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(54) **NAVIGATION IN A HIERARCHICAL STRUCTURED TRANSACTION PROCESSING SYSTEM**

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( * ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 485 days.

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*G06F 17/30* (2006.01)
(52) **U.S. Cl.** ......................... **707/2**; 707/6; 707/3; 707/4
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See application file for complete search history.

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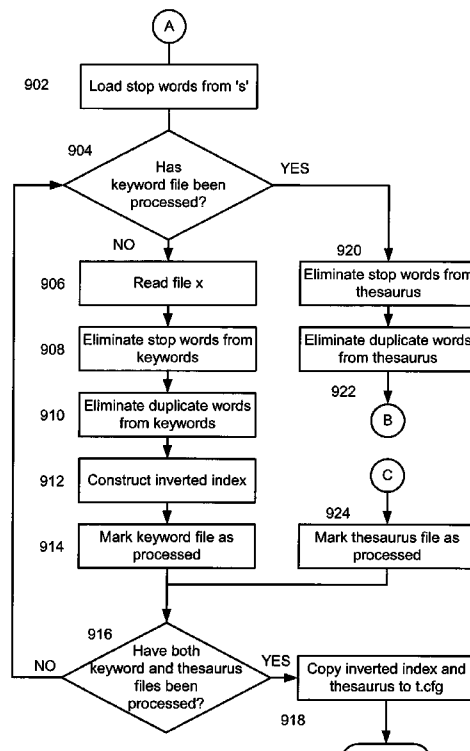| | | | |
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(57) **ABSTRACT**

