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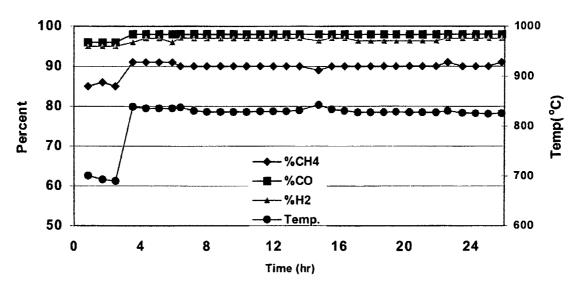
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(54) Title: RETICULATED CERAMIC FOAM CATALYSTS FOR SYNTHESIS GAS PRODUCTION



(57) Abstract: Reticulated ceramic monolithic catalysts and non-poisoning catalyst supports comprising one or more metal oxides of chromium, cobalt, nickel, an alkaline earth, a rare earth, or another sinterable metal oxide that are active in any of various chemical oxidation reactions are disclosed. Methods of making the new reticulated ceramic structures comprising impregnating an organic foam or other pore-templating material are also disclosed. Processes for the catalytic conversion of light hydrocarbons to products comprising carbon monoxide and hydrogen employing reticulated ceramic catalysts are described.



I'' RNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B01J37/02 B01J B01J35/04 C01B3/40 CO1B3/38 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) BOIJ COIB Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Υ US 6 007 781 A (SANDERS MICHELE W ET AL) 1,6,7,13 28 December 1999 (1999-12-28) example 3 Υ EP 0 588 691 A (RHONE POULENC CHIMIE) 24 23 March 1994 (1994-03-23) claims 1,16 Α EP 0 543 802 A (GEN MOTORS CORP) 26 May 1993 (1993-05-26) -/--X Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents *T* later document published after the international filing date or priority date and not in conflict with the application but 'A' document defining the general state of the art which is not considered to be of particular relevance cited to understand the principle or theory underlying the *E* earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the document is combined with one or more other, such docu- O document referring to an oral disclosure, use, exhibition or other means ments, such combination being obvious to a person skilled 'P' document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 31 August 2001 07/09/2001 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl. Fax: (+31-70) 340-3016

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