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(12) United States Patent

Mourra et al.

(54) FILE INDEXING FRAMEWORK AND SYMBOLIC NAME MAINTENANCE FRAMEWORK

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(51) **Int. Cl.**

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(52) **U.S. Cl.** **707/711**; 707/741

(58) **Field of Classification Search** None See application file for complete search history.

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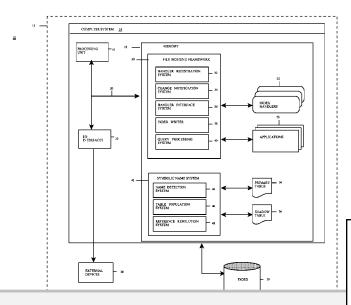
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(57) ABSTRACT

The present invention provides a file management system that includes a file indexing framework that allows third parties to contribute index handlers that are responsible for populating index entries for the artifacts they own and/or generate. The framework manages the creation, maintenance, and update of the index, and calls the index handlers at appropriate times so they can parse files that they understand for values that need to be stored in the index. The framework also provides APIs for querying the standardized fields of the index, so applications can search for standard types of data contributed for any of the indexed files. The present invention also provides a mechanism to keep track of symbolic name associations for every file/entity in the system. Specifically, the present invention provides a session-based and transient shadow table of symbolic names previously used by the files (even beyond the lifetime of the files themselves).

19 Claims, 3 Drawing Sheets



Adobe Inc. v.
Express Mobile, Inc.,
IPR2021-XXXXX
U.S. Pat. 9,471,287
Exhibit 1028



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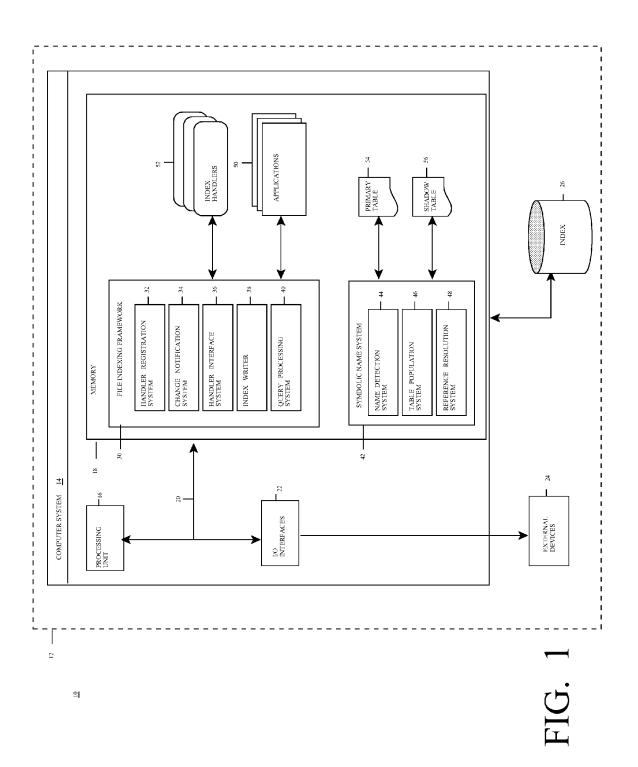
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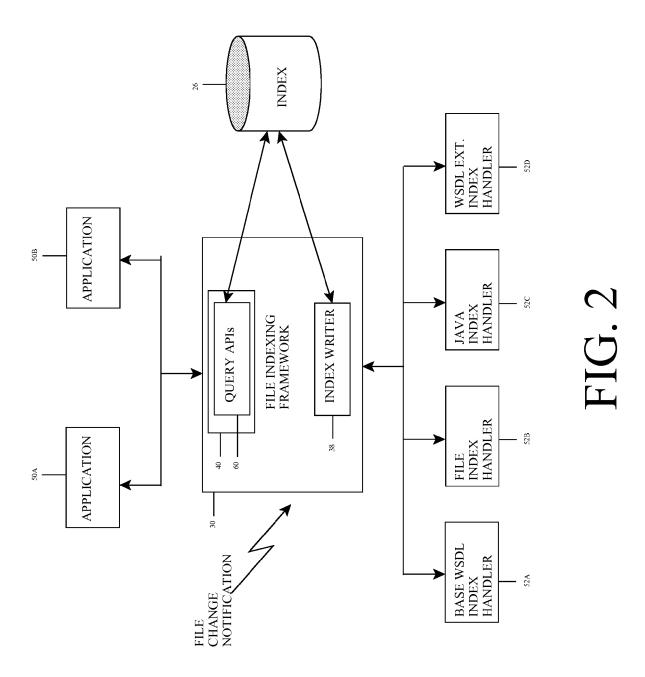
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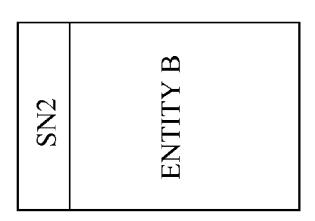




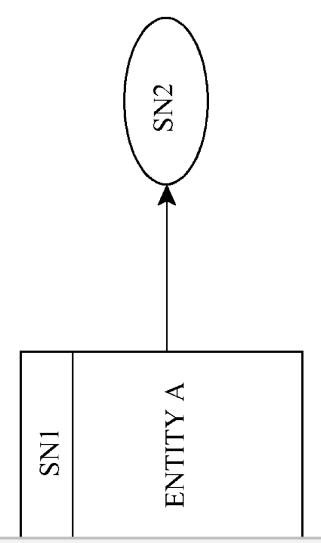








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