and Zn, with the balance being Au and unavoidable impurities. The thin film of the Au alloy has a hardness in terms of Vickers hardness of 240 Hv or more and 400 Hv or less. The contact material applied to the contact member of the present invention is excellent in environmental resistance and low contact resistance, and is ensured to have wear resistance and adhesion resistance required when in the form of a thin film.

IPC 8 full level

**H01H 1/023** (2006.01); **H01H 1/00** (2006.01)

CPC (source: EP)

**H01H 1/0036** (2013.01); **H01H 1/023** (2013.01)

Citation (applicant)

JP H08287759 A 19961101 - TANAKA PRECIOUS METAL IND

Citation (search report)

- [I] EP 3067908 A1 20160914 - OMRON TATEISI ELECTRONICS CO [JP]
- [A] US 4337133 A 19820629 - AUGIS JACQUES A, et al
- [A] US 2016172069 A1 20160616 - SUMIYA YOSHINORI [JP], 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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**EP 4333008 A1 20240306**; TW 202413657 A 20240401

DOCDB simple family (application)

**EP 23192933 A 20230823**; TW 112130119 A 20230810