

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
4 January 2007 (04.01.2007)

PCT

(10) International Publication Number
WO 2007/001866 A3

(51) International Patent Classification:

G08B 13/14 (2006.01) F17D 3/00 (2006.01)
E03B 7/07 (2006.01) G01D 13/22 (2006.01)
F16K 37/00 (2006.01) G01D 21/00 (2006.01)

(21) International Application Number:

PCT/US2006/023204

(22) International Filing Date: 14 June 2006 (14.06.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

11/157,094 20 June 2005 (20.06.2005) US
11/353,746 14 February 2006 (14.02.2006) US
11/415,687 1 May 2006 (01.05.2006) US

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(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, KN, KP, KR, KZ, LA, 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, RS, RU, SC, SD,
SE, SG, SK, SL, SM, 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, 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).

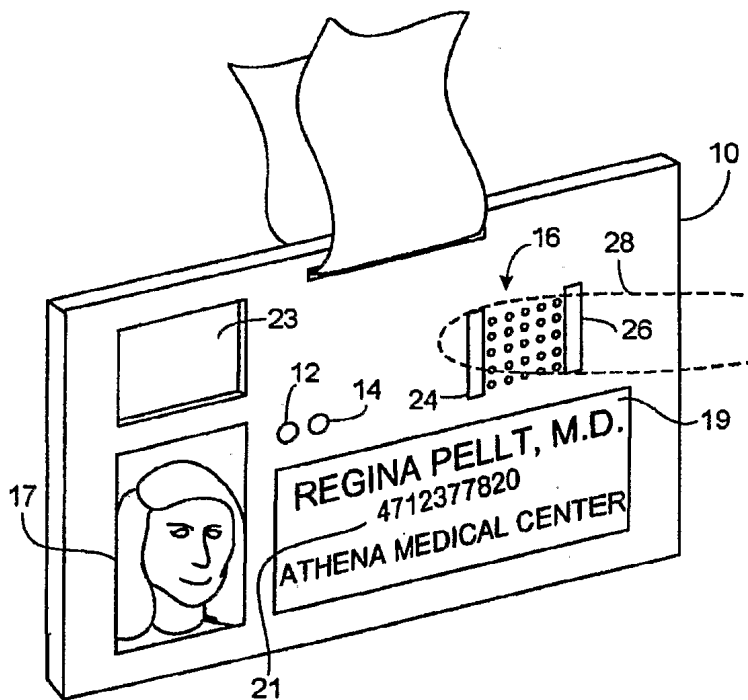
Declarations under Rule 4.17:

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

[Continued on next page]

(54) Title: HAND CLEANLINES

(57) Abstract: Among other things, an
electronic sensor is used by a person to
detect a cleanliness state of the person's
hands.



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— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

— *with international search report*

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

23 April 2009

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/23204

A. CLASSIFICATION OF SUBJECT MATTER

IPC: G08B 13/14;E03B 7/07;F16K 37/00;F17D 3/00;G01D 13/22;G01D 21/00

USPC: 137/551,559;340/573.1,571,572.9,500,501,532,539.1,539.25;116/205,208

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. : Please See Continuation Sheet

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	US 6,426,701 B1 (LEVY et al.) 30 July 2002, column 2, lines 37-67; col 4, lns 43-49; col 5, lns 6-15, 22-24, 29-31, 35-37, 55, and 56; col 6, lns 4-7, 16-19, 35-40, 60-65; col 7, lns 5-12 and 56-60; col 8, lns 26-31, 35-37, and 65-67; col 9, lns 1-3, 10-15, 34-42	1-9, 12-29, 37, 58-62, 75, 76, 81, and 86-89
X	US 6,727,818 B1 (WILDMAN et al.) 27 April 2004, col 2, lns 30-40, 56-67; col 3, lns 1-10, 20-30; col 4, lns 10-16, 23-326, 43-54, 60-67; col 5, lns 54-62; col 6, lns 56-62; col 7, lns 9-13, 19-41; col 8, lns 10-27; col 9, lns 8-17, 24-35; col 10, lns 31-40; col 11, lns 17-25; col 12, lns 25; col 16, lns 6-20; col 21, lns 38-47;	1-29, 33, 37, 58-62, 65, 68-72, 75-81, and 86-89
X	US 5,610,589 A (EVANS et al.) 11 March 1997, col 1, lns 43-46, 60-67; col 2, lns 25-40, 50-53; col 3, lns 31-35, 49-53; col 4, lns 14-21, 60-67; col 5, lns 1-16	1-29, 37, 58-62, 65, 68, 71, 72, 75, 76, 80, 81, and 86-89
A	US 5,812,059 A (SHAW et al.) 22 September 1998, col 2, ns 11-28; col 3, lns 20-23, 37-45; col 4, lns 12-15, 35-37; col 5, lns 2-*10, 29-33, 43-46; col 6, lns 23-40;	1, 6, 7, 8, 27, 75, 58

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

12 December 2006 (12.12.2006)

Date of mailing of the international search report

08 MAY 2007

Name and mailing address of the ISA/US

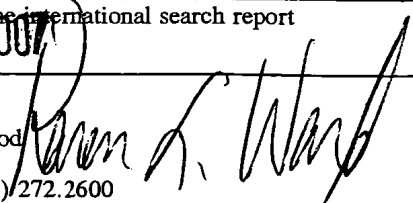
Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US06/23204

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 5,945,910 A (GORRA) 31 August 1999, col 3, lns 1-35; col 4, lns 15-22 and 50-55; col 6, lns 20-25, 55-57; col 7, lns 1-5, 56-60; col 8, lns 21-25, 33-40, 55-59	1, 6, 7, 8, 27, 75, 58
&	US 6,883,563 B2 (SMITH) 26 April 2005, entire document	1
X	US 4,706,493 A (CHANG et al.) 17 November 1987, col 1, lns 5-12; col 2, lns 34-40	33, 34
— Y		
X	US 6,417,773 B1 (VLAHOS et al.) 09 July 2002, col 2, lns 26-34	30,32
— Y		
X	US 6,572,564 B2 (ITO et al.) 03 June 2003, col 15, lns 17-30	31
— Y		

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/23204

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:
Please See Continuation 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 additional fees, this Authority did not invite payment of any 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.: 1-34,37,58-62,65,68-72,75-81 and 86-89

- 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.

BOX III. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

Claims 1-7, 9-18, 20-25, 27-34, 37, 58-62, 65, 68-72, 75-81, and 86-89 are drawn to cleanliness detection.

Claims 38-54 are drawn to presence detection.

Claims 63, 64, 73, 74-79, and 82-85 are drawn to indication of switching states.

Claims 8, 19, and 26 are drawn to a timing circuit/ time measurement.

Claim 67 is drawn to measuring resistance to alcohol.

Claims 35, 36, and 57 are drawn to testing using a counter.

The inventions listed as Groups 1-6 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 3.2, they lack the same or corresponding special technical features for the following reasons: Group I is related to cleanliness detection. Group II is related to presence detection. Group III is related to changing states and an indication to indicate changing states. Group IV is related to a timing circuit for interval measurement. Group V is related to determining a resistance of alcohol that degrades sensitivity. Group VI is related to a testing circuit using a timer.

Continuation of B. FIELDS SEARCHED Item 1:

137/551,552,552.5,552.7,553,554,555,556,556.3,556.6,557,558,559;340/573.1,571,572.1,572.2,572.3,572.4,572.5,572.6,572.7,572.8,572.9,500,501,532,539.1,539.12,539.13,539.14,539.15,539.16,539.17,539.18,539.19,539.2,539.21,539.22,539.23,539.24,539.25; 116/205 ?08