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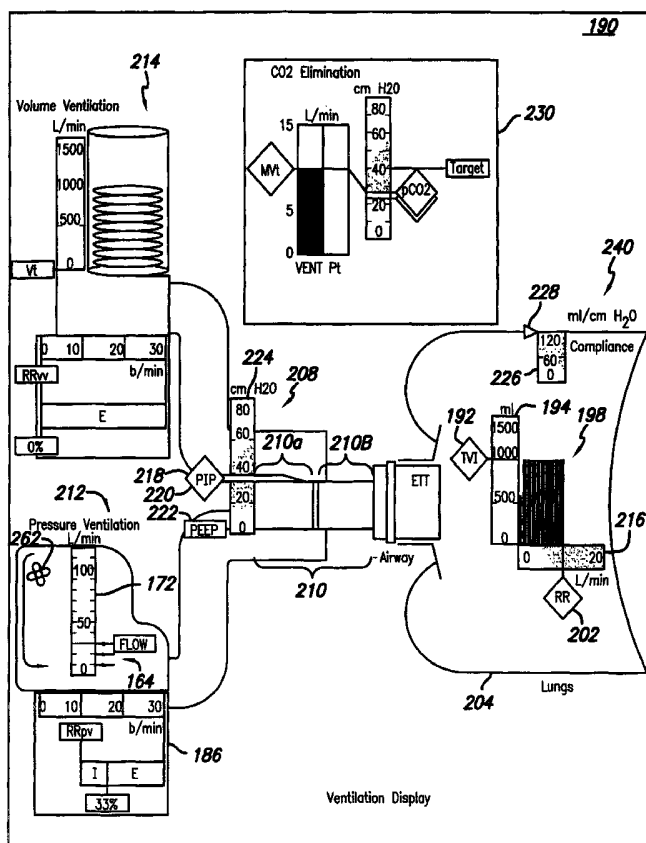
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60/263,861 23 January 2001 (23.01.2001) US
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GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
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KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, 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, TR), OAPI patent
(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG).

[Continued on next page]

(54) Title: PHYSIOLOGICAL OBJECT DISPLAYS



(57) Abstract: The disclosed invention relates to systems and methods for obtaining physiological information from patients and displaying that information in an intuitive and logical format to a physician. Object displays are disclosed that are capable of visually displaying critical information in real time to allow physicians to quickly perceive the importance of changing patient values.

WO 02/071933 A3

**Declarations under Rule 4.17:**

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, 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, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, 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, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

— of inventorship (Rule 4.17(iv)) for US only

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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/US 02/02181

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 A61B5/00

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)

IPC 7 A61B G01S G09B

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, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 09, 31 July 1998 (1998-07-31) & JP 10 094519 A (HITACHI MEDICAL CORP), 14 April 1998 (1998-04-14) abstract --- -/--	1

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.
- "&" document member of the same patent family

Date of the actual completion of the international search

28 November 2002

Date of mailing of the international search report

27. 02 2003

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Authorized officer

CHEN, A

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 02/02181

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.:

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.:

1-5

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: 1-5

Data object representing heart chambers and blood flow information between the heart chambers.

2. Claims: 6-8

Data object representing mean arterial pressure, central venous pressure and cardiac output.

3. Claims: 9-14

Data object comprising a venous reservoir object, a pump object and an oxygenator object.

4. Claims: 15-18 and 19-20

Data object comprising a volume ventilator object and a pressure ventilator object.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 02/02181

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>KUNIHIRO CHIHARA ET AL: "A DUAL-PROBE BLOOD FLOW-MAPPING SYSTEM USING DOPPLER ULTRASOUND" IEICE TRANSACTIONS, INSTITUTE OF ELECTRONICS INFORMATION AND COMM. ENG. TOKYO, JP, vol. E74, no. 9, 1 September 1991 (1991-09-01), pages 2625-2633, XP000271983 ISSN: 0917-1673 page 2625, left-hand column, line 1 -right-hand column, line 20 page 2630, left-hand column, line 1 -page 2631, right-hand column, line 23 page 2632, left-hand column, line 40 -right-hand column, line 5 figures 7A-8C</p> <p>---</p>	1
X	<p>US 5 551 434 A (IINUMA) 3 September 1996 (1996-09-03) column 6, line 1 -column 9, line 33 figures 9-10C</p> <p>---</p>	1
A	<p>US 5 701 897 A (SANO) 30 December 1997 (1997-12-30) column 11, line 11 -column 14, line 63 column 16, line 10 -column 19, line 51 column 27, line 61 -column 29, line 45; figures 8-1 figures 8-14,19,20,61</p> <p>---</p>	2,3,5
A	<p>US 5 297 552 A (MIGNOT) 29 March 1994 (1994-03-29) column 4, line 44 -column 5, line 50 column 7, line 34 - line 44</p> <p>---</p>	2-5
A	<p>WO 99 38433 A (THE BOARD OF TRUSTEES OR THE UNIVERSITY OF ILLINOIS) 5 August 1999 (1999-08-05) page 3, line 22 -page 19, line 20 figures</p> <p>-----</p>	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 02/02181

Patent document cited in search report	A	Publication date	Patent family member(s)	Publication date
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			JP 5237109 A	17-09-1993
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WO 9938433	A	05-08-1999	AU 3285899 A	16-08-1999
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			JP 2002501774 T	22-01-2002
			WO 9938433 A1	05-08-1999
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