

Title (en)

COPPER ALLOY FOR HEAT EXCHANGER TUBE

Title (de)

KUPFERLEGIERUNG FÜR EIN WÄRMETAUSCHERROHR

Title (fr)

ALLIAGE DE CUIVRE POUR TUBE D'ÉCHANGEUR DE CHALEUR

Publication

**EP 2451604 B1 20170830 (EN)**

Application

**EP 10797826 A 20100708**

Priority

- US 2010041313 W 20100708
- US 22467109 P 20090710

Abstract (en)

[origin: US2011005739A1] An alloy comprising copper, nickel, tin and, optionally, phosphorus which can be used in, for example, a copper alloy tube for heat exchangers that provides excellent fracture strength and processability for reducing the weight of the tube and for use in high pressure applications with cooling media such as carbon dioxide.

IPC 8 full level

**C22C 9/02** (2006.01); **B23K 1/00** (2006.01); **C22C 9/06** (2006.01); **C22F 1/08** (2006.01); **F28F 21/08** (2006.01)

CPC (source: CN EP US)

**C22C 9/02** (2013.01 - CN EP US); **C22C 9/06** (2013.01 - CN EP US); **C22F 1/08** (2013.01 - CN EP US); **F28F 21/085** (2013.01 - CN EP US)

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 SE SI SK SM TR

DOCDB simple family (publication)

**US 2011005739 A1 20110113**; BR 112012000607 A2 20170905; BR 112012000607 A8 20180206; BR 112012000607 B1 20190306; CA 2767242 A1 20110113; CA 2767242 C 20160927; CN 102470471 A 20120523; CN 107739880 A 20180227; EP 2451604 A1 20120516; EP 2451604 A4 20130410; EP 2451604 B1 20170830; ES 2649557 T3 20180112; HK 1251625 A1 20190201; JP 2012532990 A 20121220; JP 2015178679 A 20151008; JP 6087982 B2 20170301; MX 2012000544 A 20120720; MX 340861 B 20160728; MY 173128 A 20191230; US 2016363397 A1 20161215; WO 2011005926 A1 20110113

DOCDB simple family (application)

**US 83228310 A 20100708**; BR 112012000607 A 20100708; CA 2767242 A 20100708; CN 201080031914 A 20100708; CN 201711242581 A 20100708; EP 10797826 A 20100708; ES 10797826 T 20100708; HK 18111018 A 20180827; JP 2012519714 A 20100708; JP 2015096266 A 20150511; MX 2012000544 A 20100708; MY PI2011006325 A 20100708; US 2010041313 W 20100708; US 201615248399 A 20160826