EXHIBIT 2

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Farber et al.

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(45) **Date of Patent:**   **Aug. 9, 2005**

(54) **ENFORCEMENT AND POLICING OF LICENSED CONTENT USING CONTENT-BASED IDENTIFIERS**

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(21) Appl. No.: **09/987,723**

(22) Filed: **Nov. 15, 2001**

(65) **Prior Publication Data**

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Related U.S. Application Data

(63) Continuation of application No. 09/283,160, filed on Apr. 1, 1999, now Pat. No. 6,415,280, which is a division 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.

(51) **Int. Cl.^{7}** **G06F 17/30**
(52) **U.S. Cl.** **707/10**; 707/3; 707/101; 707/200; 709/203; 709/219; 709/229
(58) **Field of Search** 707/3, 6, 9, 10, 707/101, 200; 709/203, 219, 229

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(57)   **ABSTRACT**

Data files are distributed across a plurality of computers. The computers may form a network such as a content delivery network (CDN) or a peer-to-peer network. The network may operate as a TCP/IP network such as the Internet. Data files may represent may represent digital messages, images, videos or audio signals. For content—data items or files in the system—a name is obtained (or determined), where the name is based, at least in part, on a given function of the data in a data item or file. The given function may be a message digest or hash function, and it may be MD4, MD5, and SHA. A copy of a requested file is only provided to licensed (or authorized) parties. The system may check one or more computers for unauthorized or unlicensed content. Content is served based on a measure of availability of servers.

56 Claims, 31 Drawing Sheets

SIMPLE DATA ITEM

S216

S212
COMPUTE MD FUNCTION ON DATA ITEM

S214
APPEND LENGTH MODULO 32 OF DATA ITEM

TRUE NAME
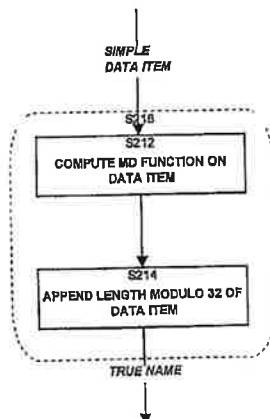
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FIG. I(a)
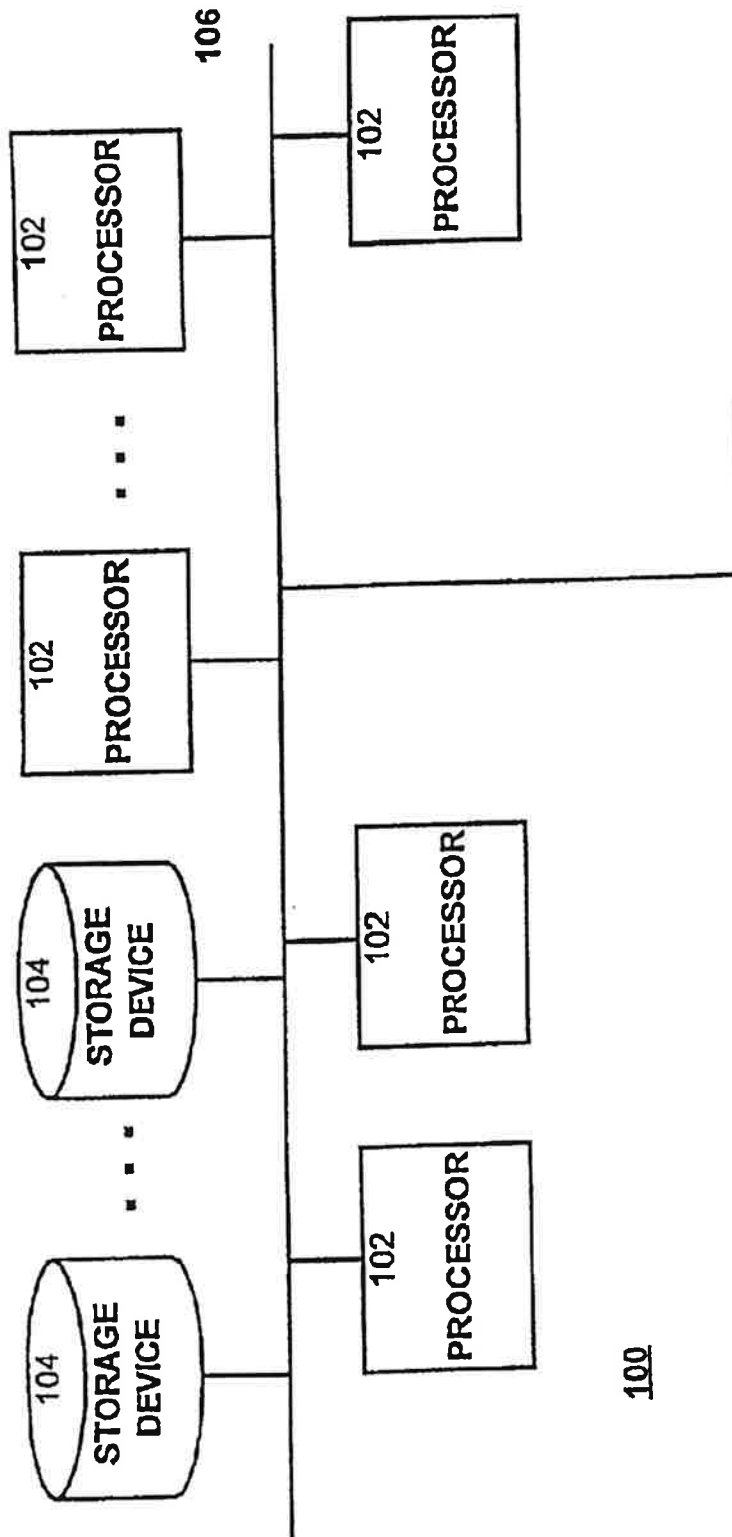
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