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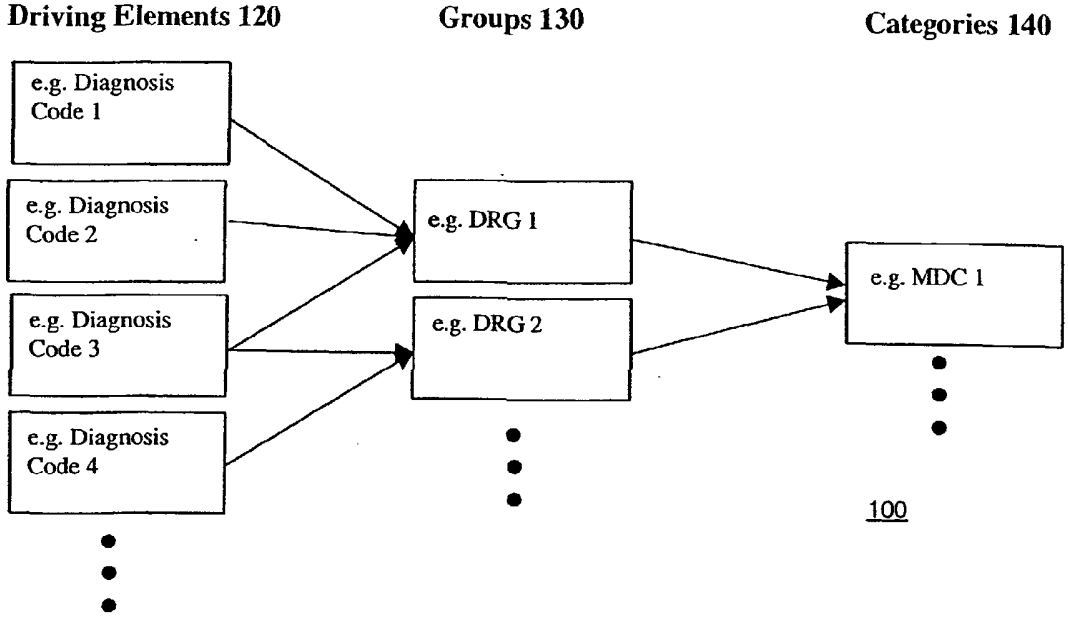
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[Continued on next page]

(54) Title: FRAUD AND ABUSE DETECTION AND ENTITY PROFILING IN HIERARCHICAL CODED PAYMENT SYSTEMS



(57) Abstract: Fraud and abuse detection in an entity's payment coding practices includes the ability to search for fraud at all levels of the hierarchical coded payment system within the context of an unsupervised model. The model uses variables derived and profiles created at any level or at all levels of the hierarchical coded payment system to create a comprehensive description of the payment coding activities submitted by the entity. That description is compared with other peer entities to determine unusual and *To*potentially inappropriate activity. The profiles created may themselves be utilized for purposes other than the detection of fraud and abuse.

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/60
US CL : 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, 11, 14

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.
X --- Y	US 5,577,169 A (PREZIOSO) 19 November 1996 (19.11.1996), see column 2, lines 19-52	1,3,4,18-22,24-28and43 ---------- 2,5-17,23,29-42and44-47
Y	Federal Register, Department of Health and Human Sevices, Part II, May 12, 1998	2,5-17,29-42, and 44-47
Y	US 5,253,164 A (HOLLOWAY et al.) 12 October 1993 (12.10.1993), see columns 2, lines 5-16	23

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

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Date of the actual completion of the international search	Date of mailing of the international search report
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