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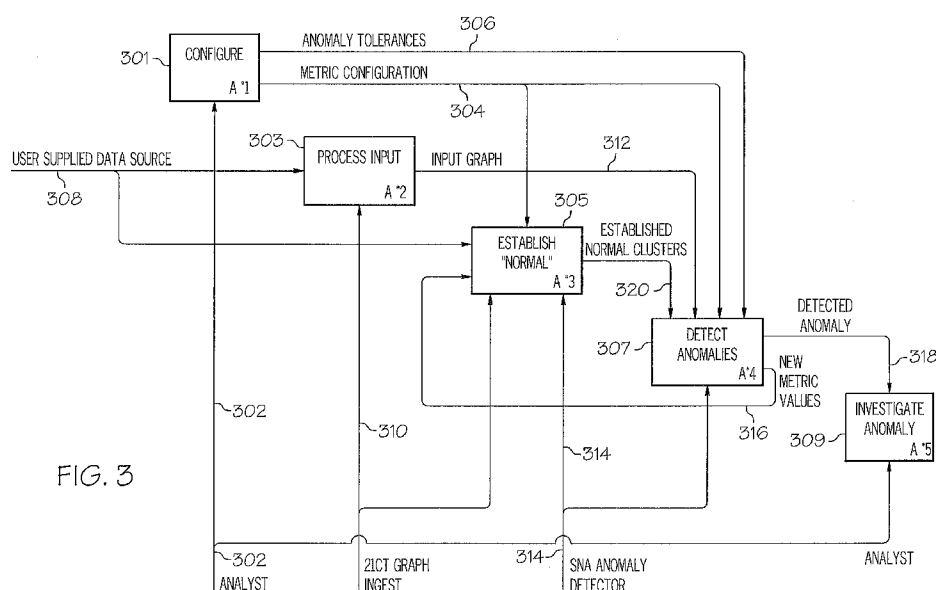
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(54) Title: SNA-BASED ANOMALY DETECTION



(S7) Abstract: A method, system, and computer program product for enabling dynamic detection of anomalies occurring within an input graph representing a social network. More specifically, the invention provides an automated computer simulation technique that implements the combination of Social Network Analysis (SNA) and statistical pattern classification for detecting abnormal social patterns or events through the expanded use of SNA Metrics. The simulation technique further updates the result sets generated, based on observed occurrences, to dynamically determine what constitutes abnormal behavior, within the overall context of observed patterns of behavior.



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INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G06F 15/173 (2008.04)

USPC - 709/224

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)

IPC(8): G06F 15/173 (2008.04)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC: 709/205, 218, 224; 715/736, 751, 753; 706/15, 20; 703/22

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Electronic databases: USPTO WEST (USPT, PGPB, EPAB, JPAB); DialogWEB; Google Scholar

Search Terms Used: social networks or SNA, network analysis or analyzing, generating or computing or determining tolerance or metric, monitoring or tracking user interaction or activities or behavior, configuring metric or range or anomaly etc

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2005/0267766 A1 (Galbreath et al.) 01 December 2005 (01.12.2005) (abstract, and para [0009]-[0011], [0020]-[0041], [0043]-[0052])	1-32
Y	US 2005/0283753 A1 (Ho et al.) 22 December 2005 (22.12.2005) (abstract, and para [0008]-[0009])	1-32
A	US 2006/0085248 A1 (Arnett et al.) 20 April 2006 (20.04.2006)	1-32
A	US 2006/0042483 A1 (Work et al.) 02 March 2006 (02.03.2006)	1-32
A	US 2005/0165891 A1 (Moody et al.) 28 July 2005 (28.07.2005)	1-32
A	US 2004/0088325 A1 (Elder et al.) 06 May 2004 (06.05.2004)	1-32

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"A" document defining the general state of the art which is not considered to be of particular relevance

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"P" document published prior to the international filing date but later than the priority date claimed

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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

"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

"&" document member of the same patent family

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