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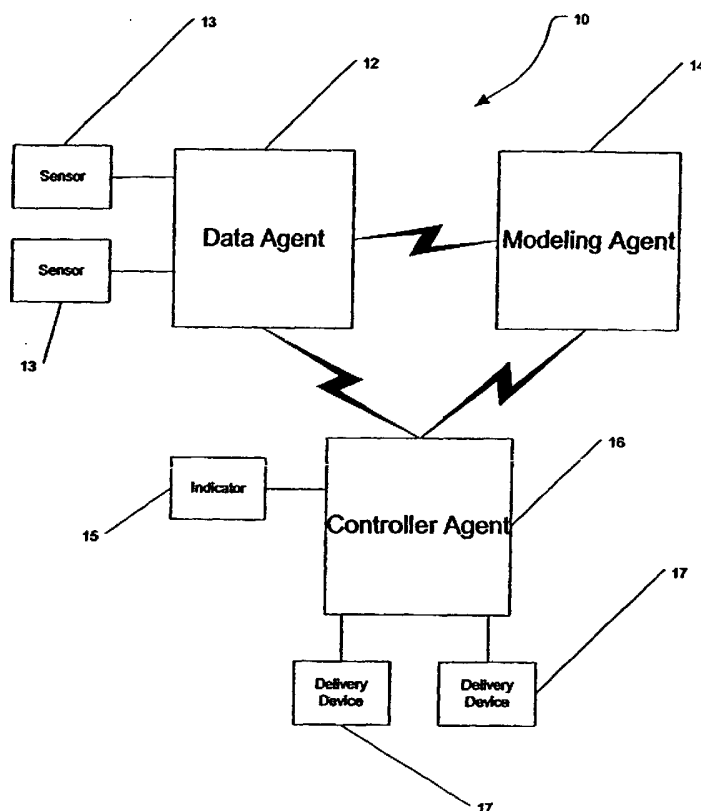
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[Continued on next page]

(54) Title: EVALUATION OF A PATIENT AND PREDICTION OF CHRONIC SYMPTOMS



(57) Abstract: A system (10) senses various physiological parameters of a patient such as heart rate or temperature to evaluate the patient and predict when an episode of a chronic symptom may occur. The system (10) further includes a modeling component (14) that generates an individualized predictive model for a given patient wherein the patient's previous episodes of the symptom are utilized to shape the model. The system tests the model to assure accuracy and can revise the model as necessary. Once the model is established, the system monitors patient parameters and can alert (15) the patient to the expected onset of the symptom and/or automatically administer an appropriate drug (17) or other therapy to control the expected symptom. The system is applicable to allergic reactions, anxiety attacks, ADHD, backaches, depression, dizziness, drowsiness, epileptic seizures, fatigue, heart malfunction, hunger pangs, joint or other pain, loss of motor control, migraines, motion sickness, muscle spasm, nausea, nicotine fits, numbness, shaking, shortness of breath, sleep or sleep disorders, tremors, unconsciousness, vision impairment or other chronic symptoms.



ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI,  
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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/02370

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 5/00

US CL : 600/300

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. : Please See Continuation Sheet

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
WEST (L1-L27) with Plus search

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,063,028 A (LUCIANO) 16 May 2000, see abstract	1, 8, 12
A	US 6,120,440 A (GOKNAR) 19 September 2000, see abstract	1, 8, 12
Y, P	US 6,416,471 B1 (KUMAR et al) 09 July 2002, see abstract, column 10, lines 51-64, column 37, lines 37-67, and figures 3, 12, 14-15	1-2, 4 and 7-15
A, P	US 6,454,705 B1 (COSENTINO et al) 24 September 2002, see abstract and figure 1	1, 8, 12

☐ 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

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"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"

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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

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document member of the same patent family

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# INTERNATIONAL SEARCH REPORT

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## Continuation of B. FIELDS SEARCHED Item 1:

600/300-301, 481, 485, 507-509, 513, 523, 544-546, 587, 595; 128/898, 904, 920-921, 923-925; 604/65-67; 607/14-15, 17; 702/19; 705/1-4; 707/6; 706/924