

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
27 April 2006 (27.04.2006)

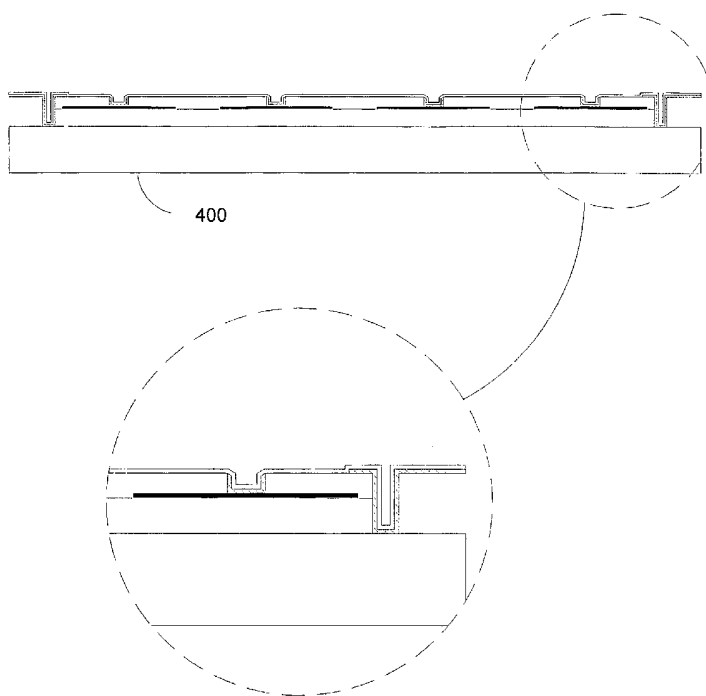
PCT

(10) International Publication Number
WO 2006/044238 A3

- (51) International Patent Classification:
G02B 26/08 (2006.01) *G02B 26/00* (2006.01)
- (21) International Application Number:
PCT/US2005/036081
- (22) International Filing Date: 5 October 2005 (05.10.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
10/969,251 19 October 2004 (19.10.2004) US
- (63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:
US 10/969,251 (CON)
Filed on 19 October 2004 (19.10.2004)
- (71) Applicant (for all designated States except US): **REFLECTIVITY, INC.** [US/US]; 350 Potrero Avenue, Sunnyvale, CA 94085 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **HEUREUX, Peter** [US/US]; 155 Lazywoods Road, Felton, CA 95018 (US).
- (74) Agent: **MUIR, Gregory, R.**; Reflectivity, Inc., 350 Potrero Avenue, Sunnyvale, CA 94085 (US).
- (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, 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 (patent), 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

[Continued on next page]

(54) Title: MICROMIRROR ARRAY DEVICE AND A METHOD FOR MAKING THE SAME



(57) Abstract: The spatial light modulator of the present invention comprises an array of micromirrors, each of which has a reflective deflectable mirror plate. A set of posts are provided for holding the mirror plates on a substrate, but not all micromirrors of the micromirror array have posts.

WO 2006/044238 A3



— *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.

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

31 August 2006

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/36081

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **G02B 26/08**(2006.01);**G02B 26/00**(2006.01)

USPC: 359/223,224,291

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 359/223,224,291

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y,P --- A	US 6,885,493 (Ljungblad et al), 28 Januaray 2002 (28.01.2002), column 10, lines 57-67	1-32,34-36,41-66,73-79 ----- 33,37-40,67-72

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

22 May 2006 (22.05.2006)

Date of mailing of the international search report

11 JUL 2006

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-6013

Authorized officer

Rhonda Lee Bell

Jerry Fang

Telephone No. 5712726013