THIS SHEET HAS BEEN REPLACED

CONCURRENT RECORD ACCESS DATABASE SYSTEM

ABSTRACT

A data base system on a computer uses an index tree containing record keys which reference associated records in the data base. The tree, which comprises a root node extending through intermediate nodes to leaf nodes, provides concurrent accesses to a plurality of users. When changes are to be made to the key structure, action has to be taken to prevent users, other than the user making the change, from corrupting the data or receiving corrupted data. To do this, when one user is inserting or deleting a key and its associated record, all accesses to a node being traversed by this user and the immediately traversed mode are limited to read accesses by other users. At the leaf node, all accesses by others to the key and record being added or deleted are prevented together with accesses to the next successively located record key and its associated record. After the deletion or insertion, the access limitations are removed.

This Sheet Has Been Replaced

