

Title (en)

PROCESS FOR TREATMENT A DISPERSION-HARDENED PLATINUM COMPOSITION

Title (de)

VERFAHREN ZUR BEARBEITUNG EINER DISPERSIONSGEHÄRTETEN PLATINZUSAMMENSETZUNG

Title (fr)

PROCÉDÉ D'USINAGE D'UN MATÉRIAU À BASE DE PLATINE RENFORCÉ PAR DISPERSION

Publication

EP 3077556 A1 20161012 (DE)

Application

EP 14812166 A 20141204

Priority

- DE 102013225187 A 20131206
- EP 2014076600 W 20141204

Abstract (en)

[origin: WO2015082630A1] The invention relates to a method for processing a dispersion-hardened platinum composition, wherein a volume body of a dispersion-hardened platinum composition having at least 70 wt% of platinum, at most 29.95 wt% of other noble metals, and 0.05 wt% to 0.5 wt% of at least one at least partially oxidized non-noble metal selected from zirconium, cerium, scandium, and yttrium is provided. The provided volume body composed of the dispersion-hardened platinum composition is cold-worked, wherein the cross-sectional area of the volume body of the dispersion-hardened platinum composition is reduced by at most 20% in the cold-working, and then a temperature treatment of the cold-worked volume body is performed, in which temperature treatment the cold-worked product is tempered at at least 1100 °C for at least one hour. The invention further relates to a method for producing a product composed of a dispersion-hardened platinum composition, and to a dispersion-hardened platinum material that can be obtained according to the processing method presented above. The invention further relates to a use of a dispersion-hardened platinum material.

IPC 8 full level

C22C 5/04 (2006.01); **C22C 32/00** (2006.01); **C22F 1/14** (2006.01)

CPC (source: EP KR US)

C22C 1/1078 (2013.01 - EP US); **C22C 5/04** (2013.01 - EP KR US); **C22C 32/00** (2013.01 - KR); **C22C 32/0021** (2013.01 - EP US); **C22F 1/14** (2013.01 - EP KR US); **B22F 2003/248** (2013.01 - EP US); **B22F 2999/00** (2013.01 - EP US)

Citation (search report)

See references of WO 2015082630A1

Cited by

EP4282526A1; WO2023227261A1

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)

WO 2015082630 A1 20150611; CN 105765092 A 20160713; CN 105765092 B 20181019; DE 102013225187 A1 20150611; DE 102013225187 B4 20180719; EP 3077556 A1 20161012; EP 3077556 B1 20190619; JP 2017502170 A 20170119; JP 6530402 B2 20190612; KR 101831090 B1 20180221; KR 20160097249 A 20160817; US 2016289808 A1 20161006

DOCDB simple family (application)

EP 2014076600 W 20141204; CN 201480065977 A 20141204; DE 102013225187 A 20131206; EP 14812166 A 20141204; JP 2016536823 A 20141204; KR 20167017985 A 20141204; US 201415100809 A 20141204