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(54) **QUERY SCHEDULING IN A PARALLEL-PROCESSING DATABASE SYSTEM**

(75) Inventors: **David Bayliss**, Delray Beach, FL (US); **Richard Chapman**, Boca Raton, FL (US); **Jake Smith**, London (GB); **Ole Poulsen**, Bend, OR (US); **Gavin Halliday**, Royston (GB); **Nigel Hicks**, London (GB)

(73) Assignee: **Seisint, Inc.**, Boca Raton, FL (US)

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(52) **U.S. Cl.** **707/3**; 707/10; 718/102; 709/201

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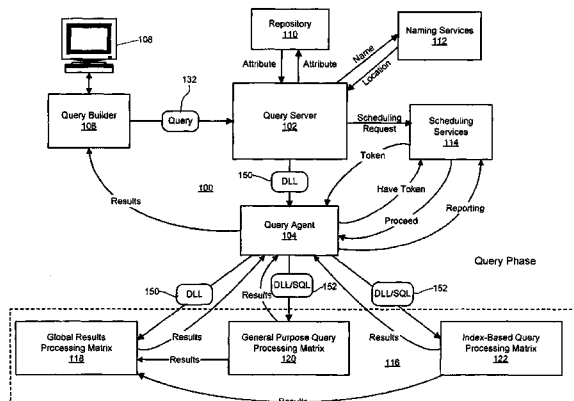See application file for complete search history.

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(57)   **ABSTRACT**

A system and method for scheduling database operations to one or more databases in a parallel-processing database system are described herein. After a query server generates a dynamic-link library (DLL) or other executable representative of one or more database operations to a database, the query server notifies a scheduling services module of the generation of the DLL and submits the DLL to a query agent. The query agent notifies the scheduling services module of its receipt of the DLL. Based on any of a variety of considerations, the scheduling services module schedules a time of execution for the DLL by one or more processing matrices that store the database. At the scheduled time, the scheduling services module directs the query agent to submit the DLL to the indicated processing matrices. The scheduling services module also can be adapted to monitor the execution of previously submitted DLLs by one or more processing matrices and adjust the scheduled times of execution for subsequent DLLs accordingly.

