Title (en)

AN ELECTROCHEMICAL PROCESS FOR PREPARING A REACTION PRODUCT OF A METAL OR METALLOID ELEMENT

Title (de)

ELEKTROCHEMISCHES VERFAHREN ZUR HERSTELLUNG EINES REAKTIONSPRODUKTES EINES METALLS ODER METALLOIDS

Title (fr)

PROCÉDÉ ÉLECTROCHIMIQUE POUR PREPARER UN PRODUIT D'UN MÉTAL OU MÉTALLOIDE

Publication

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Application

EP 16700274 A 20160111

Priority

• EP 15150649 A 20150109
• EP 2016050379 W 20160111

Abstract (en)

[origin: EP3042981A1] The present invention relates to an electrochemical process for isolating from at least one water soluble precursor compound comprising a metal or a metalloid element or two or more thereof having a positive valence, a reaction product of the metal or metalloid element or two or more thereof, wherein the water soluble precursor compound is supplied to a water based catholyte contained in a cathode compartment of an electrochemical cell containing a cathode with an electrochemically active surface in contact with the catholyte, wherein the cathode is subjected to an electric potential, which is chosen such as to cause reduction of an oxidant gas present at the cathode to one or more corresponding peroxide, ionic and/or radical species capable of reacting with the metal or metalloid element, and to cause conversion of the reduced oxidant gas into a reaction product comprising a compound of the metal or metalloid element or two or more thereof and the peroxide, ionic and/or radical species, in particular into nano particles of the reaction product.

IPC 8 full level

C25B 1/00 (2006.01)

CPC (source: EP US)

C25B 1/00 (2013.01 - EP US); **C25B 1/30** (2013.01 - EP US); **C25B 11/00** (2013.01 - EP US)

Citation (search report)

See references of WO 2016110597A1

Cited by

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EP 3042981 A1 20160713; CA 2973289 A1 20160714; CN 107532309 A 20180102; CN 107532309 B 20190628; DK 3242963 T3 20190114; EP 3242963 A1 20171115; EP 3242963 B1 20180926; ES 2702082 T3 20190227; JP 2018508659 A 20180329; MX 2017009005 A 20171023; US 2018023201 A1 20180125; WO 2016110597 A1 20160714

DOCDB simple family (application)

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