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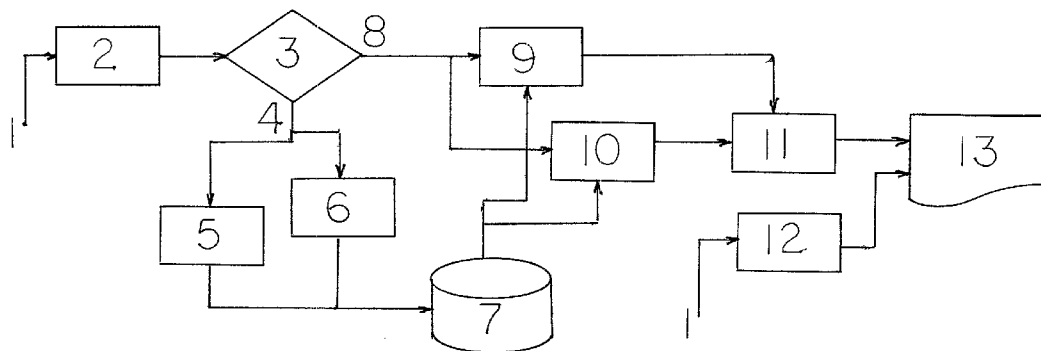
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(54) Title: SYSTEM AND METHOD FOR AUTOMATIC GENERATION OF A HIERARCHICAL TREE NETWORK AND THE USE OF TWO COMPLEMENTARY LEARNING ALGORITHMS, OPTIMIZED FOR EACH LEAF OF THE HIERARCHICAL TREE NETWORK



(57) Abstract: A system and method that generates a hierarchical tree network and uses linear-plus-nonlinear learning algorithms to form a consensus view on a member's future health status. Each leaf in the hierarchical tree network is homogeneous in clinical characteristics, experience period, and available data assets. Optimization is performed on each leaf so that features and learning algorithms can be tailored to local characteristics specific to each leaf.

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**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US05/14522

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC: **G06Q 50/00**(2006.01)

USPC: 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

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)

East: health, medicine, medical, forecast, predict, regression, bayesian

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,658,396 B1 (Tang et al) 2 Dec 2002 (2.12.2002), col. 6, line 11-col. 7, line 6; col. 12, line 45-col. 13, line 12; col. 15, line 55-col. 16, line 9.	1-13
Y	US 2002/0069079 A1 (Vega) 6 June 2002 (6.6.2002), paragraph 114.	1-13

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

"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

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"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

"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)

"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

"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

"&" document member of the same patent family

Date of the actual completion of the international search

28 September 2006 (28.09.2006)

Date of mailing of the international search report

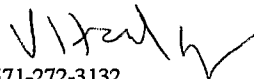
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