

Title (en)
Anode For Electrochemical Reaction

Title (de)
Anode für elektrochemische Reaktion

Title (fr)
Anode pour réaction électrochimique

Publication
EP 2055806 A1 20090506 (EN)

Application
EP 07119711 A 20071031

Priority
EP 07119711 A 20071031

Abstract (en)

Disclosed is an anode for electrochemical reactions, such as electrolysis and electrodeposition, comprising a titanium substrate covered with metal oxide, in which the amount of platinum group element(s) is decreased in comparison with the ordinary anode of platinum group element oxides so as to decrease the cost and to mitigate the problem of natural resources, and further, durability of the anode is improved. The electrocatalyst of the anode is multiple oxide of platinum group element(s), and Sn and Sb. The cationic ratio of Sn to Sb is 1-40 and the sum of Sn and Sb is 1-90 cationic %. The electrocatalyst is prepared by coating mixed solutions of the soluble salts on the substrate and baking, so as to convert the metal salts to metal oxides.

IPC 8 full level
C25B 11/04 (2006.01)

CPC (source: EP)
C25B 11/057 (2021.01); **C25B 11/093** (2021.01); **C25D 17/10** (2013.01)

Citation (search report)

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- [X] F. MONTILLA ET AL.: "Preparation and Characterization of Antimony-Doped Tin Dioxide Electrodes. Part 1. Electrochemical Charaterization", J. PHYS. CHEM. B, vol. 108, 18 March 2004 (2004-03-18), pages 5036 - 5043, XP002473213
- [X] F. MONTILLA ET AL.: "Preparation and Characterization of Antimony-Doped Tin Dioxide Electrodes. Part 2. XRD and EXAFS Characterization", J. PHYS. CHEM. B, vol. 108, 18 March 2004 (2004-03-18), pages 5044 - 5050, XP002473214

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