

Title (en)

USE OF A METALLIC ELEMENT MADE FROM A COPPER-ZINC- MANGANESE ALLOY AS ELECTRIC HEATING ELEMENT

Title (de)

VERWENDUNG EINES AUS EINER KUPFER-ZINK-MANGAN-LEGIERUNG AUSGEBILDETEN METALLISCHEN ELEMENTS ALS ELEKTRISCHES HEIZELEMENT

Title (fr)

UTILISATION D'UN ÉLÉMENT MÉTALLIQUE FORMÉ À PARTIR D'UN ALLIAGE CUIVRE-ZINC-MANGANÈSE EN TANT QU'ÉLÉMENT DE CHAUFFAGE ÉLECTRIQUE

Publication

**EP 3147382 B1 20220413 (DE)**

Application

**EP 16190686 A 20160926**

Priority

DE 102015116314 A 20150925

Abstract (en)

[origin: CN107022694A] The present invention relates to the use of a metallic element formed from a copper-zinc-manganese alloy with a copper content of at least 63% by weight as an electrical heating element, in particular for low-temperature applications.

IPC 8 full level

**C22F 1/08** (2006.01); **C22C 9/04** (2006.01); **H05B 3/12** (2006.01)

CPC (source: CN EP RU)

**C22C 9/04** (2013.01 - CN EP RU); **C22C 9/05** (2013.01 - CN); **C22F 1/08** (2013.01 - EP); **H05B 3/12** (2013.01 - CN EP)

Cited by

US11473172B2; WO2018174259A1

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)

**EP 3147382 A1 20170329**; **EP 3147382 B1 20220413**; CN 107022694 A 20170808; DE 102015116314 A1 20170330; DK 3147382 T3 20220620; PL 3147382 T3 20220822; RU 2016137894 A 20180329; RU 2016137894 A3 20200214; RU 2726522 C2 20200714

DOCDB simple family (application)

**EP 16190686 A 20160926**; CN 201610849763 A 20160926; DE 102015116314 A 20150925; DK 16190686 T 20160926; PL 16190686 T 20160926; RU 2016137894 A 20160923