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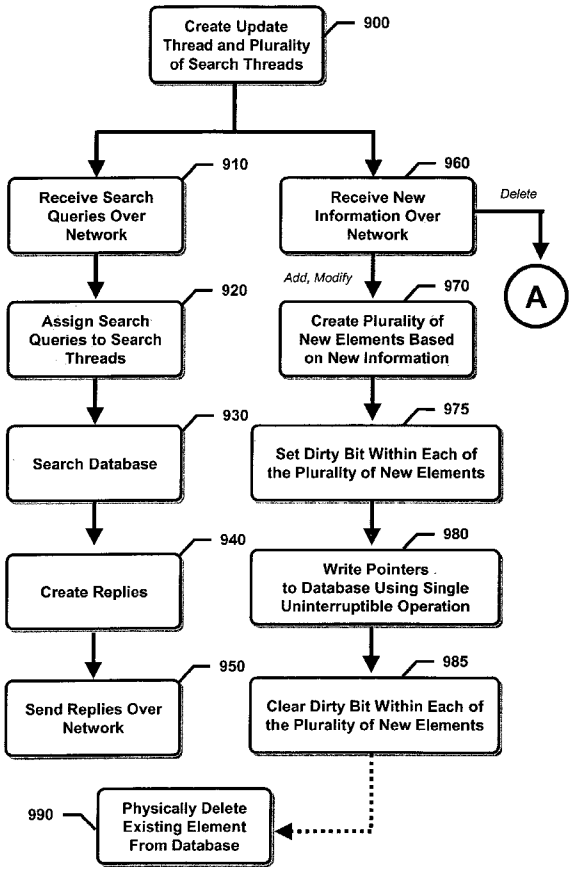
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(54) Title: TRANSACTIONAL MEMORY MANAGER



(57) Abstract: Embodiments of the present invention provide a method and system for high-speed database searching with concurrent, transaction-based updating for large database systems. Specifically, a plurality of search queries may be received over a network (910), the database may be searched (930), and a plurality of search replies (940) may be sent over the network (950). While searching the database (930), new information may be received over the network (960),a plurality of new database elements may be created based on the new information (970), a dirty bit may be set within each new database element (975), a pointer to each new database element may be written to the database using a single uninterruptible operation (980), and the dirty bit within each new database element may be cleared (985).

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