

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
13 February 2003 (13.02.2003)

PCT

(10) International Publication Number
WO 03/011348 A3

(51) International Patent Classification⁷: G03B 17/24,
A61L 9/03, H04N 1/00, B41J 2/325

Lucy [GB/GB]; 40 Woodbridge Road, Knowle, Bristol BS4 2EU (GB). FROHLICH, David, Mark [GB/GB]; 17 Briarwood, Westbury-on-Trym, Bristol BS9 3SS (GB).

(21) International Application Number: PCT/GB02/03440

(22) International Filing Date: 26 July 2002 (26.07.2002)

(74) Agent: LAWRENCE, Richard, Anthony; Hewlett-Packard Limited, Intellectual Property Section, Filton Road, Stoke Gifford, Bristol BS34 8QZ (GB).

(25) Filing Language: English

(26) Publication Language: English

(81) Designated States (*national*): JP, US.

(30) Priority Data:
0118667.5 31 July 2001 (31.07.2001) GB

(84) Designated States (*regional*): European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR).

(71) Applicant (*for all designated States except US*):
HEWLETT-PACKARD COMPANY [US/US]; 3000 Hanover Street, Palo Alto, CA 94304 (US).

Published:

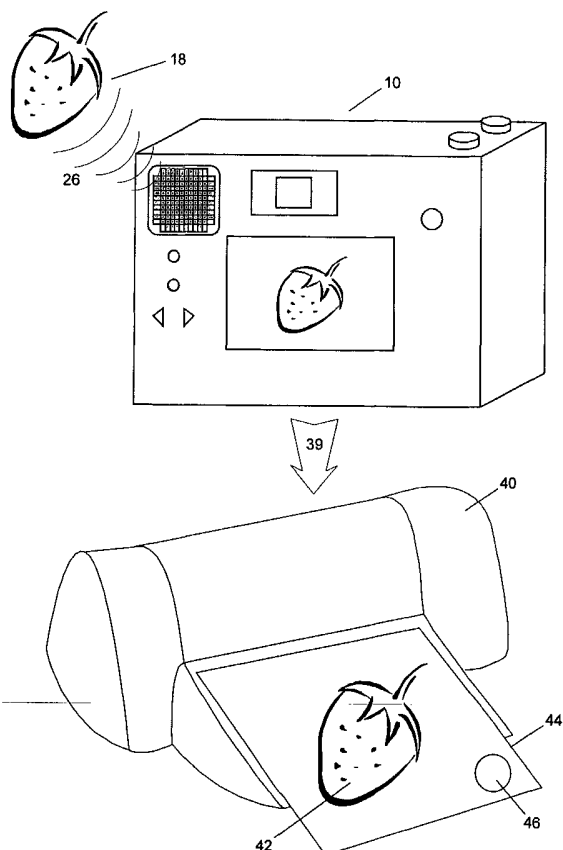
- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): MURPHY, Rachel,

[Continued on next page]

(54) Title: APPARATUS AND A METHOD IN THE FIELD OF PHOTOGRAPHY FOR RECORDING AND REPRODUCING SCENT OR TASTE



(57) Abstract: A camera (10) comprising means for capturing an image, integral scent association means operable by a user to associate a scent (26) with the image, and integral means operable to cause the said scent to be perceived by a user. The invention also provides a printer (40) comprising printing means and integral scent generation means, wherein the scent generation means comprise a drive mechanism and a tape having a plurality of scented regions, the drive mechanism being operable to spool the tape and the scent generation means being operable to cause a selected scented region to emit its scent.



