

Title (en)
AN ELECTROCHEMICAL PROCESS FOR PREPARING A COMPOUND COMPRISING A METAL OR METALLOID AND A PEROXIDE, IONIC OR RADICAL SPECIES

Title (de)
ELEKTROCHEMISCHES VERFAHREN ZUR HERSTELLUNG EINER VERBINDUNG EINES METALLS ODER METALLOIDS UND EINES PEROXIDS ODER EINER IONISCHEN ODER RADIKALISCHEN SPEZIES

Title (fr)
PROCÉDÉ ÉLECTROCHIMIQUE POUR PRÉPARER UN COMPOSÉ D'UN MÉTAL OU MÉTALLOÏDE ET D'UN PEROXYDE OU DES ESPÈCES IONIQUES OU RADICALAIRES

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Abstract (en)
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.

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C25B 1/00 (2006.01)

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Citation (applicant)

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