19/03/03
20030136 95

162162

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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
11 April 2002 (11.04.2002)

PCT

(10) International Publication Number
WO 02/28522 A1

(51) International Patent Classification[7]: B01J 19/00, C23C 14/00, 14/04

(21) International Application Number: PCT/US01/21321

(22) International Filing Date: 7 July 2001 (07.07.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/677,448 29 September 2000 (29.09.2000) US

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

(72) Inventor: SUN, Xiao-Dong; 1455 Dorwaldt Boulevard, Schenectady, NY 12309 (US).

(74) Agents: SNYDER, Bernard et al.; General Electric Company, 3135 Easton Turnpike W3C, Fairfield, CT 06431 (US).

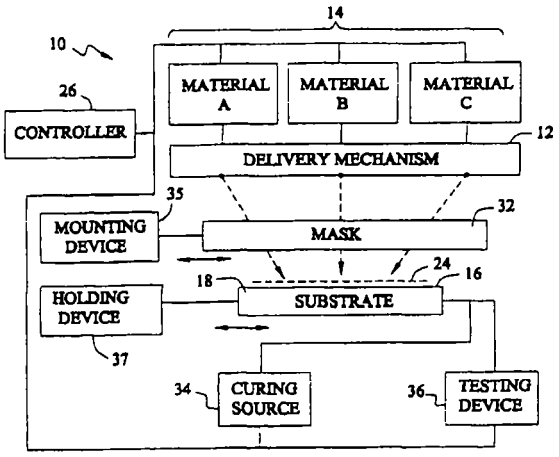
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,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

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

Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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: COMBINATORIAL SYSTEMS AND METHODS FOR COATING WITH ORGANIC MATERIALS



(57) Abstract: Systems and methods for high throughput fabrication and analysis of an array of coated materials. A system (10) of one embodiment for making an array of coated materials includes a plurality of organic materials (14) and a delivery mechanism (12) for delivering each of the plurality of organic materials to a delivery area (24). The delivery mechanism has a plurality of sources (38) each associated with a corresponding one of the plurality of organic materials. Each of the plurality of sources provides a thickness distribution profile (18) of the corresponding organic material at least partially positioned in the delivery area, where at least one of the thickness distribution profiles varies across the delivery area. A method of one embodiment for making an array of coated materials includes providing a plurality of organic materials (14) and selectively delivering each of the plurality of organic materials to a delivery area (24). Each of the delivered plurality of organic materials has a thickness distribution profile (48) at least partially positioned in the delivery area, where at least one of the thickness distribution profiles varies across the delivery area.

WO 02/28522 A1

ACTION