



(51) International Patent Classification:

B01J 21/06 (2006.01) **B01J 37/03** (2006.01)
B01J 37/10 (2006.01) **C01G 23/04** (2006.01)

(21) International Application Number:

PCT/SG2010/000296

(22) International Filing Date:

11 August 2010 (11.08.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/232,939 11 August 2009 (11.08.2009) US

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(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: TITANATE / TITANIA COMPOSITE NANOPARTICLE

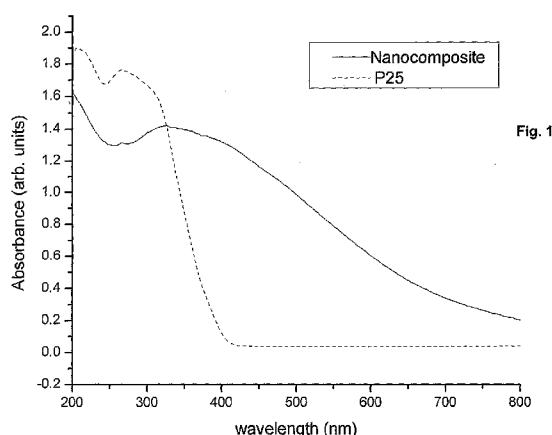


Fig. 1

(57) Abstract: The present invention relates to a photocatalytically active nanoparticulate material. A nanoparticle of the invention is a composite nanoparticle having two crystalline phases: hydrogen titanate and titania, which are uniformly mixed in the nanoparticle. The invention also relates to forming a nanoparticulate composite material by heating a basic titania sol under solvothermal conditions.