

Title (en)

COBALT SILICIDE-CONTAINING COPPER ALLOY

Title (de)

KOBALTSILIZIDHALTIGE KUPFERLEGIERUNG

Title (fr)

ALLIAGE DE CUIVRE CONTENANT DU SILICIURE DE COBALT

Publication

**EP 3363922 A4 20190821 (EN)**

Application

**EP 16826980 A 20160608**

Priority

- CN 201510439092 A 20150723
- CN 2016000301 W 20160608

Abstract (en)

[origin: US2018066339A1] The present invention discloses copper alloy containing cobalt and silicon, which comprises (in percentage of weight): 69% to 92% of copper; 6.5% to 30.5% of zinc; 0.01% to 3% of cobalt; and 0.01% to 0.5% of silicon; wherein the total content of copper and zinc is greater than 95%, and the content of inevitable impurities is less than 0.2%. Preferably, the copper alloy comprises matrix phases of copper-zinc a solid solution and CoxSi precipitated phases; the CoxSi precipitated phases are dispersedly distributed on a matrix phase; the percentage of the matrix phases by area is greater than or equal to 95%; and, the percentage of the CoxSi precipitated phases by area is 0.01% to 5%.

IPC 8 full level

**C22C 9/04** (2006.01); **C22F 1/08** (2006.01)

CPC (source: EP US)

**C22C 9/04** (2013.01 - EP US); **C22F 1/08** (2013.01 - EP US)

Citation (search report)

- [XAI] US 2004234412 A1 20041125 - OISHI KEIICHIRO [JP], et al
- [XA] JP 2007270286 A 20071018 - DOWA HOLDINGS CO LTD
- [XA] JP 2002349573 A 20021204 - MITSUBISHI MATERIALS CORP
- [A] EP 2670875 A1 20131211 - POONGSAN CORP [KR]
- [A] US 5968604 A 19991019 - BISCHOFF-BOGON WERNER [DE], et al
- [A] JP 2008007839 A 20080117 - NIKKO KINZOKU KK
- [A] CN 101709405 A 20100519 - SUZHOU HANLI COPPER ALLOY MATE
- See references of WO 2017012283A2

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)

**US 2018066339 A1 20180308**; CN 105018782 A 20151104; CN 105018782 B 20170926; EP 3363922 A2 20180822; EP 3363922 A4 20190821; EP 3363922 B1 20230419; WO 2017012283 A2 20170126; WO 2017012283 A3 20170323

DOCDB simple family (application)

**US 201615558477 A 20160608**; CN 201510439092 A 20150723; CN 2016000301 W 20160608; EP 16826980 A 20160608