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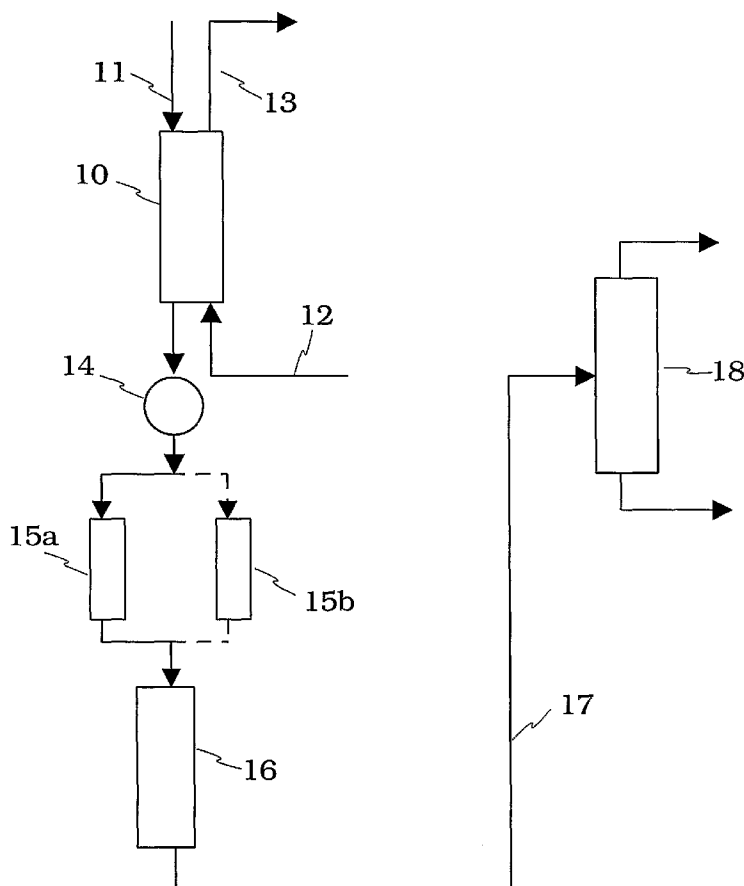
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[Continued on next page]

(54) Title: LIQUID PHASE AROMATICS ALKYLATION PROCESS



(57) Abstract: A process for the production of high octane number gasoline from light refinery olefins and benzene-containing aromatic streams such as reformate. Light olefins including ethylene and propylene are extracted from refinery off-gases, typically from the catalytic cracking unit, into a light aromatic stream such as reformate containing benzene and other single ring aromatic compounds which is then reacted with the light olefins to form a gasoline boiling range product containing alkylaromatics. The alkylation reaction is carried out in the liquid phase with a catalyst which preferably comprises a member of the MWW family of zeolites such as MCM-22 using a fixed catalyst bed.

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A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - C07C 2/68 (2007.01) USPC - 585/467 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) USPC - 585/467 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC - 585/467 and all relevant classifications (text search, see terms below) Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PubWEST(USPT,PGPB,EPAB,JPAB); DialogPRO(Engineering); Google Scholar Search Terms: zeolite, catalyst, temperature, pressure, MCM-22, ZSM-5											
C. DOCUMENTS CONSIDERED TO BE RELEVANT <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X ----- Y</td> <td>US 2004/0242404 A1 (Hwang et al.) 02 December 2004 (02.12.2004), entire document especially para [0054]-[0061] and Examples 1-3</td> <td>1-7, 10-14, 17 ----- 8-9, 15-16</td> </tr> <tr> <td>Y</td> <td>US 5,371,310 A (Bennett et al.) 06 December 1994 (06.12.1994), col 6, ln 19-26 and col 3, ln 30-31</td> <td>8-9, 15-16</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X ----- Y	US 2004/0242404 A1 (Hwang et al.) 02 December 2004 (02.12.2004), entire document especially para [0054]-[0061] and Examples 1-3	1-7, 10-14, 17 ----- 8-9, 15-16	Y	US 5,371,310 A (Bennett et al.) 06 December 1994 (06.12.1994), col 6, ln 19-26 and col 3, ln 30-31	8-9, 15-16
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