

Title (en)

Anode for electrolysis and method of electrolytically synthesizing fluorine-containing substance using the anode for electrolysis

Title (de)

Anode zur Elektrolyse und Verfahren zum elektrolytischen Synthetisieren einer fluorhaltigen Substanz mittels der Anode zur Elektrolyse

Title (fr)

Anode pour électrolyse et procédé de synthèse électrolytique d'une substance contenant du fluor à l'aide de l'anode pour électrolyse

Publication

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Application

EP 10152341 A 20100202

Priority

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Abstract (en)

The present invention provides an electrode for electrolysis, wherein the electrode comprises: a substrate comprising an electrically conductive material, wherein the surface of the substrate is made of glassy carbon; and an electrically conductive diamond film with which at least part of the substrate is coated.

IPC 8 full level

C25B 3/28 (2021.01)

CPC (source: EP KR US)

C25B 1/245 (2013.01 - EP KR US); **C25B 11/043** (2021.01 - EP KR US); **C25B 11/051** (2021.01 - EP KR US)

Citation (applicant)

- JP 2000204492 A 20000725 - JAPAN SCIENCE & TECH CORP
- JP 2006249557 A 20060921 - PERMELEC ELECTRODE LTD, et al
- US 6241956 B1 20010605 - SAITO KAZUO [JP], et al
- JP 2009021157 A 20090129 - DAIICHI DENSHI KOGYO

Citation (search report)

- [X] US 2007215460 A1 20070920 - TOJO TETSURO [JP], et al
- [X] EP 1031645 A1 20000830 - SUISSE ELECTRONIQUE MICROTECH [CH]
- [A] GB 2271359 A 19940413 - BRITISH NUCLEAR FUELS PLC [GB]

Citation (examination)

- JP 2000204492 A 20000725 - JAPAN SCIENCE & TECH CORP
- M SHIZUNO ET AL: "Electrolysis of (CH₃)₄NF·5HF melt with Boron-doped diamond anode", 214TH ECS MEETING, 1 January 2008 (2008-01-01), XP055052863, Retrieved from the Internet <URL:<http://ma.ecsd.org/content/MA2008-02/42/2650.full.pdf>> [retrieved on 20130208]
- TASAKA A ET AL: "Anodic behaviors of nickel and platinum in a mixed molten salt of (CH₃)₄NF·4HF and CsF·2HF at room temperature", JOURNAL OF FLUORINE CHEMISTRY, ELSEVIER, NL, vol. 97, no. 1-2, 20 July 1999 (1999-07-20), pages 253 - 261, XP004172100, ISSN: 0022-1139, DOI: 10.1016/S0022-1139(99)00056-1

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