

Title (en)

METHODS OF PRODUCING PARA-XYLENE AND TEREPHTHALIC ACID

Title (de)

VERFAHREN ZUR HERSTELLUNG VON PARAXYLEN- UND TEREPHTHALSÄURE

Title (fr)

PROCÉDÉS D'OBTENTION DE PARA-XYLÈNE ET D'ACIDE TÉRÉPHTALIQUE

Publication

EP 2895446 A1 20150722 (EN)

Application

EP 13766444 A 20130913

Priority

- US 201261701276 P 20120914
- US 201313838761 A 20130315
- US 2013059660 W 20130913

Abstract (en)

[origin: WO2014043468A1] The present disclosure provides methods to produce para-xylene, toluene, and other compounds from renewable sources (e.g., cellulose, hemicellulose, starch, sugar) and ethylene in the presence of a catalyst. For example, cellulose and/or hemicellulose may be converted into 2,5-dimethylfuran (DMF), which may be converted into para-xylene by cycloaddition of ethylene to DMF. Para-xylene can then be oxidized to form terephthalic acid.

IPC 8 full level

C07C 2/86 (2006.01); **C07C 2/46** (2006.01); **C07C 2/62** (2006.01); **C07C 15/08** (2006.01); **C07C 49/14** (2006.01); **C07C 51/265** (2006.01); **C07C 63/26** (2006.01)

CPC (source: EP)

C07C 2/46 (2013.01); **C07C 2/62** (2013.01); **C07C 2/86** (2013.01); **C07C 2/865** (2013.01); **C07C 2/867** (2013.01); **C07C 15/08** (2013.01); **C07C 49/14** (2013.01); **C07C 51/265** (2013.01); **C07C 63/26** (2013.01); **C07C 2521/04** (2013.01); **C07C 2521/08** (2013.01); **C07C 2523/10** (2013.01); **C07C 2523/28** (2013.01); **C07C 2523/72** (2013.01); **C07C 2527/054** (2013.01); **C07C 2527/11** (2013.01); **C07C 2527/122** (2013.01); **C07C 2527/125** (2013.01); **C07C 2527/126** (2013.01); **C07C 2527/173** (2013.01); **C07C 2527/19** (2013.01); **C07C 2529/08** (2013.01); **C07C 2529/70** (2013.01); **C07C 2531/025** (2013.01); **C07C 2531/04** (2013.01); **C07C 2531/12** (2013.01)

Citation (search report)

See references of WO 2014043468A1

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)

WO 2014043468 A1 20140320; AR 092565 A1 20150422; BR 112015005701 A2 20170704; CN 104918901 A 20150916;
EP 2895446 A1 20150722; HK 1212674 A1 20160617; IN 2933DEN2015 A 20150918; JP 2015531786 A 20151105; JP 6503294 B2 20190417;
KR 20150055014 A 20150520; MX 2015003313 A 20150714; TW 201425272 A 20140701

DOCDB simple family (application)

US 2013059660 W 20130913; AR P130103291 A 20130913; BR 112015005701 A 20130913; CN 201380059080 A 20130913;
EP 13766444 A 20130913; HK 16100689 A 20160121; IN 2933DEN2015 A 20150409; JP 2015532075 A 20130913;
KR 20157009382 A 20130913; MX 2015003313 A 20130913; TW 102133178 A 20130913