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(54) **Title:** COMPOSITIONS AND METHODS FOR MAKING POLYESTERS AND ARTICLES THEREFROM

(57) **Abstract:** Polyester materials, methods for making polyesters materials, and uses of the polyester materials in binder materials and articles of manufacture are disclosed. In one embodiment, a process is provided for preparing a polyester solution, including mixing monomers of at least one organic acid containing at least three carboxylic groups and at least one multi-hydroxyl alcohol containing at least three hydroxyl groups to form a reaction mixture, heating the reaction mixture to a first temperature, polymerizing the monomers at the first temperature until reaching an acid value from about 200 to about 400 mg KOH/g, adjusting the temperature to a second temperature less than the first temperature, and forming the polyester solution. The polyester materials may be mixed with cross-linking materials to form binder materials. The binder material may then be used to form articles of manufacture.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US13/45420

| A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - C08F 283/04; C08G 63/12, 64/14 (2013.01) USPC - 525/375, 33, 437 According to International Patent Classification (IPC) or to both national classification and IPC | | |
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| B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC(8): C08F 283/04; C08G 63/12, 64/14 (2013.01) USPC: 525/375, 33, 437, 440.072 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 practicable, search terms used) MicroPatent (US-G, US-A, EP-A, EP-B, WO, JP-bib, DE-C,B, DE-A, DE-T, DE-U, GB-A, FR-A); Google; Google Patent; Google Scholar; ProQuest; KEYWORDS: melamine, acrylic, tri*carboxylicacid*, tri*ol*, polyol*, Polymeriz*, polyester*, acid value, cross-link* | | |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | |
| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
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| A | US 6350850 B1 (UDEA, M et al.) 26 February 2002; entire document | 1-33 |
| <input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> | | |
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