

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
5 August 2010 (05.08.2010)

PCT

(10) International Publication Number
WO 2010/088591 A9

(51) International Patent Classification:

G01D 5/353 (2006.01) *G01N 21/00* (2006.01)*G01D 5/26* (2006.01) *G02B 6/00* (2006.01)*G01F 23/292* (2006.01)

(21) International Application Number:

PCT/US2010/022715

(22) International Filing Date:

1 February 2010 (01.02.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/148,564 30 January 2009 (30.01.2009) 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, 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, 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))

— with amended claims and statement (Art. 19(1))

— with information concerning authorization of rectification of an obvious mistake under Rule 91.3 (b) (Rule 48.2(i))

(88) Date of publication of the international search report:

4 November 2010

Date of publication of the amended claims and statement: 20

January 2011

(48) Date of publication of this corrected version:

1 September 2011

(15) Information about Correction:

see Notice of 1 September 2011

(54) Title: SIDE ILLUMINATED MULTI POINT MULTI PARAMETER OPTICAL FIBER SENSOR

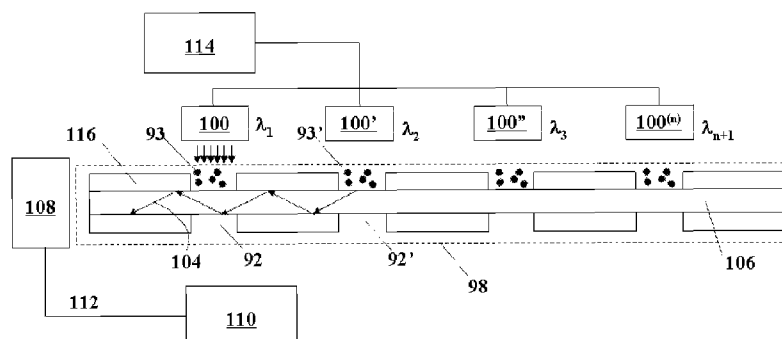


FIG. 9a.

(57) **Abstract:** A side illuminated multi point multi parameter optical fiber sensor that requires no sensitive coating is provided. This sensor comprises an optical fiber having at least one removed cladding section as the sensitive region, at least one probing light source that side illuminates the fiber, a power supply, a detector, a signal processor and a display. The sensitive optical fiber is optically affected by the presence of a measurand medium that can fluoresce, phosphoresce, absorb and/or scatter the probing light. This probing light is guided by the fiber core towards a detector which measures the light intensity and this light intensity is correlated with a measurand.