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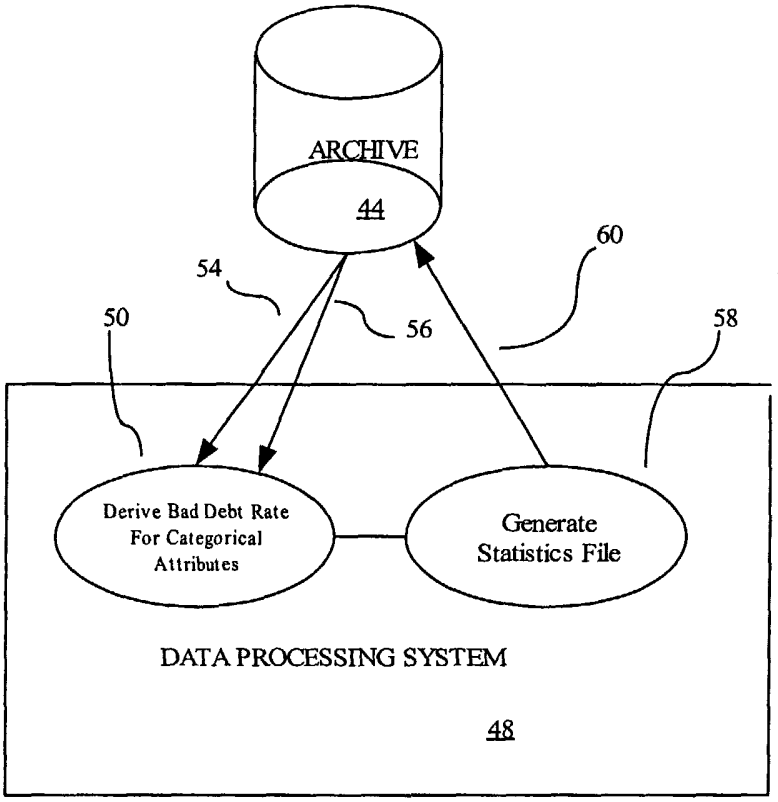
(54) Title: AN ARTIFICIAL INTELLIGENCE TRENDING SYSTEM



(57) Abstract: A data processing system (48) program to develop, train, and implement a neural network for identifying customers who represent a bad debt risk is disclosed. A feature vector is applied to a neural network to generate outputs that approximate the relative likelihood that customers who are the subjects of the records used to generate the feature vector will be a bad debt risk. Statistical values (58) relating categorical attributes (50) of the customers to the likehood of their becoming a bad debt risk are substituted for the categorical attributes (50), and the attributes are normalized before the feature vector is applied to the network. In one embodiment the customers are customers of a long distance service provider.

WO 02/063555 A3

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A. CLASSIFICATION OF SUBJECT MATTER

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US CL : 705/50

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. : 705/50

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,262,941 A (SALADIN et al) 16 November 1993 (16.11.1993), See entire document	1-45
A,P	US 6,202,053 B1 (CHRISTIANSEN et al) 13 March 2001 (13.03.2001), See entire document	1-45
A	US 5,696,907 A (TOM) 09 December 1997 (09.12.1997), See entire document	1-45
A	US 6,119,103 A (BASCH et al) 12 September 2000 (12.09.2000), See entire document	1-45
A	US 6,112,190 A (Fletcher et al) 29 August 2000 (29.08.2000), See entire document	1-45
A	US 5,574,828 A (HAYWARD et al) 12 November 1996 (12.11.1996), See entire document	1-45

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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