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(54) **Title:** PROCESS FOR FURFURAL PRODUCTION FROM BIOMASS

(57) **Abstract:** Furfural is produced from a lignocellulosic feedstock comprising glucan and xylan. The feedstock is contacted with water in the presence of an acid catalyst. The resulting mixture is contacted with at least one water-immiscible organic solvent to form a mixture comprising an aqueous phase and an organic phase. Under suitable reaction conditions, furfural is produced and preferentially partitions into the organic phase, from which it may be recovered.



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A. CLASSIFICATION OF SUBJECT MATTER***C07D 307/50(2006.01)i, C07D 307/48(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)

C07D 307/50; C07D 307/48; C07H 3/02

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: furfural, xylan, glucan, solvent, acid catalyst

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6441202 B1 (LIGHTNER; GENE E.) 27 August 2002 See abstract, column 2 line 19~29, column 3 line 29~38, claims 1~20	1-14, 17
X	US 2003-0032819 A1 (GENE E. LIGHTNER) 13 February 2003 See abstract, paragraph 14 and 28, claims 1~20	1-14, 17
X	US 2010-0004437 A1 (BINDER JOSEPH BARTHOLOMEW et al.) 07 January 2010 See abstract, paragraph 8, 23, and 45, table 8 and 9C, claims 1~38	1-14, 17



Further documents are listed in the continuation of Box C.



See patent family annex.

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INTERNATIONAL SEARCH REPORT

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6441202 B1	27.08.2002	None	
US 2003-0032819 A1	13.02.2003	US 6603026 B2	05.08.2003
US 2010-0004437 A1	07.01.2010	CA 2726126 A1	23.12.2009
		CN 102066304 A	18.05.2011
		EP 2303825 A1	06.04.2011
		EP 2303825 A4	23.11.2011
		WO 2009-155297 A1	23.12.2009