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(54) Title: CONTINUOUS CATALYTIC GENERATION OF POLYOLS FROM CELLULOSE WITH RECYCLE

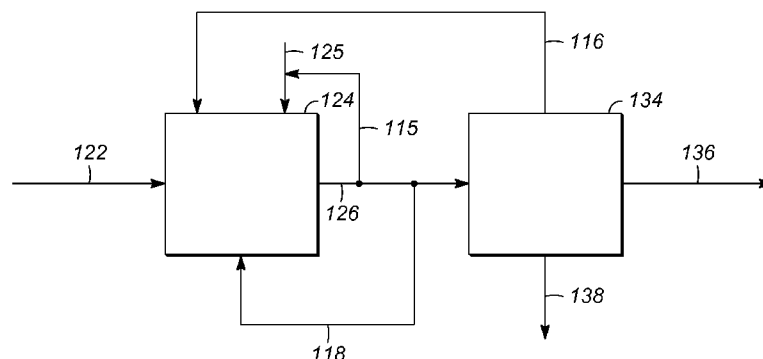


FIG. 1

(57) Abstract: A catalytic process for generating at least one polyol from a feedstock comprising cellulose is performed in a continuous manner. The process involves, contacting, continuously, hydrogen, water, and a feedstock comprising cellulose, with a catalyst to generate an effluent stream comprising at least one polyol, water, hydrogen, and at least one co-product. The water, hydrogen, and at least one co-product are separated from the effluent stream and recycled to the reaction zone. The polyol is recovered from the effluent stream.



A. CLASSIFICATION OF SUBJECT MATTER*C07C 29/94(2006.01)i, C07C 31/26(2006.01)i, C07C 31/18(2006.01)i, B01J 23/755(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 29/94; B01J 27/22; B01J 27/224; C07C 29/60; C07C 29/90; C07C 51/00; C07C 29/00; C07C 45/85

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) & Keywords:polyol, cellulose, saccharide, ethylene glycol, nickel, tungsten carbide, water, hydrogen

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2011-0046419 A1 (ZHANG TAO et al.) 24 February 2011 See paragraphs [0009] - [0011], [0021] - [0025], examples, tables and claims.	1-10
Y	US 2010-0255983 A1 (ZHANG TAO) 07 October 2010 See paragraphs [0014] - [0018], examples, tables and claims.	1-10
Y	US 2010-0256424 A1 (ZHANG TAO et al.) 07 October 2010 See paragraphs [0014] - [0020], examples, tables and claims.	1-10
Y	US 2011-0160482 A1 (NAGAKI DICK ALAN et al.) 30 June 2011 See abstract, paragraphs [0069] - [0087], examples and figures 1-4.	1-10
A	US 2010-0280275 A1 (CORTRIGHT RANDY D.) 04 November 2010 See examples and claims.	1-10



Further documents are listed in the continuation of Box C.



See patent family annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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