

Title (en)

METHOD OF PRODUCING COUPLED RADICAL PRODUCTS VIA DESULFOXYLATION

Title (de)

VERFAHREN ZUR HERSTELLUNG VON GEKUPPELTEN RADIKALEN PRODUKTEN ÜBER DESULFOXYLATION

Title (fr)

PROCÉDÉ DE PRODUCTION DE PRODUITS À RADICAUX COUPLÉS VIA UNE DÉSULFOXYLATION

Publication

**EP 2964657 A4 20161019 (EN)**

Application

**EP 14760888 A 20140305**

Priority

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- US 2014020786 W 20140305

Abstract (en)

[origin: WO2014138252A1] A method that produces coupled radical products. The method involves obtaining a sodium salt of a sulfonic acid (R-SO<sub>3</sub>-Na). The alkali metal salt is then used in an anolyte as part of an electrolytic cell. The electrolytic cell may include an alkali ion conducting membrane (such as a NaSICON membrane). When the cell is operated, the alkali metal salt of the sulfonic acid desulfoxylates and forms radicals. Such radicals are then bonded to other radicals, thereby producing a coupled radical product such as a hydrocarbon. The produced hydrocarbon may be, for example, saturated, unsaturated, branched, or unbranched, depending upon the starting material.

IPC 8 full level

**C25B 3/23** (2021.01); **C25B 3/29** (2021.01); **C07B 61/00** (2006.01); **C25B 9/19** (2021.01)

CPC (source: EP)

**C07B 61/00** (2013.01); **C10G 29/28** (2013.01); **C10G 50/00** (2013.01); **C25B 3/29** (2021.01); **C25B 9/19** (2021.01); **C25B 13/04** (2013.01)

Citation (search report)

- [A] QIONGFANG ZHUO ET AL: "Degradation of perfluorinated compounds on a boron-doped diamond electrode", ELECTROCHIMICA ACTA, ELSEVIER SCIENCE PUBLISHERS, BARKING, GB, vol. 77, 14 April 2012 (2012-04-14), pages 17 - 22, XP028404687, ISSN: 0013-4686, DOI: 10.1016/J.ELECTACTA.2012.04.145
- See references of WO 2014138252A1

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