

Title (en)
PURE COPPER PLATE

Title (de)
PLATTE AUS REINEM KUPFER

Title (fr)
PLAQUE DE CUIVRE PUR

Publication
EP 4036261 A1 20220803 (EN)

Application
EP 20870402 A 20200911

Priority
• JP 2019176835 A 20190927
• JP 2020034462 W 20200911

Abstract (en)
This pure copper plate or sheet contains 99.96% by mass or greater of Cu, in which when an average crystal grain size of crystal grains in a rolled surface is represented by $X \mu\text{m}$ and an amount of Ag is represented by Y mass ppm, an expression of $1 \times 10^{-8} \leq X^{-3} \sup Y^{-1} \leq 1 \times 10^{-5}$ is satisfied, and when a ratio of J3, in which all three grain boundaries constituting a grain boundary triple junction are special grain boundaries, to all grain boundary triple junctions is defined as NF_{J3} and a ratio of J2, in which two grain boundaries constituting a grain boundary triple junction are special grain boundaries and one grain boundary constituting the grain boundary triple junction is a random grain boundary, to all grain boundary triple junctions is defined as NF_{J2} , an expression of $0.30 < (\text{NF}_{\text{J2}} / (1 - \text{NF}_{\text{J3}})) \leq 0.48$ is satisfied.

IPC 8 full level
C22C 9/00 (2006.01); **C22F 1/00** (2006.01); **C22F 1/08** (2006.01)

CPC (source: EP KR US)
C21D 9/46 (2013.01 - KR); **C22C 1/02** (2013.01 - EP); **C22C 1/03** (2013.01 - EP); **C22C 9/00** (2013.01 - EP KR US);
C22F 1/08 (2013.01 - EP KR US)

Cited by
EP4116449A4; EP4116450A4; US12035469B2

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 4036261 A1 20220803; **EP 4036261 A4 20230920**; CN 114269957 A 20220401; CN 114269957 B 20220729; JP 6973680 B2 20211201; JP WO2021060023 A1 20211104; KR 20220068985 A 20220526; TW 202115264 A 20210416; US 2022403484 A1 20221222; WO 2021060023 A1 20210401

DOCDB simple family (application)
EP 20870402 A 20200911; CN 202080059341 A 20200911; JP 2020034462 W 20200911; JP 2021507700 A 20200911; KR 20227005974 A 20200911; TW 109133046 A 20200924; US 202017762267 A 20200911