WO 03/011348 A3



(88) Date of publication of the international search report:
8 May 2003

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.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 02/03440

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G03B17/24 A61L9/03 H04N1/00 B41J2/325

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)

IPC 7 G03B A61L H04N B41J

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, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category ^o	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 995 770 A (RITZ MICHAEL J ET AL) 30 November 1999 (1999-11-30) cited in the application column 3, line 48 -column 5, line 20; figures 1,2,8 column 8, line 15-33	1,4-6, 12,13, 18,20, 21,29, 31-33,39
A	column 5, line 21 -column 7, line 42; figures 2,3A,,3B-6,8	23,24
A	DE 199 28 592 A (RUETZ STEFAN) 28 December 2000 (2000-12-28) column 3, line 16 -column 5, line 40; figures 1-10	1,4-8, 16,29, 31-35,38

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.^o 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.
- *Z* document member of the same patent family

Date of the actual completion of the international search

20 March 2003

Date of mailing of the international search report

28/03/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Bähr, A

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 02/03440

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 99 16476 A (PEREX AGORRETA FRANCISCO JAVIE) 8 April 1999 (1999-04-08) page 2, line 10 -page 3, line 27; figure 1 ---	1,2,5,7, 16,29, 30,32
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 09, 13 October 2000 (2000-10-13) -& JP 2000 156647 A (NIPPON TELEGR &TELEPH CORP <NTT>), 6 June 2000 (2000-06-06) abstract; figures 1-6 ---	2,3,5,6, 30,32,33
A	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 11, 30 September 1998 (1998-09-30) & JP 10 171067 A (ORIENTAL PHOTO IND CO LTD), 26 June 1998 (1998-06-26) abstract ---	1,29
A	EP 0 844 781 A (FUJI PHOTO FILM CO LTD) 27 May 1998 (1998-05-27) column 5, line 52 -column 9, line 25; figures 1-3 ---	5,6,32, 33
A	US 6 229 565 B1 (BOBRY HOWARD H) 8 May 2001 (2001-05-08) column 3, line 27 -column 9, line 12; figures 1-8 ---	14,22
A	US 6 067 103 A (EWERT BRIAN C ET AL) 23 May 2000 (2000-05-23) column 6, line 51 -column 14, line 41; figures 1-7 ---	23,24
A	US 5 975 675 A (KIM YONG-GEUN) 2 November 1999 (1999-11-02) column 2, line 65 -column 5, line 39; figures 1-6 ---	23,24
A	GB 2 315 044 A (ESSELTE NV) 21 January 1998 (1998-01-21) page 4, paragraph 1 -page 10, paragraph 1; figures 1-8 -----	23,24

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB 02/03440

Box I Observations where certain claims were found unsearchable (Continuation of item 1 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 II Observations where unity of invention is lacking (Continuation of item 2 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 all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
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.:
1 - 22, 23 - 24, 29 - 39
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.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- 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 - 22, 29 - 39

Camera for image capture and a corresponding method for associating and delivering a scent with an image

2. Claims: 23, 24

Printer with integral scent generation means comprising a drive mechanism and a tape having plural scented regions

3. Claims: 25 - 28

An elongate tape having a plurality of discrete scented regions comprising encoded data

4. Claims: 40, 41

A camera with a detector to analyse the scent of its surrounding medium

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 02/03440

Patent document cited in search report	A	Publication date	Patent family member(s)	Publication date
US 5995770	A	30-11-1999	NONE	
DE 19928592	A	28-12-2000	DE 19928592 A1 AU 6260700 A WO 0078367 A1 EP 1185310 A1 JP 2003502114 T	28-12-2000 09-01-2001 28-12-2000 13-03-2002 21-01-2003
WO 9916476	A	08-04-1999	ES 2133115 A1 WO 9916476 A1	16-08-1999 08-04-1999
JP 2000156647	A	06-06-2000	NONE	
JP 10171067 7	A		NONE	
EP 0844781	A	27-05-1998	JP 10150523 A EP 0844781 A2 US 6337712 B1 US 2002032909 A1	02-06-1998 27-05-1998 08-01-2002 14-03-2002
US 6229565	B1	08-05-2001	NONE	
US 6067103	A	23-05-2000	US 6049347 A AU 1196499 A CA 2306569 A1 EP 1040004 A1 JP 2001520138 T NZ 504357 A WO 9920468 A1 US 6049613 A	11-04-2000 10-05-1999 29-04-1999 04-10-2000 30-10-2001 26-10-2001 29-04-1999 11-04-2000
US 5975675	A	02-11-1999	KR 159727 B1	01-05-1999
GB 2315044	A	21-01-1998	NONE	