



US007159233B2

(12) **United States Patent**  
**Son et al.**

(10) **Patent No.:** **US 7,159,233 B2**  
(45) **Date of Patent:** **Jan. 2, 2007**

(54) **METHOD AND APPARATUS FOR  
PREPROCESSING AND POSTPROCESSING  
CONTENT IN AN INTERACTIVE  
INFORMATION DISTRIBUTION SYSTEM**

5,856,973 A	1/1999	Thompson	370/389
5,898,456 A *	4/1999	Wahl	725/91
6,079,566 A	6/2000	Eleftheriadis et al.	207/101
6,557,031 B1 *	4/2003	Mimura et al.	709/218
6,647,411 B1 *	11/2003	Towell et al.	709/213
2001/0013068 A1 *	8/2001	Klemets et al.	709/231

(75) Inventors: **Yong Ho Son**, Palo Alto, CA (US);  
**Christopher W. B. Goode**, Menlo Park,  
CA (US)

(73) Assignee: **Sedna Patent Services, LLC**,  
Philadelphia, PA (US)

**FOREIGN PATENT DOCUMENTS**

WO	WO 98/51080 A	11/1998
WO	WO 99/21363 A	4/1999

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 998 days.

**OTHER PUBLICATIONS**

(21) Appl. No.: **09/772,288**

U.S. Appl. No. 08/984,710, filed Dec. 3, 1997, entitled: System for Interactively Distributing Information Services.

(22) Filed: **Jan. 29, 2001**

U.S. Appl. No. 09/772,287, filed Jan. 29, 2001, entitled: Method and Apparatus for Content Distribution Via Non-Homogeneous Access Networks.

(65) **Prior Publication Data**

US 2002/0047899 A1 Apr. 25, 2002

Bonisch H et al: "Server side compresslets for Internet multimedia streams" Multimedia Computing and Systems, 1999, IEEE International Conference on Florence, Italy Jun. 7-11, 1999, Los Alamitos, CA, USA, IEEE Comput. Soc. US, vol. 2, Jun. 7, 1999 (Jun. 7, 1999), pp. 82-86, XP010519360 ISBN: 0-7695-0253-9.

**Related U.S. Application Data**

(60) Provisional application No. 60/178,795, filed on Jan. 28, 2000, provisional application No. 60/178,809, filed on Jan. 28, 2000, provisional application No. 60/178,810, filed on Jan. 28, 2000, provisional application No. 60/178,857, filed on Jan. 28, 2000.

\* cited by examiner

*Primary Examiner*—Chris Kelley  
*Assistant Examiner*—Joseph G. Ustaris

(74) *Attorney, Agent, or Firm*—Patterson & Sheridan, LLP

(51) **Int. Cl.**  
**H04N 7/173** (2006.01)  
**G06F 15/16** (2006.01)

(57) **ABSTRACT**

(52) **U.S. Cl.** ..... **725/86; 725/88; 725/91;**  
**725/98; 709/218; 709/219; 709/231**

(58) **Field of Classification Search** ..... **725/86,**  
**725/87, 88, 91, 98; 709/218, 219, 231**  
See application file for complete search history.

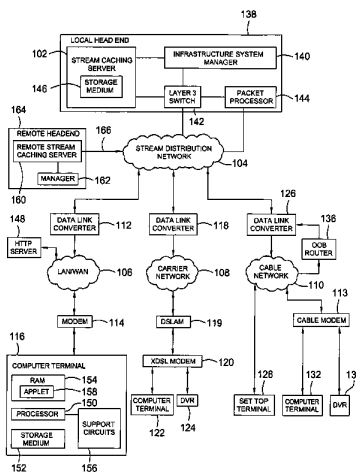
A method and apparatus for preprocessing and preprocessing content in an interactive information distribution system. Content is retrieved from a storage medium and encapsulated in accordance to an Internet Protocol (IP) format. The encapsulated content is then uploaded for storage in a stream caching server and for future streaming of content to different types of access networks.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

