Title: A ZINC-CONTAINING METHANE AROMATIZATION CATALYST, METHOD OF MAKING AND METHOD OF USING THE CATALYST

Abstract: A catalyst for converting methane to aromatic hydrocarbons is described herein. The catalyst comprises an active metal or a compound thereof, zinc or a compound thereof and an inorganic oxide support wherein the active metal is added to the support as a metal oxalate. A method of making the catalyst and a method of using the catalyst are also described.
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

22 November 2012
A. CLASSIFICATION OF SUBJECT MATTER
INV. B01J23/28  B01J29/40  B01J37/08  C07C2/76

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)
B01J  C07C

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

Electronic database consulted during the international search (name of database and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
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<tr>
<td>X</td>
<td>wo 2009/124960 AI (BASF SE [DE]; KI ESLICH FRANK [DE]; C0ELH0 TSOU JOANA [DE]; YI LMAZ BI LG) 15 October 2009 (2009-10-15) claims 1, 4, 6, 7, 8, 9, 14, 15 preparation on steps A-F; examples; table 4.6 page 4, line 1 - page 15, line 36</td>
<td>1-31</td>
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<td>X</td>
<td>wo 2009/091336 AI (AGENCY SCIENCE TECH &amp; RES [SG]; MITSUI CHEMICALS INC [JP]; LIU YAN [SG]) 23 July 2009 (2009-07-23) catalyst C; examples 3, comparative example 3; table 1 page 17, line 1 - line 6 page 18, line 1 - line 18 claims 1, 11, 13, 20, 21, 22, 23</td>
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Further documents are listed in the continuation of Box C. See patent family annex.

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Date of the actual completion of the international search

25 September 2012

Date of mailing of the international search report

09/10/2012

Name and mailing address of the ISA

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Hol zwarth, Arnold
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<td>X</td>
<td>WO 2010/092851 Al (MEIDENSHA ELECTRIC MFG CO LTD [JP]; YAMAMOTO YO; YAMADA TOMOHI RO) 19 August 2010 (2010-08-19) the whole document</td>
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<td>&amp; US 2011/275873 Al (YAMAMOTO Y0 [JP] ET AL) 10 November 2011 (2011-11-10) paragraphs [0030], [0035] - [0040] paragraph [0043]; figures 1-4; examples claims 8-10</td>
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<td>X,P</td>
<td>WO 2011/143303 A2 (SHELL OIL CO [US]; SHELL INT RESEARCH [NL]; TANEV PETER TANEV [US]; DE) 17 November 2011 (2011-11-17) page 4, line 5 - page 6, line 4; claims; figures; examples</td>
<td>1-26</td>
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