A method performed in a system having multiple navigable nodes interconnected in a hierarchical arrangement involves receiving an input containing at least one word identifiable with at least one keyword, identifying at least one node, other than the first node, not directly connected to the first node, but associated with the at least one keyword, and jumping to the identified node. A transaction processing system having a hierarchical arrangement of nodes and is configured for user navigation among the nodes. The system has an inverted index correlating keywords with at least some nodes in the arrangement so that when the user provides an input in response to a verbal description and the response includes a meaningful word correlatable with a keyword, the system will identify at least one node correlated to the meaningful word by the inverted index and jump to that node without first traversing any other node.
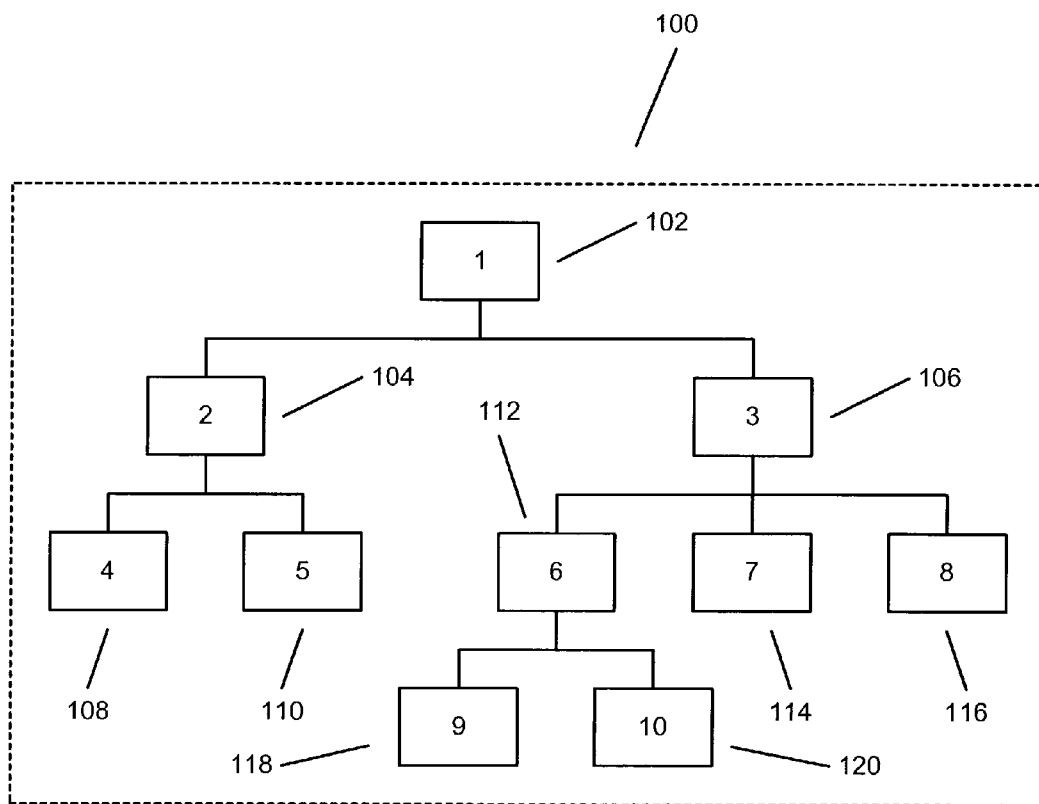
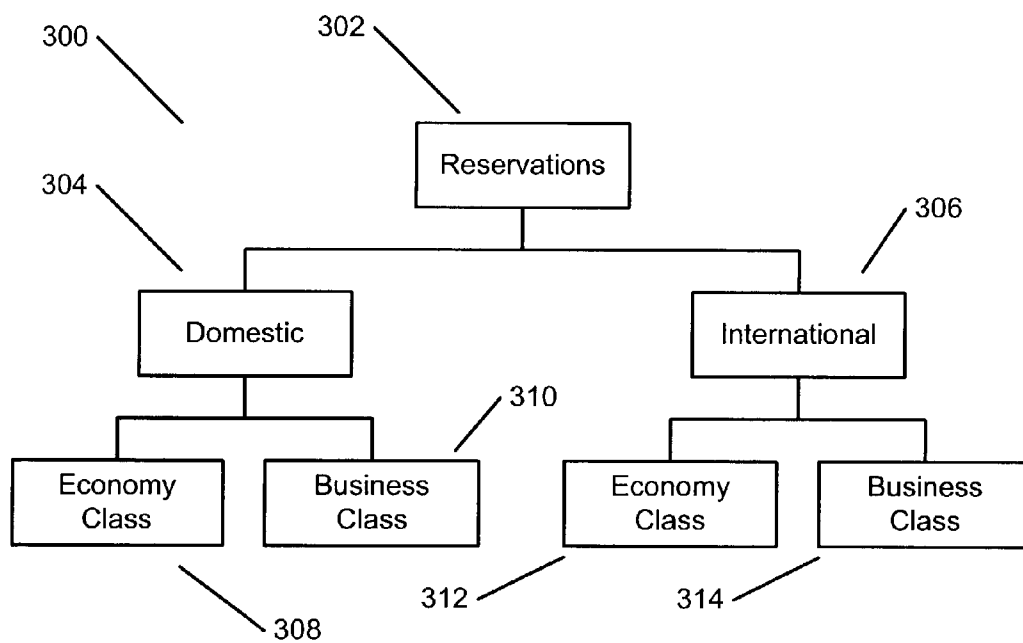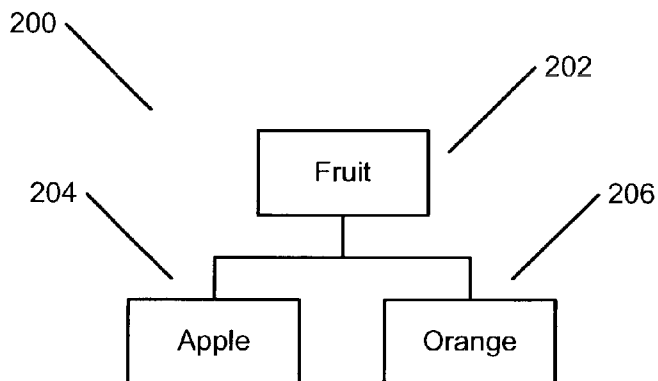**7 Claims, 11 Drawing Sheets**