5,838,678 A 11/1998 Davis et al. .... 370/389

**27 Claims, 6 Drawing Sheets**



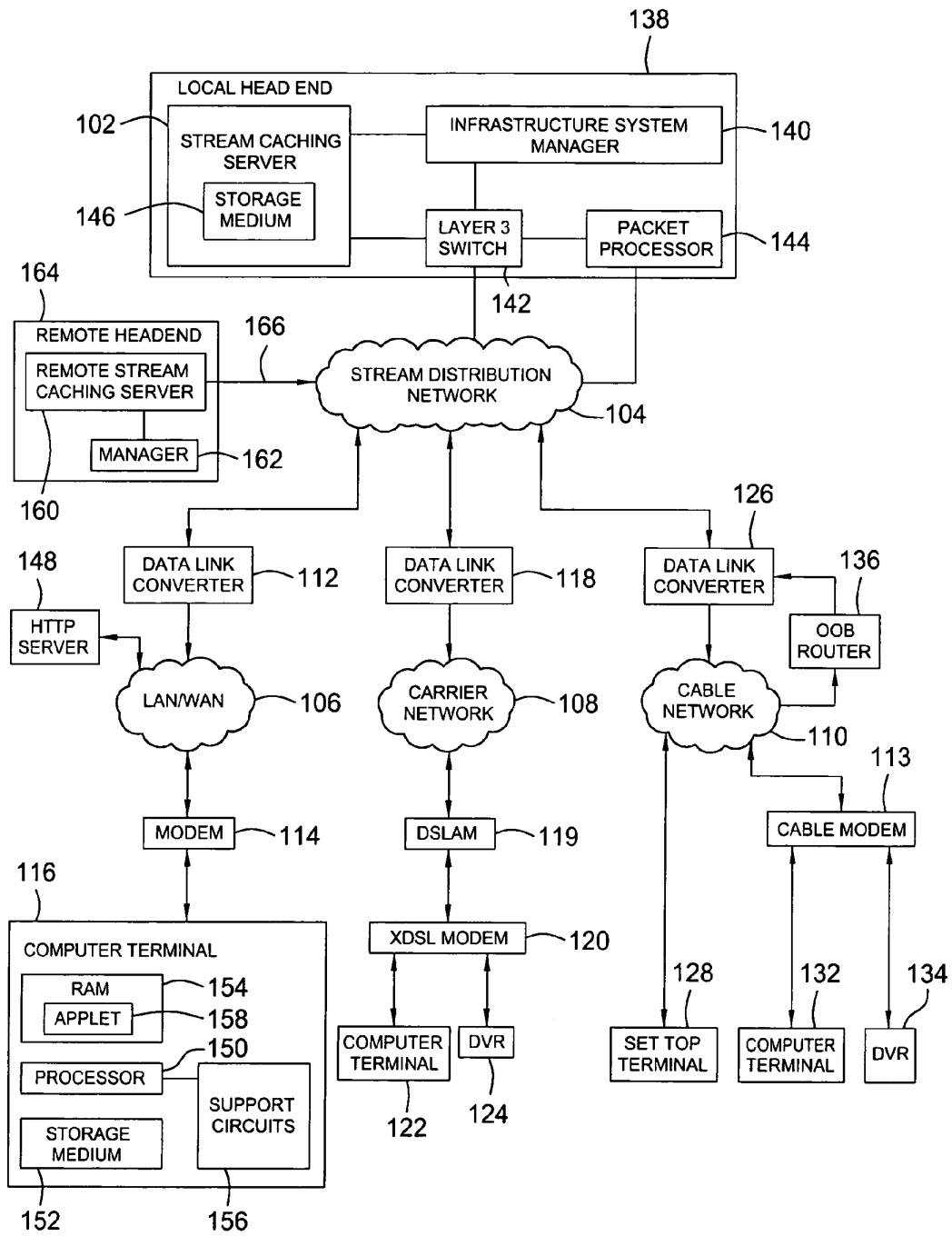


FIG. 1

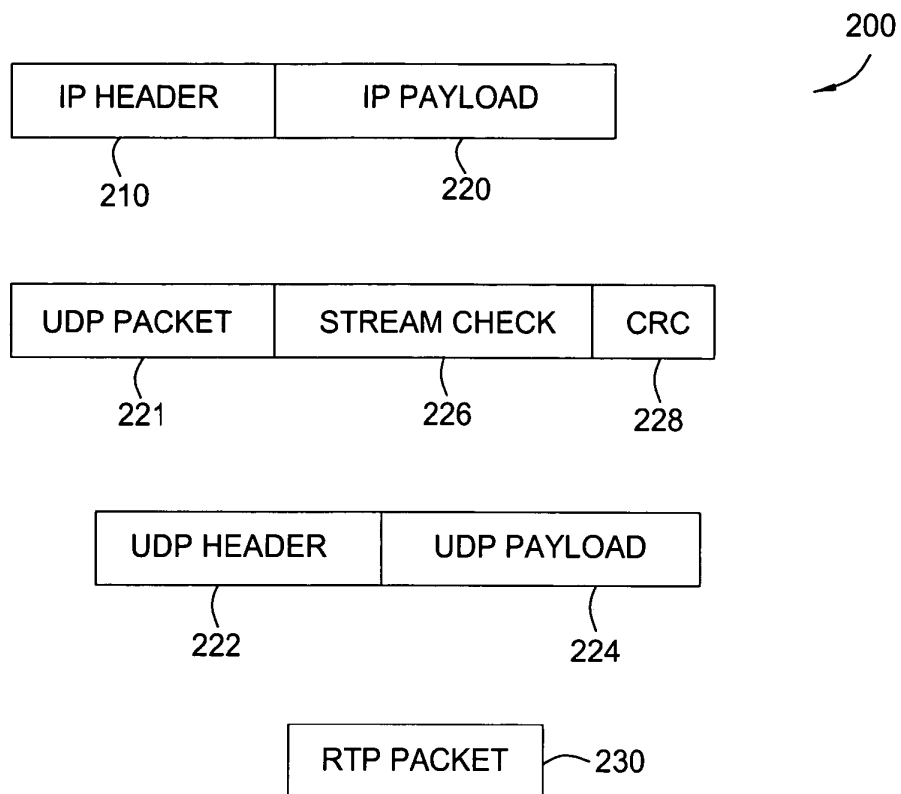


FIG. 2A

