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(54) **COMPUTER FILE SYSTEM USING CONTENT-DEPENDENT FILE IDENTIFIERS**

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This patent is subject to a terminal disclaimer.

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continuation of application No. 08/960,079, filed on Oct. 24, 1997, now Pat. No. 5,978,791, which is a continuation of application No. 08/425,160, filed on Apr. 11, 1995, now abandoned.

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(52) **U.S. Cl.** **707/698**; 707/690; 707/699

(58) **Field of Classification Search** 707/690, 707/698, 699

See application file for complete search history.

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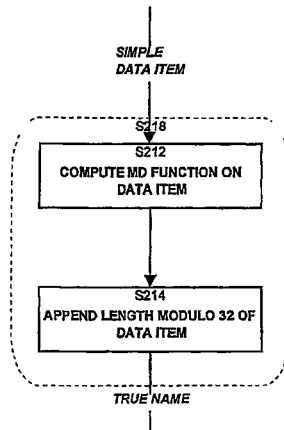FOREIGN PATENT DOCUMENTS

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(57) **ABSTRACT**

A file system includes a plurality of servers to store file data as segments or chunks; and first data that includes file identifiers for files for which the file data are stored as segments; and second data that maps the file identifiers to the segments to which the file identifiers correspond; and location data that identifies which of the plurality of servers stores which of the segments, the location data being keyed on segment identifiers, each segment identifier being based on the data in a corresponding segment.

137 Claims, 31 Drawing Sheets

SIMPLE
DATA ITEM

S218
S212
COMPUTE MD FUNCTION ON DATA ITEM

S214
APPEND LENGTH MODULO 32 OF DATA ITEM

TRUE NAME

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