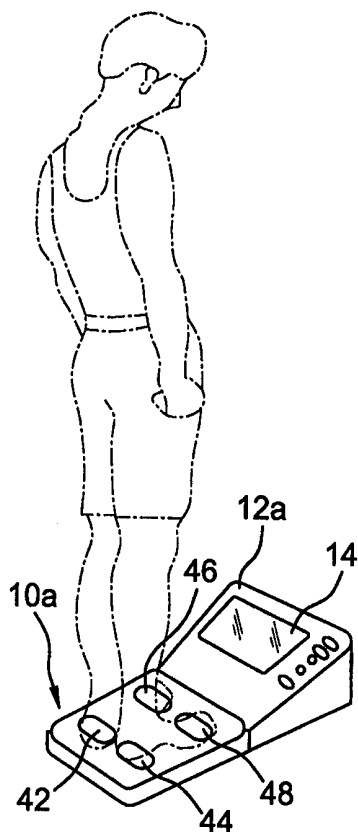




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : A61B 5/05, 5/103	A3	(11) International Publication Number: WO 99/52425 (43) International Publication Date: 21 October 1999 (21.10.99)
(21) International Application Number: PCT/EP99/02540 (22) International Filing Date: 15 April 1999 (15.04.99) (30) Priority Data: 60/081,886 15 April 1998 (15.04.98) US (71) Applicant: BRAUN GMBH [DE/DE]; D-Frankfurt am Main (DE). (72) Inventors: MERZ, Diethard; Lichtenberger Strasse 43, D-64289 Darmstadt (DE). DRINAN, Darrel; 10914 Caminito Tierra, San Diego, CA 92131 (US). LEVATTER, Jeffrey; P.O. Box 8062, Rancho Santa Fe, CA 92067 (US). ALTING-MEES, Adrian; 10421 Pacific Center Court, San Diego, CA 92121-4339 (US). (74) Common Representative: BRAUN GMBH; Frankfurter Strasse 145, D-61476 Kronberg (DE).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 2 December 1999 (02.12.99)
(54) Title: BODY COMPOSITION ANALYZER WITH TREND DISPLAY		
(57) Abstract A body composition analysis and display system provides a display of averaged data for selected body composition factors, such as body weight and body fat percentage, at a plurality of selected intervals over a period of time. The user's body fat percentage is determined by measuring the user's body impedance. 		

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece			TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	NZ	New Zealand		
CM	Cameroon		Republic of Korea	PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 99/02540

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 A61B5/05 A61B5/103

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 6 A61B G01G

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 301 879 A (DUBOW ARNOLD A) 24 November 1981 (1981-11-24) cited in the application column 1, line 60 -column 3, line 23 column 3, line 54 -column 4, line 10; figures	1,5
X	US 4 694 922 A (MAIROT GUY) 22 September 1987 (1987-09-22) column 2, line 2 -column 3, line 54; claims; figures	1,5,9
A	US 5 415 176 A (SATO TOMIO ET AL) 16 May 1995 (1995-05-16) cited in the application column 4, line 11 -column 6, line 43; claims; figures	1,3,4, 10,12-14
	- / - -	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in 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.

"Z" document member of the same patent family

Date of the actual completion of the international search

22 July 1999

Date of mailing of the international search report

07 OCT.1999

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

Manschot, J

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 99/02540

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 96 08198 A (CHA KI CHUL) 21 March 1996 (1996-03-21) page 16, line 25 -page 18, line 15; figures 3,4 ---	1,3,4, 11-13
A	US 5 372 141 A (GALLUP DAVID A ET AL) 13 December 1994 (1994-12-13) column 4, line 1 -column 5, line 65; claims; figures -----	1,3,4

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 99/02540

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:

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.:
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.:

1-15

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

1. Claims: 1-15

System for measuring and displaying of a current and a prior body composition factor.

2. Claims: 16-26

System for measuring, computing and displaying current and prior results for at least two different body composition factors

3. Claims: 27-31

System for measuring and displaying current and prior body composition factors for a plurality of users and preclude users if current and prior data deviate.

4. Claims: 32-35

System for measuring and displaying body composition factor for plurality of users with identification code

5. Claims: 36-42

system for measuring and displaying body composition factor only if taken during predetermined time of day.

6. Claims: 43-52

System for measuring and displaying body composition factor having base unit and remote display unit

7. Claims: 53-55

system for measuring and displaying body composition factor with modifying means for modifying the measured bioimpedance.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 99/02540

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4301879 A	24-11-1981	NONE	
US 4694922 A	22-09-1987	CH 661796 A AT 58241 T CA 1242027 A EP 0188175 A JP 61169724 A	14-08-1987 15-11-1990 13-09-1988 23-07-1986 31-07-1986
US 5415176 A	16-05-1995	JP 2835662 B JP 7100122 A US 5611351 A DE 69221438 D DE 69221438 T EP 0545014 A	14-12-1998 18-04-1995 18-03-1997 11-09-1997 19-03-1998 09-06-1993
WO 9608198 A	21-03-1996	KR 123408 B	11-11-1997
US 5372141 A	13-12-1994	NONE	