25 Claims, 21 Drawing Sheets

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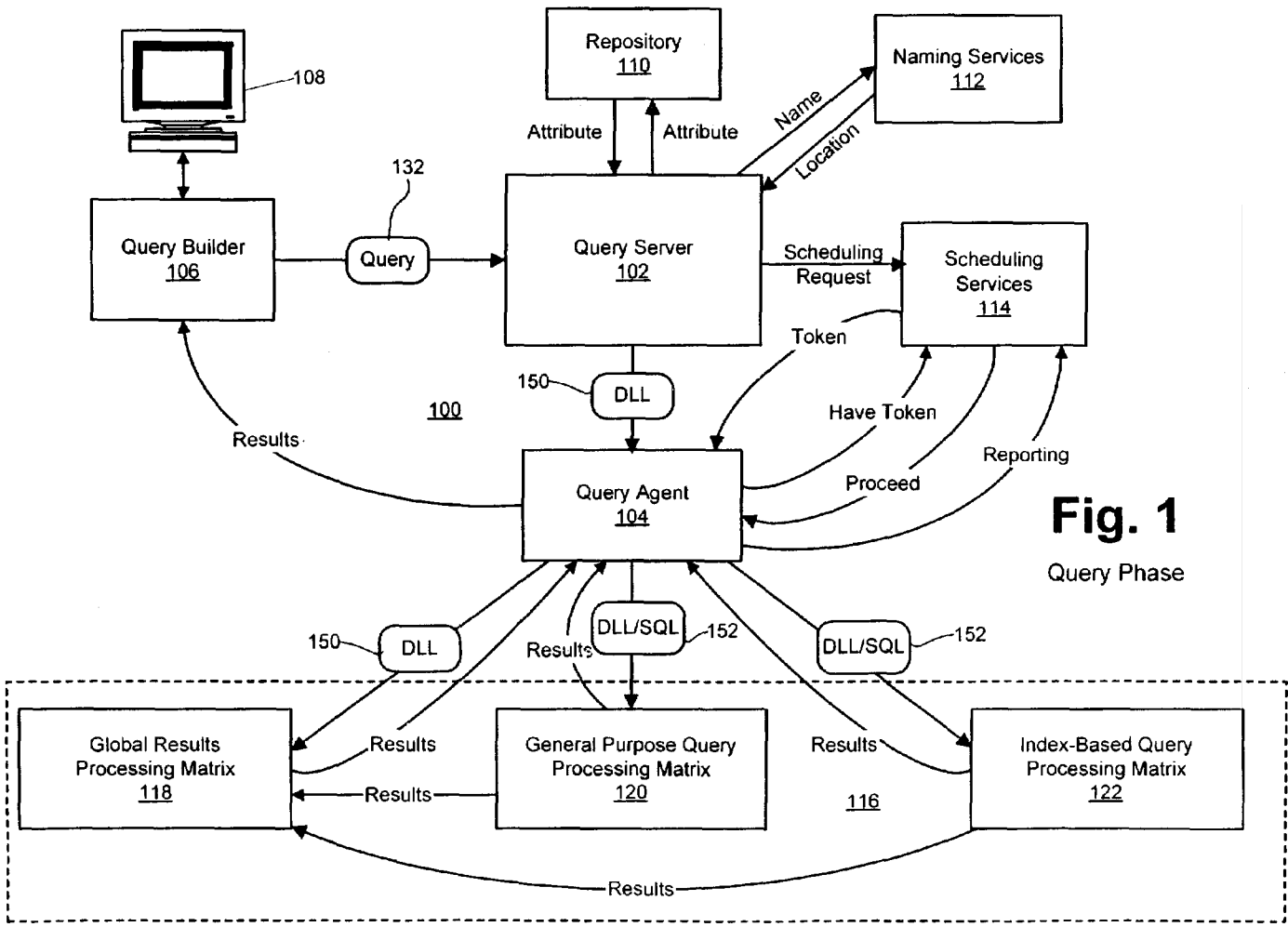
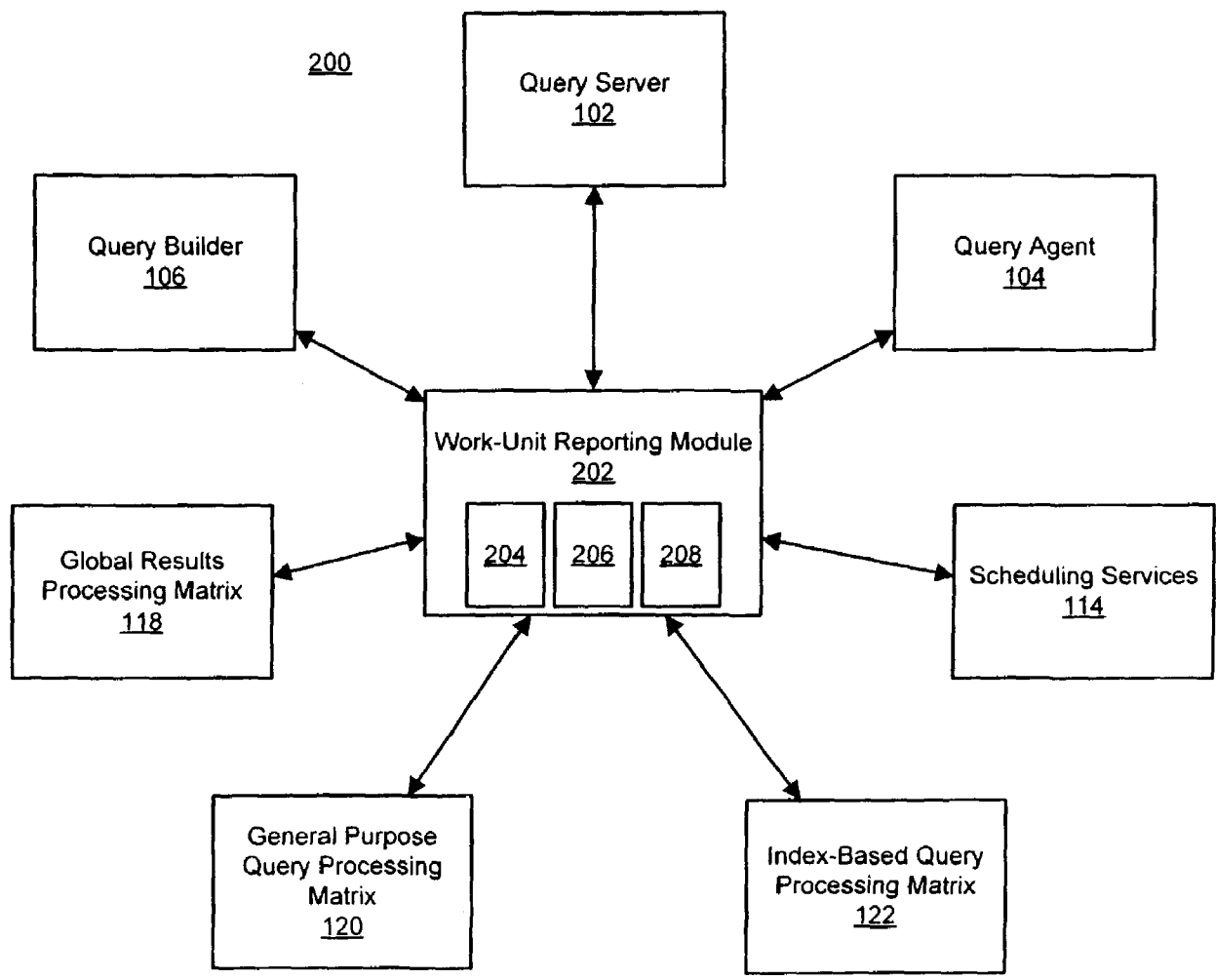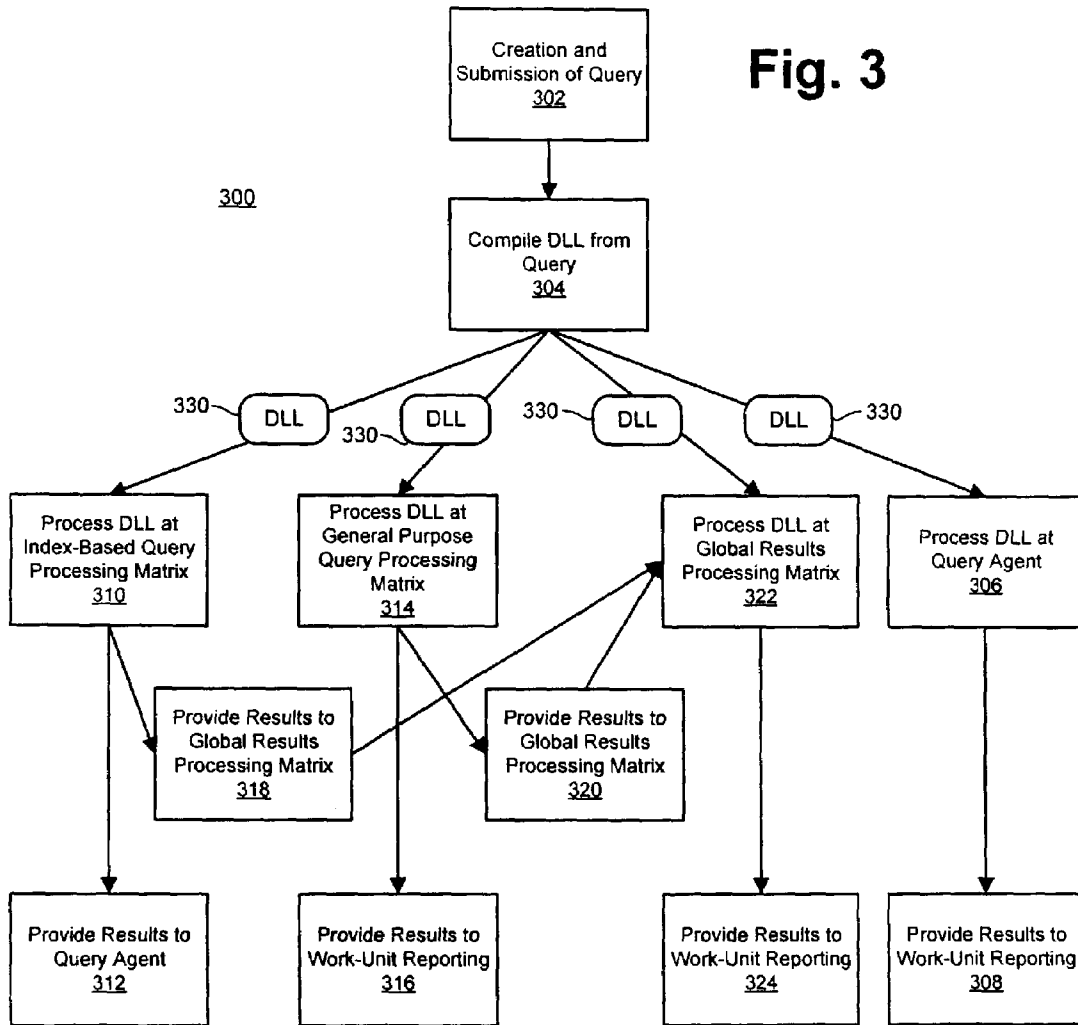* cited by examiner

Fig. 1

Query Phase

Fig. 2

200

Query Server
102

Query Builder
106

Query Agent
104

Work-Unit Reporting Module
202

204 206 208

Global Results
Processing Matrix
118

Scheduling Services
114

General Purpose
Query Processing
Matrix
120

Index-Based Query
Processing Matrix
122

Fig. 3

DOCKET ALARM

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