

Title (en)
Grey gold alloy with no nickel and no copper

Title (de)
Weißgoldlegierung ohne Nickel und Kupfer

Title (fr)
Alliage d'or gris sans nickel et sans cuivre

Publication
EP 2450461 B1 20141029 (FR)

Application
EP 11009184 A 20100415

Priority
• EP 10716257 A 20100415
• EP 09405077 A 20090506
• EP 11009184 A 20100415

Abstract (en)
[origin: EP2251444A1] White gold alloy free of nickel and copper, comprises (in mass%): gold (greater than 75); palladium (18-24); at least one element (1-6) comprising manganese, hafnium, niobium, platinum, tantalum, vanadium, zinc, and zirconium; optionally at least one element (greater than 0.5) comprising silicon, gallium, and titanium; and optionally at least one element (greater than 0.2) comprising ruthenium, iridium, and rhenium. An independent claim is included for preparing the alloy, comprising placing the components of the white gold alloy in a crucible; heating the crucible to melt the components; pouring the molten alloy; allowing to harden; subjecting to water quenching; subjecting to at least one cold rolling; and annealing under reducing atmosphere.

IPC 8 full level
C22C 5/02 (2006.01); **C22F 1/14** (2006.01)

CPC (source: EP US)
C22C 5/02 (2013.01 - EP US); **C22F 1/14** (2013.01 - EP US)

Cited by
WO2016151228A1; US10364481B2

Designated contracting state (EPC)
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)
EP 2251444 A1 20101117; CH 703415 B1 20140314; CN 102549179 A 20120704; CN 102549179 B 20160330; EP 2427582 A1 20120314; EP 2427582 B1 20140312; EP 2450460 A1 20120509; EP 2450460 B1 20130925; EP 2450461 A1 20120509; EP 2450461 B1 20141029; JP 2012526192 A 20121025; JP 5793136 B2 20151014; US 2012114522 A1 20120510; US 9650697 B2 20170516; WO 2010127458 A1 20101111; WO 2010127458 A8 20110414

DOCDB simple family (application)
EP 09405077 A 20090506; CH 17712011 A 20100415; CH 2010000101 W 20100415; CN 201080019776 A 20100415; EP 10716257 A 20100415; EP 11009183 A 20100415; EP 11009184 A 20100415; JP 2012508867 A 20100415; US 201013265655 A 20100415