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(54) Title: PROCESS FOR RECYCLING POLYMERIC WASTE MATERIALS

(57) Abstract: The present invention provides an economic process which utilizes biodiesel and other high boiling esters containing short alkyl groups to produce liquid fuels from waste polymeric material. The polymeric material is added to a solvent having a predetermined cycle starting solvent volume. An energy source is introduced into the solvent for a predetermined time at a predetermined temperature and pressure to form a product. The energy source is removed and the product is cooled to a predetermined temperature to produce the fuel. The invention also encompasses the fuel formed by the process described.



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A. CLASSIFICATION OF SUBJECT MATTER*C10G 1/10(2006.01)i, C08J 11/04(2006.01)i, B29B 17/00(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)

IPC 8: C10G 1/10

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: IPC as above

Japanese Utility Models and Applications for Utility Models: IPC as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

e-KIPASS (KIPO internal) : "tire or tyre", "solvent", "biodiesel", "pyrolysis"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KR 10-0148205 B1 (S. H. Jung, et al) 01 Aug 1998 See abstract, pages 2-3, claims 1-2, and Fig. 1	1-51, 56-57
X	KR 10-2005-0076204 A (K. K. Kim) 26 Jun 2005 See abstract, pages 2-3, claims 1-3, and Fig. 1	1-51, 56-57
X	US 5821396 A (R. Bouziane) 13 Oct 1998 See abstract, col. 2, col. 7, lines 38-52, and claims 1-10	52-55, 58-76
X	US 6736940 B2 (B. Masemore, et al) 18 May 2004 See abstract, col.13, lines 13-24, example 1, and claims 1-8	52-55, 58-76
A	KR 10-2007-0010867 A (K. K. Kim, et al) 24 Jan 2007 See abstract and pages 3-5	1-76



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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