Title (en)

ELECTRODE FOR ELECTROLYSIS

Title (de)

ELEKTRODE FÜR DIE ELEKTROLYSE

Title (fr)

ÉLECTRODE DESTINÉE À L'ÉLECTROLYSE

Publication

EP 3546619 A4 20191225 (EN)

Application

EP 17873862 A 20171117

Priority

- JP 2016227066 A 20161122
- JP 2017041559 W 20171117

Abstract (en)

[origin: EP3546619A1] An electrode for electrolysis according to the present invention is an electrode for electrolysis including a conductive substrate; and a catalyst layer formed on a surface of the conductive substrate, wherein the catalyst layer comprises ruthenium element, iridium element, titanium element, and at least one first transition metal element selected from the group consisting of Sc, V, Cr, Fe, Co, Ni, Cu, and Zn, a content ratio of the first transition metal element contained in the catalyst layer based on 1 mol of the titanium element is 0.25 mol % or more and less than 3.4 mol %, and a D value being an indicator of an electric double layer capacitance of the electrode for electrolysis is 120 C/mor more and 420 C/mor less.

IPC 8 full level

C25B 1/46 (2006.01); **C25B 9/17** (2021.01); **C25B 9/19** (2021.01); **C25B 9/23** (2021.01); **C25B 11/04** (2006.01)

CPC (source: EP KR RU US)

C25B 1/46 (2013.01 - EP KR); **C25B 9/00** (2013.01 - EP); **C25B 9/17** (2021.01 - RU); **C25B 9/19** (2021.01 - KR); **C25B 9/23** (2021.01 - US); **C25B 11/057** (2021.01 - KR US); **C25B 11/091** (2021.01 - KR); **C25B 11/093** (2021.01 - EP KR RU); **C25B 11/097** (2021.01 - KR US)

Citation (search report)

- [XI] US 2007289865 A1 20071220 - DIFRANCO DINO F [US], et al
- [A] JP 5686455 B2 20150318
- See references of WO 2018097069A1

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WO2021108461A1

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)

EP 3546619 A1 20191002; **EP 3546619 A4 20191225**; **EP 3546619 B1 20210106**; BR 112019010219 A2 20190827; CN 109891002 A 20190614; CN 109891002 B 20210312; ES 2850501 T3 20210830; JP 6670948 B2 20200325; JP WO2018097069 A1 20190725; KR 102272749 B1 20210706; KR 20190067859 A 20190617; RU 2720309 C1 20200428; TW 201819687 A 20180601; TW I661091 B 20190601; US 2019338429 A1 20191107; WO 2018097069 A1 20180531

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