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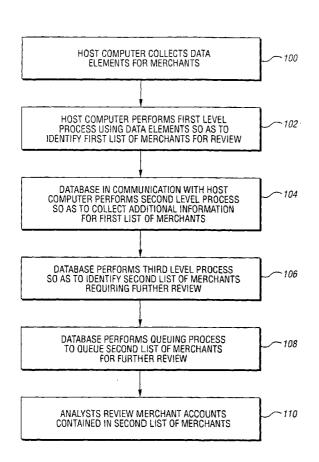
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(54) Title: TIERED PROCESSING METHOD AND SYSTEM FOR IDENTIFYING AND MITIGATING MERCHANT RISK



(57) Abstract: A method for identifying merchant risk includes collecting data elements for a plurality of merchants (100); automatically performing a first level process using the data elements so as to identify a first subset of merchants for review (102); automatically performing a second level process so as to collect additional information for the first subset of merchants (104); and automatically performing a third level process (106) using the first subset of merchants and the additional information so as to identify a second subset of merchants requiring further review (108). A system for practicing the method is also disclosed.



Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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## INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER								
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B. FIELDS SEARCHED  Minimum documentation searched (classification system followed by classification symbols)								
Minimum documentation searched (classification system followed by classification symbols)  U.S.: 705/38								
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)								
Please See Extra Sheet.								
C. DOCUMENTS CONSIDERED TO BE RELEVANT								
Category*	Citation of document, with indication, where ap	opropriate, of the relevant passages	Relevant to claim No.					
Y	US 5,262,941 A (SALADIN ET (16.11.1193), see entire document.	AL.) 16 November 1993	1-22					
Y	US 6,064,375 A (VELEZ ET AL) 16 entire document.	1-22						
A	US 6,141,651 A (RILEY ET AL) 31 October 2000 (31.10.2000), see entire document.							
A	US 6,154,729 A (CANNON ET (28.11.2000), see entire document.	AL) 28 November 2000	1-22					
A,P	US 2001/0039532 A1 (COLEMAN, JR (08.11.01), see entire document.	1-22						
Y,P	US 2002/0007302 A1 (WORK ET AL) see entire document.	17 January 2002 (17.01.02),	1-22					
Further documents are listed in the continuation of Box C. See patent family annex.								
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B. FIELDS SEARCHED Electronic data bases consulted (Name of data base and where practicable terms used):  JPO, EPO, DERWENT, NPL:									
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