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[Continued on next page]

(54) Title: SYSTEM, METHOD, AND APPARATUS FOR COMMUNICATING DATA

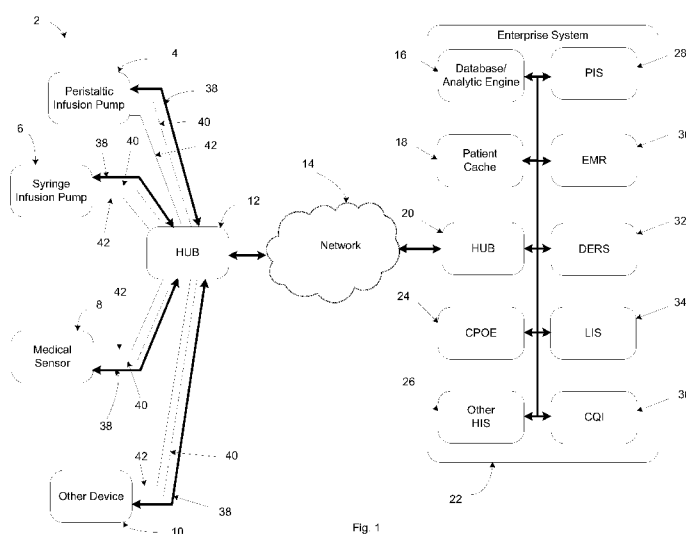


Fig. 1

(57) Abstract: A system includes first and second hubs. The first hub is configured to communicate data with a medical device through a Local Area Network and package the data into at least one application-layer packet. The second hub is configured to receive the at least one application-layer packet from the first hub operatively through at least one cellular network.



Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

Published:

— *with international search report (Art. 21(3))*

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2013/076886

A. CLASSIFICATION OF SUBJECT MATTER
INV. G06F19/00
ADD.

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)
G06F

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)

EPO-Internal, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2012/185267 A1 (KAMEN DEAN [US] ET AL) 19 July 2012 (2012-07-19) cited in the application paragraph [0247] - paragraph [0281] paragraph [0289] - paragraph [0309] paragraph [0367] - paragraph [0375] paragraph [0411] - paragraph [0416] paragraph [0448] - paragraph [0486] paragraph [0524] - paragraph [0554] paragraph [0591] - paragraph [0639] paragraph [0670] - paragraph [0714] figures 1,8,18,20, 59-61,63,90,91,94,99,104,147,149-151 ----- -/--	1,2, 4-23, 26-28, 30-42, 44-46, 48-61

☒ 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 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

25 April 2014

Date of mailing of the international search report

14/07/2014

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2013/076886

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 2011/021140 A1 (BINIER RICHARD [FR]) 27 January 2011 (2011-01-27) paragraph [0024] - paragraph [0047] figures 1-3	44-46, 48-58,61 1,2, 4-23, 26-28, 30-42, 59,60
A	----- US 2004/059205 A1 (CARLSON SVEN-ERIK [CH] ET AL) 25 March 2004 (2004-03-25) paragraph [0069] - paragraph [0089] paragraph [0103] - paragraph [0112] figures 1a,5	1,2, 4-23, 26-28, 30-42, 44-46, 48-61
A	----- US 2007/156450 A1 (ROEHM STEVEN [US] ET AL) 5 July 2007 (2007-07-05) paragraph [0022] - paragraph [0045] figures 1,3a,	1,2, 4-23, 26-28, 30-42, 44-46, 48-61
T	----- TANENBAUM A S ED - TANENBAUM A S: "COMPUTER NETWORKS", 1 January 1988 (1988-01-01), COMPUTER NETWORKS, ENGLEWOOD CLIFFS, PRENTICE HALL, US, PAGE(S) 1 - 27, XP002023239, the whole document	1,2,15, 16, 23-25, 28,36, 44,55,57
T	----- TANENBAUM A S ED - TANENBAUM A S: "COMPUTER NETWORKS", 1 January 1996 (1996-01-01), COMPUTER NETWORKS, PRENTICE-HALL INTERNATIONAL, LONDON ; GB, PAGE(S) 183 - 190, XP002220024, ISBN: 978-0-13-394248-4 the whole document -----	17-19, 38,39, 52-54

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2013/076886

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.: 62-65
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:
see FURTHER INFORMATION sheet PCT/ISA/210
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:

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 fees, this Authority did not invite payment of 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, 2, 4-23, 26-28, 30-42, 44-46, 48-61

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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 62-65

Claims 62-65 do not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not clearly defined. The statements "as shown and described herein", "as described herein" and "substantially as shown and described" do not enable the skilled person to determine which technical features are claimed.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guidelines C-IV, 7.2), should the problems which led to the Article 17(2) declaration be overcome.

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, 2, 4-23, 26-28, 30-42, 44-46, 48-61

Method of communication comprising communicating an alarm from a first hub to a medical device when an alarm condition occurs within the first hub.

2. claims: 3, 24, 25, 29, 43, 47

A hub, comprising a first system-on-module configured to interface with a first communications channel; a second system-on-module configured to interface with a second communications channel; to communicate packets over one of the first and second communications channel.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2013/076886

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2012185267	A1	19-07-2012	NONE

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