

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
15 October 2009 (15.10.2009)

(10) International Publication Number  
**WO 2009/126497 A3**

- (51) **International Patent Classification:**  
G03B 17/00 (2006.01)
- (21) **International Application Number:**  
PCT/US2009/039171
- (22) **International Filing Date:**  
1 April 2009 (01.04.2009)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**  
12/098,703 7 April 2008 (07.04.2008) US
- (71) **Applicant (for all designated States except US):** DISNEY ENTERPRISES, INC [US/US]; 500 S. Buena Vista Street, Burbank, CA 91521-0165 (US).
- (72) **Inventor; and**
- (75) **Inventor/Applicant (for US only):** JOSEPH, Daniel, M. [US/US]; 500 S. Buena Vista Street, Burbank, CA 91521 (US).
- (74) **Agent:** LEMBKE, Kent, A.; Marsh Fischmann & Breyfogle LLP, 8055 E. Tufts Avenue, Suite 450, Denver, CO 80237 (US).

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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, 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, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declarations under Rule 4.17:**

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

**Published:**

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) **Date of publication of the international search report:**  
30 December 2009

(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, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,

(54) **Title:** DIGITAL CAMERA-PROJECTOR HYBRID

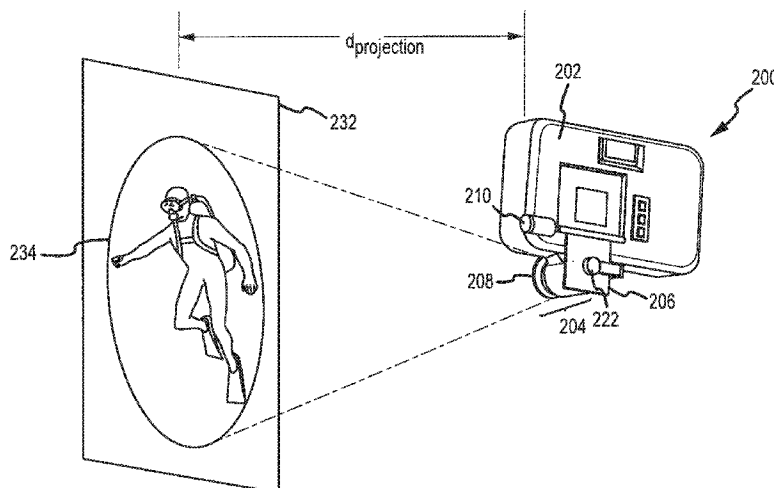


FIG. 2E

(57) **Abstract:** A camera-projector assembly (200) for viewing captured images in a near-view mode and in a distal-view projection mode. The assembly (200) includes a camera housing (202) and an image capture assembly (110) within the housing (202) collecting image data (119). The camera-projector assembly (200) includes a projection assembly (204) mounted on the camera housing (202) that includes a projection lens (208) and a projection light source (222). A transmissive display (206) such as an LCD is provided external to the camera housing (202) and adapted to be positionable in a first position proximate to the camera housing (202) and in a second position between the projection lens (208) and light source (222). The transmissive display (206) is positionable against an external surface of the camera housing (202) when it is in the first position and at least partially spaced apart from the external surface in the second position. The transmissive display (206) may be rotated or slid from the first to the second position on the camera housing (202).



WO 2009/126497 A3

# INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2009/039171

**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. G03B17/00

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)  
G03B

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 practical, search terms used)

EPO-Internal, WPI Data, BIOSIS, COMPENDEX, EMBASE, FSTA, INSPEC, IBM-TDB

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 06 118337 A (OLYMPUS OPTICAL CO) 28 April 1994 (1994-04-28) abstract; figures 1,6	1-9, 23-30
X	US 5 315 334 A (INANA KATSUYA [JP]) 24 May 1994 (1994-05-24) column 3, line 16 - column 4, line 54; figures 1-8	1-9, 23-30
A	US 2002/176015 A1 (LICHTFUSS HANS A [US]) 28 November 2002 (2002-11-28) paragraph [0015] - paragraph [0044]; figures 1-3	1-9, 23-30
A	EP 1 387 211 A (SONY INT EUROP GMBH [DE]) 4 February 2004 (2004-02-04) paragraph [0034] - paragraph [0047]; figures 1-7	1-9, 23-30
	----- -/--	

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 document but 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

29 June 2009

Date of mailing of the international search report

29/10/2009

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040,  
Fax: (+31-70) 340-3016

Authorized officer

Tomezzoli, Giancarlo

INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2009/039171

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 179 199 A (LAND EDWIN H [US]) 18 December 1979 (1979-12-18) column 3, line 16 - column 7, line 9; figures 1-4  -----	1-9, 23-30

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2009/039171

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.
  
2.  As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
  
3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-9, 23-30

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-9, 23-30

Image capture device comprising a projection assembly  
---

2. claims: 10-22

consumer device comprising a projection assembly  
---

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2009/039171

Patent document cited in search report	Publication date	Publication date	Patent family member(s)	Publication date
JP 6118337	A	28-04-1994	NONE	
US 5315334	A	24-05-1994	JP 4287574 A	13-10-1992
US 2002176015	A1	28-11-2002	DE 10217299 A1 GB 2377580 A JP 2002369050 A TW 548966 B	12-12-2002 15-01-2003 20-12-2002 21-08-2003
EP 1387211	A	04-02-2004	CN 1472591 A DE 60204310 D1 DE 60204310 T2 JP 4307929 B2 JP 2004040817 A KR 20040010164 A US 2004017547 A1	04-02-2004 30-06-2005 26-01-2006 05-08-2009 05-02-2004 31-01-2004 29-01-2004
US 4179199	A	18-12-1979	NONE	