

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
10 March 2011 (10.03.2011)

PCT

(10) International Publication Number
WO 2011/026171 A1

(51) International Patent Classification:

C08G 63/64 (2006.01) **C08G 63/91** (2006.01)
C08L 3/00 (2006.01) **C08L 3/06** (2006.01)
C08L 33/02 (2006.01) **C08L 69/00** (2006.01)

(21) International Application Number:

PCT/AU2010/001100

(22) International Filing Date:

26 August 2010 (26.08.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2009904270 3 September 2009 (03.09.2009) AU

(71) Applicant (*for all designated States except US*): **TRISTANO PTY LTD** [AU/AU]; Suite 5-10, Level 5, Pacific Tower, 737-741 Burwood Road, Hawthorn, Victoria 3122 (AU).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **CHANGPING, Chen** [CN/CN]; SD9 Wuyi Garden, Jiangning District, Nanjing, Jiangsu (CN). **SCHEIRS, John** [AU/AU]; 3 Esplanade Lane, Edithvale, Victoria 3196 (AU).

(74) Agents: **TOZER, Ramon Dean** et al.; Davies Collison Cave, 1 Nicholson Street, Melbourne, Victoria 3000 (AU).

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

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: POLYMER/THERMOPLASTIC STARCH COMPOSITIONS

(57) Abstract: The invention relates to a biodegradable polymer composition comprising the following components (a)-(d) and/or a reaction product(s) derived from melt mixing the components: (a) polyalkylene carbonate; (b) thermoplastic starch (TPS) and/or its constituent components; (c) polymer having pendant carboxylic acid groups; and (d) transesterification catalyst.



WO 2011/026171 A1