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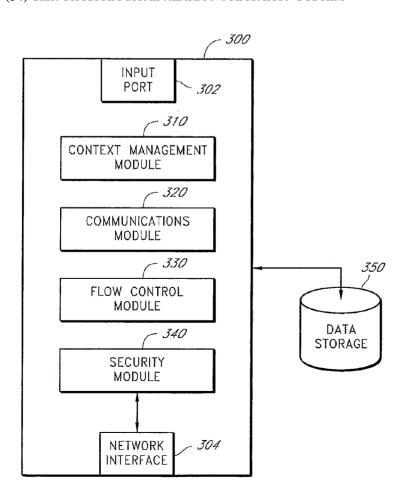
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(54) Title: PHYSIOLOGICAL ALARM NOTIFICATION SYSTEM



(57) Abstract: A method of context-based communication of physiological information over a network includes receiving physiological information, preparing a contextual data package, establishing a network connection, and communicating the contextual data package. The physiological information is received with a portable network interface module from at least one physiological monitor coupled to a single medical patient. The physiological information is related to a physiological condition of the medical patient, and the portable network interface module is exclusively assigned to the medical patient. The contextual data package is prepared with the portable network interface module. The contextual data package includes context information related to the medical patient and the physiological information. The network connection is established with a user over a network with the portable network interface module, and the portable network interface module manages the network connection with the user. The contextual data package is communicated to the user over the network with the network connection.

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A. CLASSIFICATION OF SUBJECT MATTER INV. A61B5/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{tabular}{ll} Minimum documentation searched (classification system followed by classification symbols) \\ A61B \end{tabular}$

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

<u> </u>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 443 480 A (NOKIA CORP [FI]) 4 August 2004 (2004-08-04)	1-6, 8-12,14, 17,18, 20,25,26
Α	paragraphs [0008] - [0010], [0030]	19,24
X	WO 02/067122 A (MEDIK INC I [US]) 29 August 2002 (2002-08-29)	1-12, 14-18, 20-23, 25,26
A	page 4, line 28 - line 32 page 6, line 22 - page 7, line 1 page 8, line 27 - line 31 page 10, line 1 - line 10	19,24
A	EP 1 576 925 A (MEDISON CO LTD [KR]) 21 September 2005 (2005-09-21) abstract	1,9,10, 13

Further documents are listed in the continuation of Box C.	X 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 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 10 December 2007	Date of mailing of the international search report $17/12/2007$		
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 Knüpling, Moritz		

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Category* Citation of document, with indication, where appropriate, of the relevant passages HO HYUN KANG ET AL: "Wired/wireless integrated medical information prototype system using web service" ENTERPRISE NETWORKING AND COMPUTING IN HEALTHCARE INDUSTRY, 2005. HEALTHCOM 2005. PROCEEDINGS OF 7TH INTERNATIONAL WORKSHOP ON BUSAN, SOUTH KOREA 23-25 JUNE 2005, PISCATAWAY, NJ, USA, IEEE, US, 23 June 2005 (2005-06-23), pages 41-44, XP010830628 ISBN: 0-7803-8940-9 abstract	Relevant to claim No	
integrated medical information prototype system using web service" ENTERPRISE NETWORKING AND COMPUTING IN HEALTHCARE INDUSTRY, 2005. HEALTHCOM 2005. PROCEEDINGS OF 7TH INTERNATIONAL WORKSHOP ON BUSAN, SOUTH KOREA 23-25 JUNE 2005, PISCATAWAY, NJ, USA, IEEE, US, 23 June 2005 (2005-06-23), pages 41-44, XP010830628 ISBN: 0-7803-8940-9		

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2006/046295

Patent document cited in search report		Publication date	Patent family member(s)		Publication date	
EP 1443480	Α	04-08-2004	NON	E		
WO 02067122	Α	29-08-2002	AU EP	2002255545 1410206	•	04-09-2002 21-04-2004
EP 1576925	Α	21-09-2005	JP KR US	2005261925 20050093019 2005215900	A	29-09-2005 23-09-2005 29-09-2005