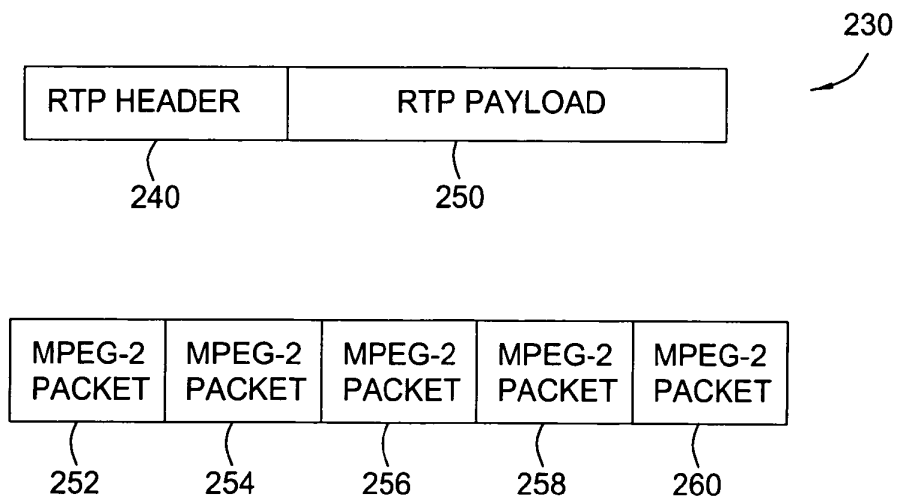


FIG. 2B

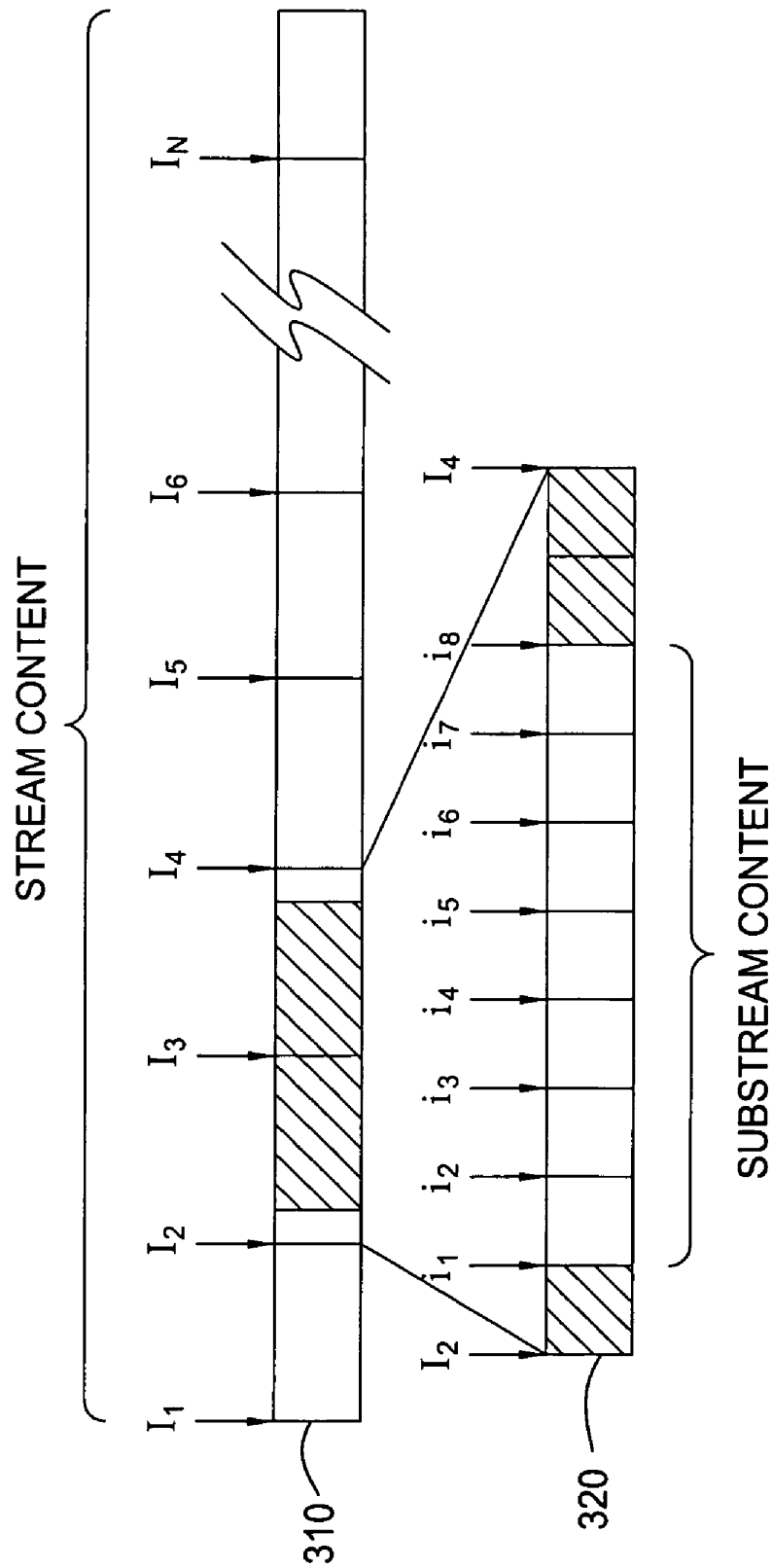


FIG. 3

400

