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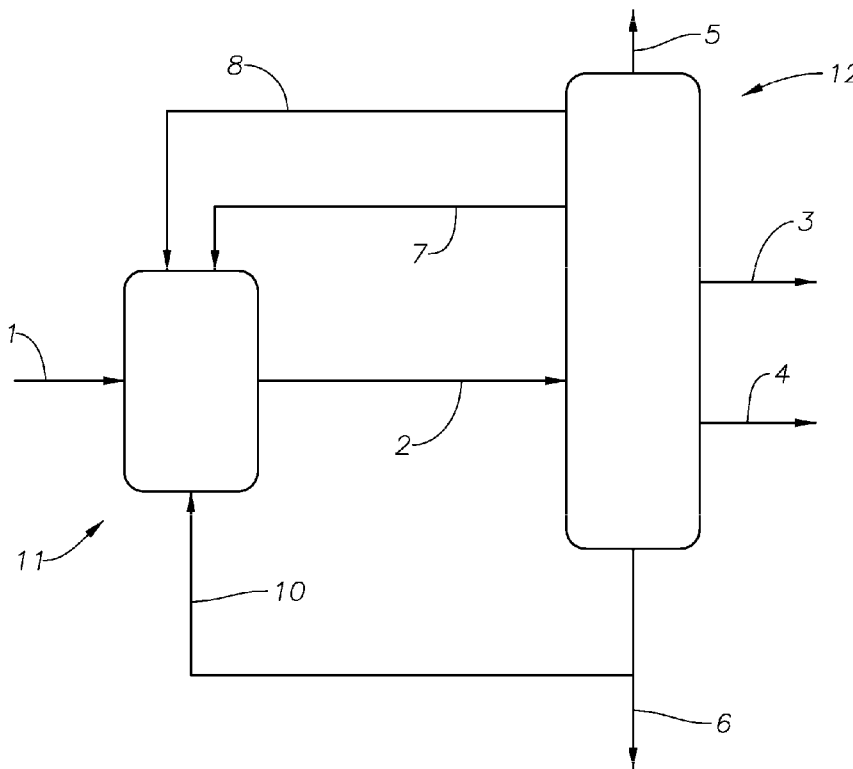
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[Continued on nextpage]

(54) Title: ALKYLATION PROCESS



[Continued on nextpage]





## INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/US2012/055499****A. CLASSIFICATION OF SUBJECT MATTER***C07C 2/64(2006.01)i, C07C 7/20(2006.01)I, C07C 15/08(2006.01)I, BOIJ 19/24(2006.01)I*

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

C07C 2/64; C07C 15/08; B01J 10/00; C07C 2/00; C07C 2/68; C07C 2/42

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) &amp; Keywords: paraxylene, oxygenate, recycling, alkylating, methanol, dimethylether, hydrocarbon, benzene, toluene, molecular sieve

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y A	US 2010-0040517 AI (BROWN, S. H. et al.) 18 February 2010 See abstract and paragraphs [0011], [0012]-[0015], [0101]	1 3-4 2,5-10
Y A	US 2011-0190559 AI (BLESSING, C. D. et al.) 04 August 2011 See abstract and paragraphs [0006]-[0008], [0041], [0046], [0059]	3-4 1-2,5-10
A	US 2010-0261941 AI (HAGEMEISTER, M. P. et al.) 14 October 2010 See abstract, claim 1 and paragraphs [0010], [0014], [0018H0022]	1-10
A	US 2011-0092756 AI (LATTNER, J. R. et al.) 21 April 2011 See abstract, claims 1, 9-11 and paragraphs [0002], [0061]	1-10
A	US 2011-0092755 AI (LATTNER, J. R. et al.) 21 April 2011 See abstract and claims 1, 19	1-10
A	US 05043502 A (MARTINDALE, D. C. et al.) 27 August 1991 See abstract and claims 7-8	1-10

 Further documents are listed in the continuation of Box C. See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

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## INTERNATIONAL SEARCH REPORT

Information on patent family members

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