

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 October 2006 (12.10.2006)

PCT

(10) International Publication Number
WO 2006/107277 A1

(51) International Patent Classification:

G01D 5/353 (2006.01) **G01L 1/24** (2006.01)
G01D 5/26 (2006.01) **G02B 6/34** (2006.01)

(21) International Application Number:

PCT/SG2006/000085

(22) International Filing Date: 5 April 2006 (05.04.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/668,466 5 April 2005 (05.04.2005) US

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

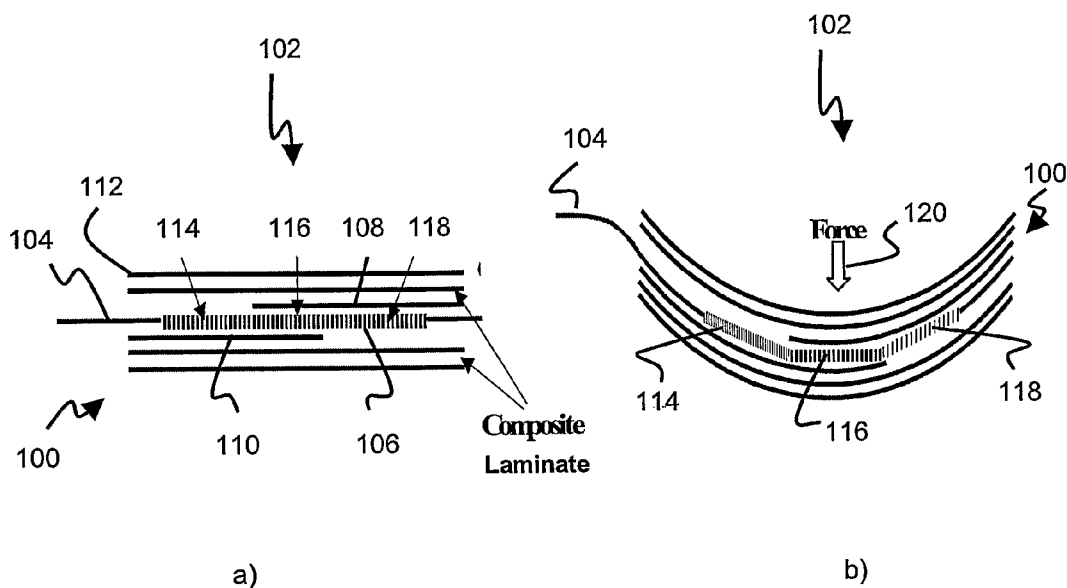
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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: SENSOR FIBER STRAIN SENSOR



(57) Abstract: An optical fiber strain sensor (102), a method of fabricating the same, and a method of sensing strain. The method of strain sensing comprises providing an optical fiber (104) having a fiber Bragg grating (FBG) formed therein; subjecting the optical fiber (104) to a strain inducing force (120) such that a grating period in a first portion of the FBG compresses (114) and a grating period in a second portion of the FBG extends (118); and optically interrogating the FBG to determine a measure of a change in bandwidth of the FBG as a result of the compression (114) and extension (118) of the grating periods in the first and second portion respectively; whereby the measure of the change in the bandwidth is representative of the strain induced.

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