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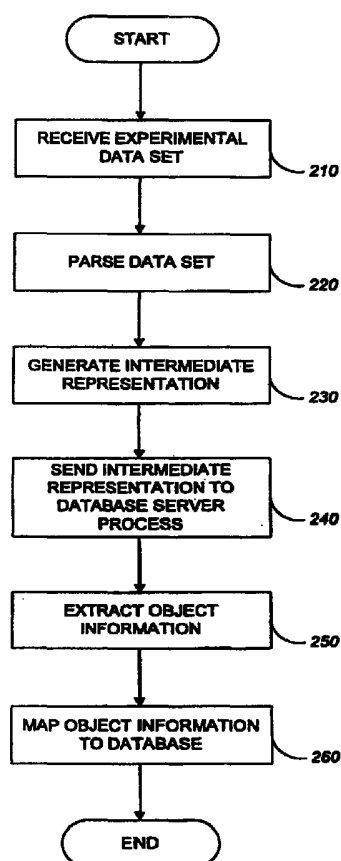
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(54) Title: LABORATORY DATABASE SYSTEM AND METHODS FOR COMBINATORIAL MATERIALS RESEARCH



(57) Abstract: Systems, methods, and apparatus, including computer program apparatus, are described for implementing techniques for processing data from a combinatorial experiment. The techniques include receiving data (210) from a chemical experiment on a library of materials having a plurality of members and generating a representation of the chemical experiment (230). The representation includes data defining an experiment object having a plurality of properties derived from the chemical experiment. The experiment object is associated with the library of materials. The representation also includes data defining one or more element objects (250). Each element object is associated with one or more members of the library of materials (260). A data model and corresponding data structures for describing such experiments are also disclosed.



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## INTERNATIONAL SEARCH REPORT

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**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : G06F 17/30

US CL : 707/6, 104; 435/6; 436/518, 548, 808

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. : 707/6, 104; 435/6; 436/518, 548, 808

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)

WEST USPATFULL

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,920,871 A (MARCRI et al) 06 July 1999 (07.06.1999) see whole document	1-63
A	US 6,185,561 B1 (BALABAN et al) 06 February 2001 (02.06.2001) see whole document	1-63



Further documents are listed in the continuation of Box C.



See patent family annex.

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

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