



- (51) **International Patent Classification:**
G02B 5/20 (2006.01) *G02C 1/06* (2006.01)
- (21) **International Application Number:**
PCT/US2012/033158
- (22) **International Filing Date:**
11 April 2012 (11.04.2012)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
61/476,058 15 April 2011 (15.04.2011) US
- (71) **Applicant (for all designated States except US):** **APPLIED BOTANICS, INC. DBA METHOD SEVEN** [US/US]; 2851 Research Park Drive, Suite E, Soquel, California 95073 (US).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** **GOLDBERG, Jeffrey** [US/US]; 1066 41st Avenue, #B202, Capitola, California 95010 (US). **SHILLER, Barry** [US/US]; 2655 Church Avenue, San Martin, California 95046 (US).
- (74) **Agent:** **RAUBVOGEL, Amir H.**; Raubvogel Law Office, 820 Lakeview Way, Redwood City, California 94062 (US).

(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, QA, RO, RS, RU, RW, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, 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, RS, 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))

(88) **Date of publication of the international search report:**
24 January 2013

(54) **Title:** OPTICAL GLASS FILTER FOR PRODUCING BALANCED WHITE LIGHT FROM A HIGH PRESSURE SODIUM LAMP SOURCE

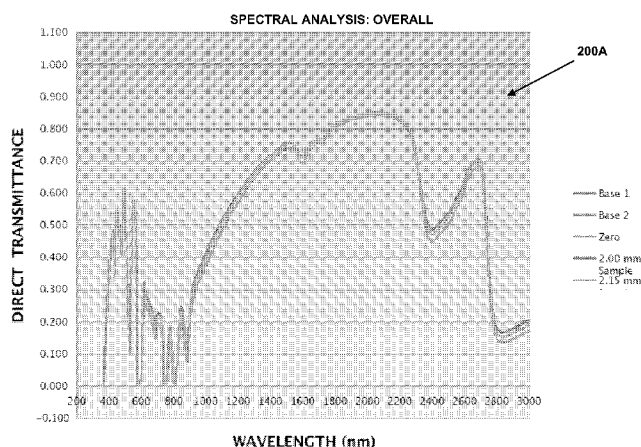


FIG. 2A

(57) **Abstract:** In various embodiments, the present invention provides a way to provide natural looking colors in an environment where HPS lighting is used. In at least one embodiment, the present invention is implemented as a color-enhanced glass lens that filters red/yellow light, ultraviolet light, and infrared radiation created by High Pressure Sodium (HPS) lighting and other forms of sodium flare, and in addition balances the remaining visual light spectrum to provide a natural white color appearance referred to as Daylight Balanced Light (DBL). DBL is achieved by balancing the color spectrum under HPS conditions to approximate what the human eye perceives as natural white light as provided by natural sunlight (5500° Kelvin). In various embodiments, the techniques of the present invention can be used to manufacture lenses, filters, windows, eyeglasses, sunglasses, contact lenses, and the like.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/033158**A. CLASSIFICATION OF SUBJECT MATTER****G02B 5/20(2006.01)i, G02C 1/06(2006.01)i**

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)

G02B 5/20; A61N 5/06; C03C 3/076; F21V 9/00; C03C 4/00

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: high-pressure sodium, filter, daylight, natural light

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6530678 B1 (KIRSTEN; MARTIN) 11 March 2003 See abstract, figure 2, claim 1	1-24
A	US 05059561 A (CIOLEK; SALLY et al.) 22 October 1991 See abstract, figures 1-4, claim 1	1-24
A	WO 97-20596 A1 (GLAXO GROUP LIMITED) 12 June 1997 See abstract, figures 1-3, claim 1	1-24



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

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

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"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

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Date of the actual completion of the international search

30 OCTOBER 2012 (30.10.2012)

Date of mailing of the international search report

30 OCTOBER 2012 (30.10.2012)

Name and mailing address of the ISA/KR

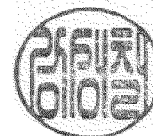
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Facsimile No. 82-42-472-7140

Authorized officer

KANG Sung Chul

Telephone No. 82-42-481-5666



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2012/033158

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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