

Title (en)
DEVICE AND METHOD FOR ARYL-ALKYL COUPLING USING DECARBOXYLATION

Title (de)
VORRICHTUNG UND VERFAHREN ZUR ARYL-ALKYL-KOPPLUNG MITTELS DECARBOXYLIERUNG

Title (fr)
DISPOSITIF ET PROCÉDÉ POUR UN COUPLAGE ARYL-ALKYLE À L'AIDE DE DÉCARBOXYLATION

Publication
EP 2971255 A4 20161019 (EN)

Application
EP 14762729 A 20140314

Priority
• US 201313834569 A 20130315
• US 2014028842 W 20140314

Abstract (en)
[origin: WO2014144432A1] A method for alkylating aromatic compounds is described using an electrochemical decarboxylation process. This process produces aryl-alkyl compounds that have properties useful in Group V lubricants (and other products) from abundant and economical carboxylic acids. The process presented here is also advantageous as it is conducted at moderate temperatures and conditions, without the need of a catalyst. The electrochemical decarboxylation has only H₂ and CO₂ as its by-products, as opposed to halide by-products.

IPC 8 full level
C25B 3/29 (2021.01); **C25B 3/23** (2021.01); **C25B 9/19** (2021.01); **C25B 9/23** (2021.01)

CPC (source: EP)
C07C 1/24 (2013.01); **C10M 105/06** (2013.01); **C10M 109/02** (2013.01); **C25B 1/04** (2013.01); **C25B 3/23** (2021.01); **C25B 3/29** (2021.01); **C25B 9/19** (2021.01); **C25B 9/73** (2021.01); **C25B 13/02** (2013.01); **C10M 2203/065** (2013.01); **C10M 2205/223** (2013.01); **C10N 2070/00** (2013.01); **Y02E 60/36** (2013.01)

Citation (search report)
• [X1] US 2011024288 A1 20110203 - BHAVARAJU SAI [US], et al
• [X1] HANS-JUERGEN SCHAEFER: "Recent contributions of Kolbe electrolysis to organic synthesis", 9 June 2005, ELECTROCHEMISTRY IV,, PAGE(S) 91 - 151, XP009191510
• See references of WO 2014144432A1

Cited by
CN109680296A

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