FIG. 1

# FIG. 2

200

202

204

206

Fruit

Apple

Orange

300

302

304

306

Reservations

Domestic

International

310

Economy
Class

Business
Class

Economy
Class

Business
Class

312

314

308

# FIG. 3

400

402

404

406

Programs

Sitcoms

Films

FIG. 4

500

502

504

Restaurants

Pizza

Burgers

Chinese

506

508

FIG. 5

FIG. 6

# DOCKET ALARM
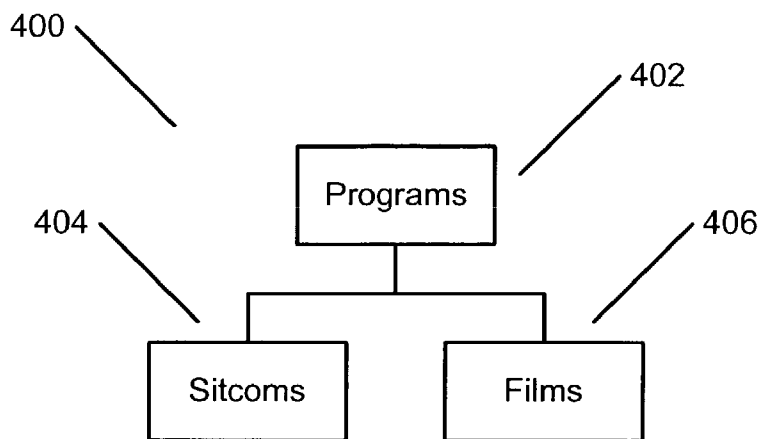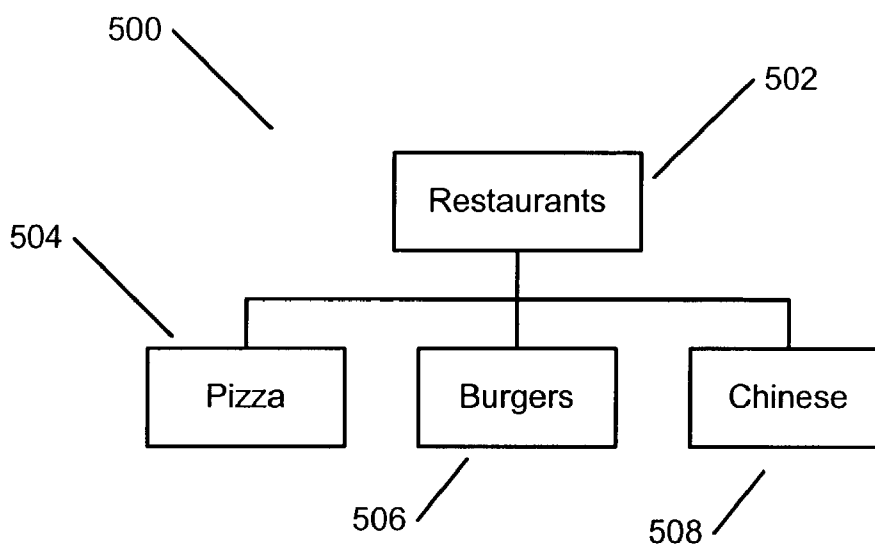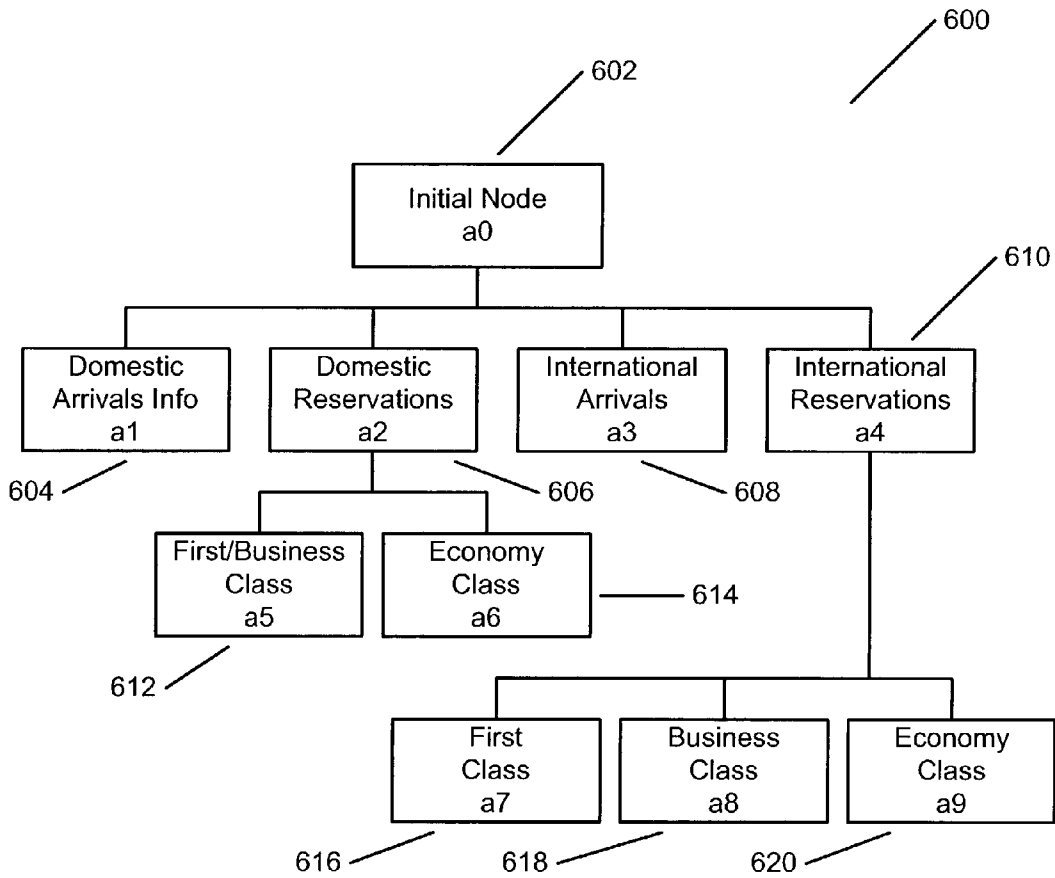
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