



(51) International Patent Classification:

C01B 13/32 (2006.01) **C04B 35/443** (2006.01)
C01F 7/16 (2006.01) **B82Y 30/00** (2011.01)
B01J 3/08 (2006.01) **C01G 45/12** (2006.01)
C01G 23/047 (2006.01) **C06B 47/14** (2006.01)

(21) International Application Number:

PCT/IB2011/054637

(22) International Filing Date:

18 October 2011 (18.10.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

105340 18 October 2010 (18.10.2010) PT

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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, QA, RO, RS, RU, RW, 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, RW, 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, RS, 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: CONTINUOUS PROCESS FOR NANOMATERIAL SYNTHESIS FROM SIMULTANEOUS EMULSIFICATION AND DETONATION OF AN EMULSION

(57) Abstract: The present invention refers to a continuous process for *in secco* nanomaterial synthesis from the emulsification and detonation of an emulsion. The said process combines the simultaneous emulsification and detonation operations of the emulsion, thus assuring a production yield superior to 100 kg/h. When guaranteeing that the sensitization of the emulsion occurs mainly upon its feeding into the reactor, it is possible to avoid the accumulation of any class-1 substances along the entire synthesis process, thus turning it into an intrinsically safe process. Afterwards, dry collection of the nanomaterial avoids the production of liquid effluents, which are very difficult to process. Given that there's neither accumulation nor resort to explosive substances along the respective stages, the process of the present invention becomes a safe way of obtaining nanomaterial, thus allowing it to be implemented in areas wherein processes with hazardous substance aid are not allowed.

