

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
16 September 2004 (16.09.2004)

PCT

(10) International Publication Number  
**WO 2004/079554 A3**

(51) International Patent Classification<sup>7</sup>: **G06F 17/60**,  
A61M 1/00

32653 (US). **DRUMMOND, Willa, H.** [US/US]; 2300  
S.W. 56th Avenue, Gainesville, FL 32608 (US).

(21) International Application Number:  
PCT/US2004/007047

(74) Agent: **BUCHHEIT, Brian, K.**; Akerman Senterfitt, P.O.  
Box 3188, West Palm Beach, FL 33402-3188 (US).

(22) International Filing Date: 5 March 2004 (05.03.2004)

(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, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/452,271 5 March 2003 (05.03.2003) US

(71) Applicant (for all designated States except US): **UNI-  
VERSITY OF FLORIDA** [US/US]; 223 Grinter Hall,  
Gainesville, FL 32611 (US).

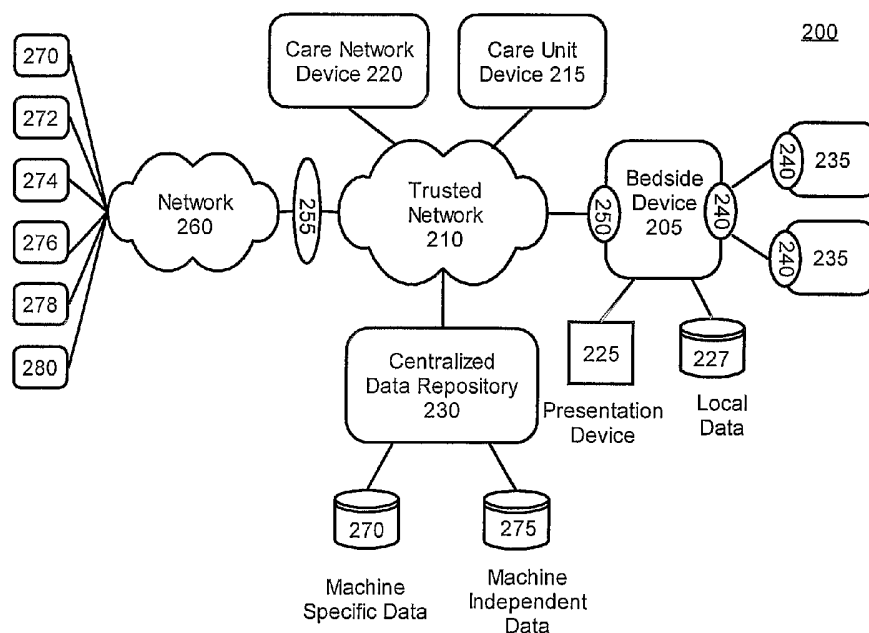
(72) Inventors; and

(75) Inventors/Applicants (for US only): **BIRKETT, Kevin,  
R.** [US/US]; 3305 N.W. 4th Street, Gainesville, FL 32609  
(US). **CARNES, Tony, C.** [US/US]; 4438 S.W. 105th  
Drive, Gainesville, FL 32608 (US). **COONS, Samuel,  
W., III** [US/US]; 4727 N.W. 71th Place, Gainesville, FL

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-  
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,  
GB, GR, HU, IE, IT, LU, 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).

[Continued on next page]

(54) Title: MANAGING CRITICAL CARE PHYSIOLOGIC DATA USING DATA SYNTHESIS TECHNOLOGY (DST)



(57) Abstract: A method of integrating physiologic data including receiving physiologic treatment data from at least two bedside machines and converting the physiologic treatment data into a machine independent format. The physiologic treatment data can be presented in perceptual real-time. For example, physiologic treatment data from multiple sources can be simultaneously presented within a single graphical user interface. The graphical user interface can be interactive so that displayed graphs can be replotted and timelines revised responsive to user input, such as a point-and-drag motion.



**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

*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.*

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

29 December 2005

# INTERNATIONAL SEARCH REPORT

International application No. :

PCT/US04/07047

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/60; A61M 1/00

US CL : 705/2

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. : 705/2; 600/300, 301, 323, 483

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)

Please See Continuation Sheet

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,579,775 (DEMPSEY et al.) 03 December 1996, fig. 2; col. 2, lines 27-54; col. 4, lines 8-27; col. 6, lines 29-36; col. 8, line 61 - col. 9, line 6.	1-17
A	US 6,493,568 B1 (BELL et al.) 10 December 2002, see entire document.	1-17
A	US 2001/0044823 A1 (LABOUNTY et al.) 22 November 2001, see entire document.	1-17

☐ 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

02 November 2005 (02.11.2005)

Date of mailing of the international search report

08 NOV 2005

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Kenneth Wieder

Telephone No. 571-272-2986

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US04/07047

Continuation of B. FIELDS SEARCHED Item 3:  
USPAT; US-PGPUB; USOCR; EPO; JPO; DERWENT; IBM\_TDB  
discrete, patient, protocol