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

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
18 January 2007 (18.01.2007)

PCT

(10) International Publication Number
WO 2007/008265 A2

(51) International Patent Classification:
G01B 9/02 (2006.01)

(21) International Application Number:
PCT/US2006/013330

(22) International Filing Date: 10 April 2006 (10.04.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/670,218	11 April 2005 (11.04.2005)	US
60/711,020	24 August 2005 (24.08.2005)	US
60/714,258	6 September 2005 (06.09.2005)	US
60/737,102	15 November 2005 (15.11.2005)	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).

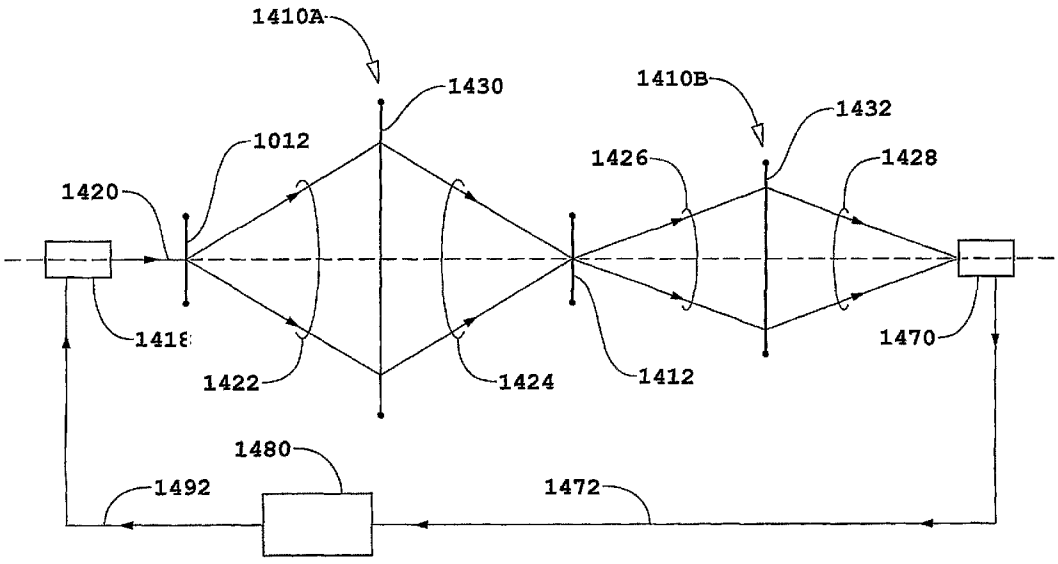
Published:

— *without international search report and to be republished upon receipt of that report*

(48) Date of publication of this corrected version:
22 March 2007

[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR IN SITU AND EX SITU MEASUREMENT OF SPATIAL IMPULSE RESPONSE OF AN OPTICAL SYSTEM USING PHASE-SHIFTING POINT-DIFFRACTION INTERFEROMETRY



(57) Abstract: A point diffraction interferometer for measuring properties of a spatial impulse response function, the interferometer including: a source for generating a source beam; an optical system; an optical element including a test object located in an object plane of the optical system, the test object including a diffraction point for generating from the source beam a measurement beam that passes through the optical system, wherein the optical element also generates from the source beam a reference beam that is combined with the measurement beam to generate an interference pattern in an image plane of the optical system, the interference pattern representing the spatial impulse response function of the optical system.

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(15) Information about Correction:
see PCT Gazette No. 12/2007 of 22 March 2007

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.