

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
4 May 2006 (04.05.2006)

PCT

(10) International Publication Number
WO 2006/047653 A3

- (51) International Patent Classification:
G01J 4/00 (2006.01) G01B 9/02 (2006.01)
- (21) International Application Number:
PCT/US2005/038689
- (22) International Filing Date: 25 October 2005 (25.10.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/621,660 26 October 2004 (26.10.2004) US
- (71) Applicant and
(72) Inventor (for all designated States except US): SAHA, Pamela [US/US]; 3138 Kings Highway, Brooklyn, New York 11234 (US).
- (74) Agents: WRAY, James et al.; 1493 Chain Bridge Road, Suite 300, McLean, Virginia 22101 (US).

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, 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).

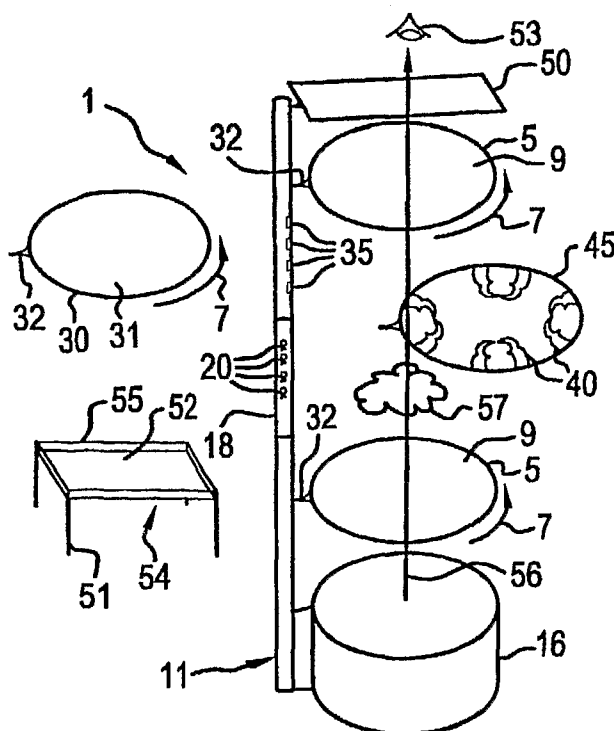
Published:
— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
13 September 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.

(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,

(54) Title: POLARISCOPE TOY AND ORNAMENT WITH ACCOMPANYING PHOTOELASTIC AND/OR PHOTOPLASTIC DEVICES



(57) Abstract: A variety of toy polariscopes (1) are simpler in design and less costly than precision instruments used in scientific research and stress analysis of materials and structures. The toy polariscopes are designed for a variety of objects (40) that may exhibit photoelastic properties such as glass, plastic, Plexiglas, gel candle material and other gels, and even edible photoelastic objects. They are specially designed for objects of various sizes with a variety of purposes such as objects to enhance learning in a variety of conditions and experiences. Special objects are designed to go with the toy polariscopes such as edible and inedible photoelastic objects, photoelastic candle material, a variety of photoelastic/photoelastic stands capable of a variety of displays in interaction with other designed photoelastic objects capable of a variety of interaction and displays. Other optical phenomena may also be observed.

WO 2006/047653 A3

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US05/38689

A. CLASSIFICATION OF SUBJECT MATTER
 IPC: **G01J 4/00**(2006.01);**G01B 9/02**(2006.01)

 USPC: 356/366,450
 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. : 356/366,450

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.
X,Y	US 5,172,270 (PEIPERL) 15 December 1992 (15.12.1978), Figure 1, column 2, lines 38-47	38, 42, 50-51, 63
Y	US 3,841,730 (KARELITZ) 15 October 1974 (15.10.1974), Figures 1 & 3, column 2, lines 38-45, column 4, lines 31-59	1, 3-6, 9, 14, 26-27, 31-32, 46
Y	US 2,423,371 (CARRANZA) 26 July 1944 (26.07.1944), column 2, lines 36-41	2
Y	US H76 (COTTERMAN) 1 July 1986 (01.07.1986), Figures 1, 2 & 3, column 2, lines 29-35 & 62-65, column 2, line 54 - column 3, line 2, column 3, lines 30-31,	7-8, 14-18, 20-25, 28, 33-37, 53-55, 59-60
Y	US 6,598,981 (WALLACH) 29 July 2003 (29.07.2003), Figure 1	10
Y	US 6,219,139 (LESNIAK) 17 April 2001 (17.04.2001), Figures 1, 6, 15	11, 68-70
Y	US 5,029,954 (EILRICH et al) 9 July 1991 (09.07.1991), Figures 1 & 3, column 3, lines 20-25	12-13,29-30,39-41, 44, 61-62, 66-67

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

"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

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

"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

"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)

"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

"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

"&" document member of the same patent family

Date of the actual completion of the international search
29 June 2007 (29.06.2007)

Date of mailing of the international search report
27 JUL 2007

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) 273-3201

Authorized officer *Rhonda for Hess*
 Gregory J Toatley
 Telephone No. (575) 272-1550

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US05/38689

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 3,885,865 (STERN et al) 27 May 1975 (27.05.1975), Figure 2	19
Y,P	US 7,011,425 (MICELE Jr et al) 14 March 2006 (14.03.2006),	71-79
Y	US 4,710,760 (KASDAY) 1 December 1987 (01.12.1987), Figure 1, abstract	43
Y	US 6,160,254 (ZIMMERMAN) 12 December 2000 (12.12.2000), Figures 4 & 6	64
Y	US 3,927,461 (PEIPERL) 23 December 1975 (23.12.1975), Figures 1 & 2, column 3, lines 27-30, column 8, lines 5-11	71-72, 78-79
Y	US 6,471,731 (ELLIOTT III et al) 29 October 2002 (29.10.2002), abstract, Figure 1, column 4, lines 41-44	73-74, 76