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[Continued on next page]

(54) Title: POLYURETHANE DISPERSIONS AND METHODS OF MAKING AND USING SAME

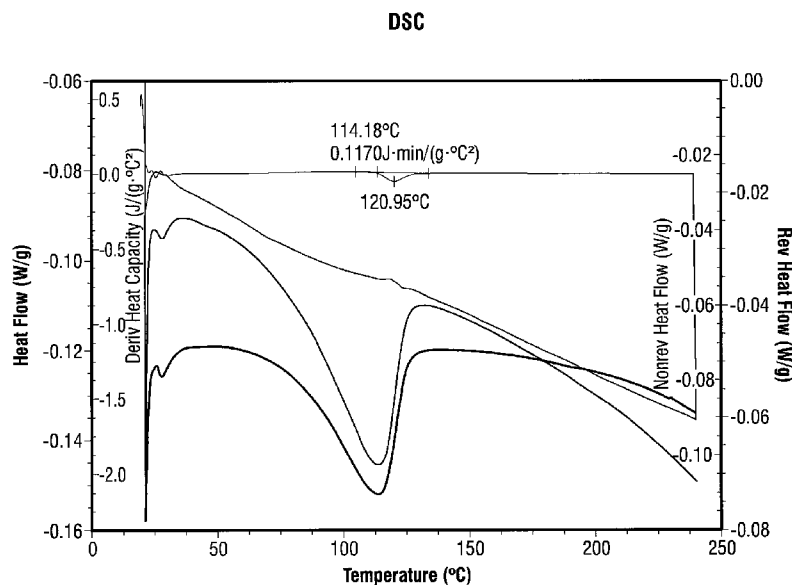


FIG. 1

(57) Abstract: The presently disclosed and claimed inventive concept(s) relates generally to polyethylene terephthalate ("PET") polymers, digested oligomeric derivatives of PET ("dPET"), functionalized oligomeric derivatives of dPET ("diPET"), and polyurethane dispersions ("PUD") made from or incorporating diPET therein.

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## INTERNATIONAL SEARCH REPORT

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**PCT/US2012/025980****A. CLASSIFICATION OF SUBJECT MATTER***C08G 18/42(2006.01)i, C08G 18/22(2006.01)i, C08L 75/04(2006.01)i, C08J 3/03(2006.01)i, C09J 175/04(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)

C08G 18/42; C07C 67/02; C08F 2/16; C08G 64/00; B32B 5/16; C08G 77/06

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) &amp; Keywords: polyurethane, polyisocyanate, solubilizing monomer, terephthalate containing hydroxyl group

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,046,295 A (FRISCH JR., KURT C. et al.) 04 April 2000 See ABSTRACT and claims 1, 2, 3.	1-14
Y	US 5,898,059 A (TROJAN, KATHLEEN L.) 27 April 1999 See ABSTRACT, column 4 lines 41-44 and claims 24, 25.	1-14
A	SINHA, VIJAYKUMAR et al. Pet Waste Management by Chemical Recycling: A Review. Journal of polymers and the environment, 2010. Vol.18, No.1, pp.8-25. See page 8 right column, page 20 right column line 42 - page 23 left column line 16.	1-14
A	US 2006-0251896 A1 (FERENCZ, JOSEPH M. et al.) 04 April 2000 See ABSTRACT, paragraphs [0043], [0058], [0071] and claims 1, 9-13.	1-14
A	US 2005-0096482 A1 (TAMADA, RYOZO et al.) 05 May 2005 See ABSTRACT, paragraphs [0024], [0026], [0028] and claims 1, 2, 3.	1-14

 Further documents are listed in the continuation of Box C. See patent family annex.

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