

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 April 2006 (06.04.2006)

PCT

(10) International Publication Number
WO 2006/036545 A1

(51) International Patent Classification⁷: C08G 64/30, B29C 47/76, C08F 6/06

(21) International Application Number:
PCT/US2005/032655

(22) International Filing Date:
13 September 2005 (13.09.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/951,574 27 September 2004 (27.09.2004) US

(71) Applicant (for all designated States except US): GENERAL ELECTRIC COMPANY [US/US]; 1 River Road, Schenectady, NY 12345 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MCCLOSKEY, Patrick, Joseph [US/US]; 10 Meadowbrook Road, Watervliet, NY 12189 (US). SILVI, Norberto [US/US]; 10 Muirfield Lane, Clifton Park, NY 12065 (US). NISOLI, Alberto [IT/US]; 1365 Van Antwerp Road, Apt. E-40, Niskayuna, NY (US). GIAMMATTEI, Mark [US/US]; 21 Fox Street, Selkirk, NY 12158 (US).

(74) Agent: WINTER, Catherine, J.; Patent Counsel, General Electric Company, 3135 Easton Turnpike (W3C), Fairfield, CT 06828 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

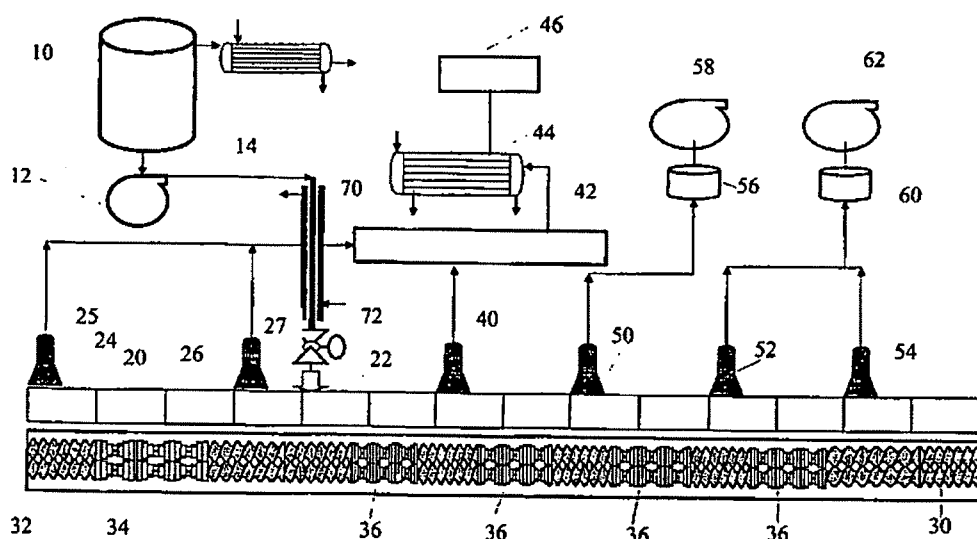
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report

[Continued on next page]

(54) Title: PROCESS TO MAKE POLYCARBONATE FROM BISMETHYLSALICYLCARBONATE



(57) Abstract: The present invention relates to a method of preparing polycarbonate comprising the steps of: (i) introducing to an extruder through a feed port a plurality of reaction components comprising a polycarbonate oligomer, an activated carbonate residue, and a transesterification catalyst, wherein the extruder comprises the feed port, a first back vent port, and a polycarbonate exit port, wherein the feed port is located between the first back vent port and the polycarbonate exit port, and wherein the resistance to flow of the reaction components from the feed port to the first back vent port is less than or equal to the resistance to flow of the reaction components from the feed port to the polycarbonate exit port; and (ii) extruding the reaction components at one or more temperatures in a range between 100 °C and 400 °C, wherein during the extrusion of the reaction components, activated carbonate residue is removed through the first back vent port, thereby preparing a polycarbonate.

WO 2006/036545 A1

WO 2006/036545 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.