

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
26 February 2004 (26.02.2004)

PCT

(10) International Publication Number  
**WO 2004/016696 A1**

(51) International Patent Classification<sup>7</sup>: **C09C 1/36**

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(21) International Application Number:  
PCT/IE2002/000120

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

(22) International Filing Date: 16 August 2002 (16.08.2002)

(25) Filing Language: English

(26) Publication Language: English

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(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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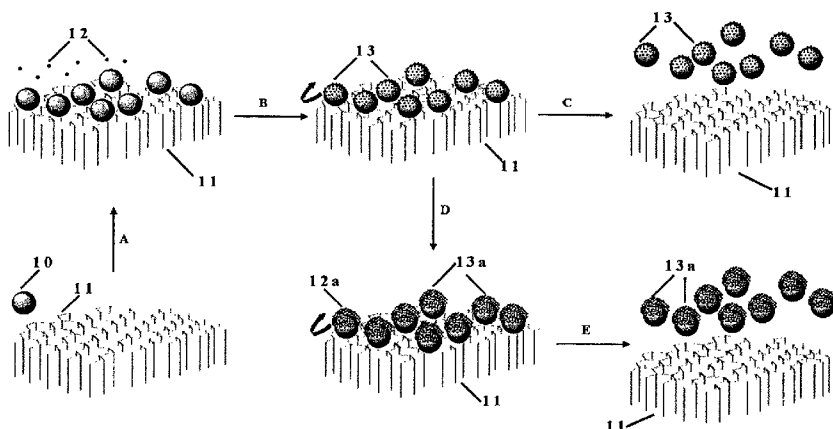
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Published:

— with international search report

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.

(54) Title: METHOD FOR THE MANUFACTURE OF PATTERNED MICRO-AND NANOPARTICLES AND USE OF SUCH PARTICLES IN THE ASSEMBLY OF NANOSCALE ARCHITECTURES IN SOLUTION



(57) Abstract: A method for the manufacture of patterned microparticles comprises immobilising microparticles, including nanoparticles, to be patterned on a surface of a porous membrane, causing an inorganic or organic coating material which can bind to exposed surfaces of said microparticles, and which can permeate through the pores of said membrane, to flow relative to said immobilised microparticles, and removing the microparticles from the membrane following binding of said coating material. The method enables one to prepare a wide range of anisotropically-modified patterned microparticles, including microparticles patterned with nanoparticles or a biomolecular material such as DNA and protein. The patterned microparticles produced can be used in wide range of applications in health, information and communication, and sustainable environment such as shelter, clothing, energy, food, transport and security.