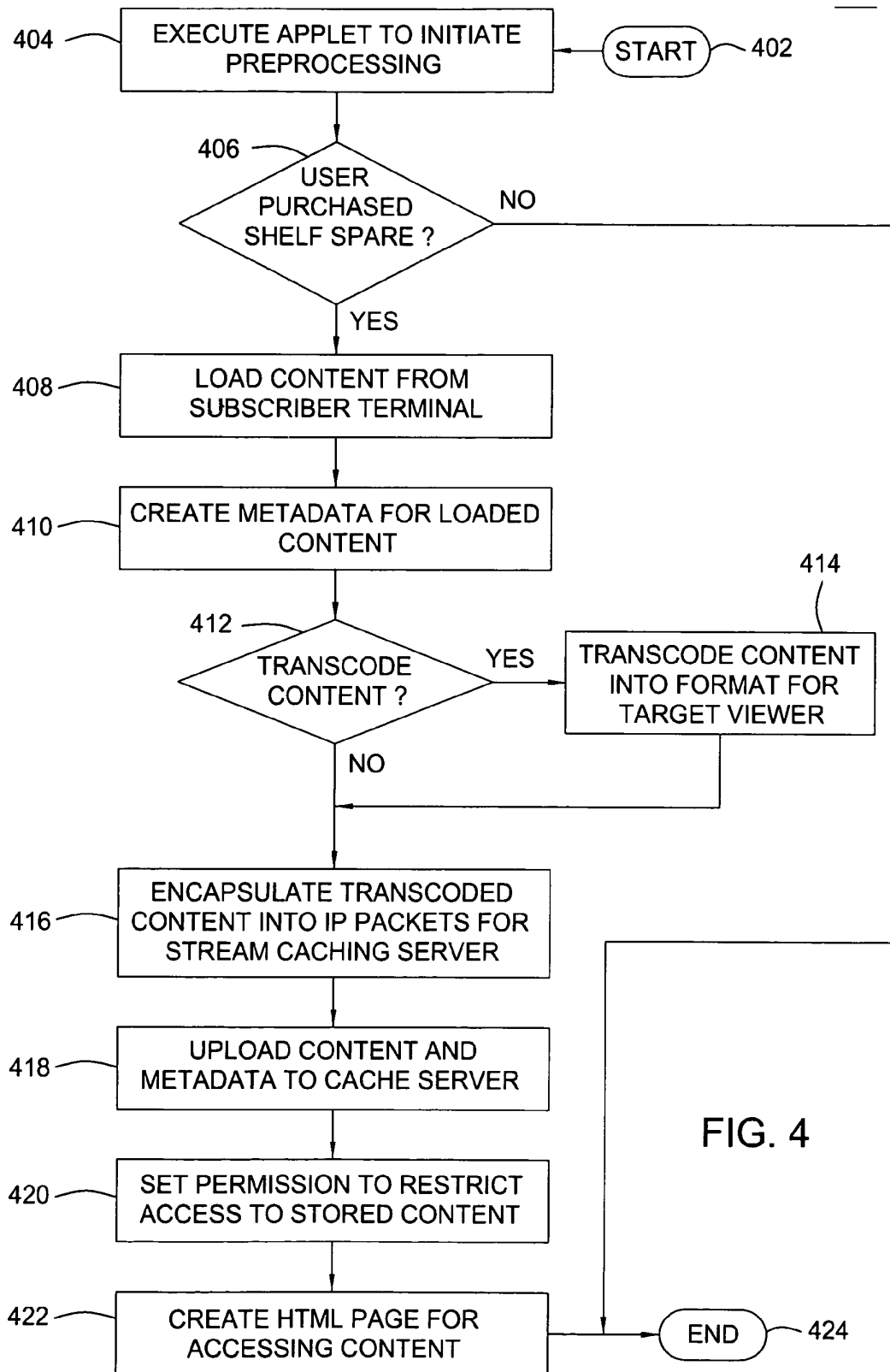


FIG. 4

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.