



US007055169B2

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

(10) **Patent No.:** **US 7,055,169 B2**
(45) **Date of Patent:** **May 30, 2006**

(54) **SUPPORTING COMMON INTERACTIVE TELEVISION FUNCTIONALITY THROUGH PRESENTATION ENGINE SYNTAX**

(75) Inventors: **Alain Delpuch**, Les Essarts le Roi (FR); **James Whitledge**, Naperville, IL (US); **Jean-Rene Menand**, Los Altos, CA (US); **Emmanuel Barbier**, Paris (FR); **Kevin Hausman**, Naperville, IL (US); **Debra Hensgen**, Redwood City, CA (US); **Dongmin Su**, Santa Clara, CA (US)

(73) Assignee: **OpenTV, Inc.**, San Francisco, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 160 days.

(21) Appl. No.: **10/419,621**

(22) Filed: **Apr. 21, 2003**
(Under 37 CFR 1.47)

(65) **Prior Publication Data**
US 2004/0139480 A1 Jul. 15, 2004

Related U.S. Application Data
(60) Provisional application No. 60/373,883, filed on Apr. 19, 2002.

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

(52) **U.S. Cl.** **725/100; 725/91; 725/138; 725/139**

(58) **Field of Classification Search** **725/91, 725/100, 109, 112, 135, 139; 709/217, 223, 709/225, 226, 231; 710/48, 266**

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,790,198 A 8/1998 Roop et al.
6,184,878 B1 2/2001 Alonso et al.

(Continued)

FOREIGN PATENT DOCUMENTS

EP 0 839 599 A2 4/1998

(Continued)

OTHER PUBLICATIONS

“CSS3 Module: The Box Model”; W3C Working Draft, Jul. 26, 2001; This version: <http://www.w3.org/TR/2001/WD-css3-box-20010726/>; Latest version: <http://www.w3.org/TR/css3-box/>; Editor: Bert Bos; Copyright © 2001 W3C® (MIT, INRIA, Keio); pp. 1-104.

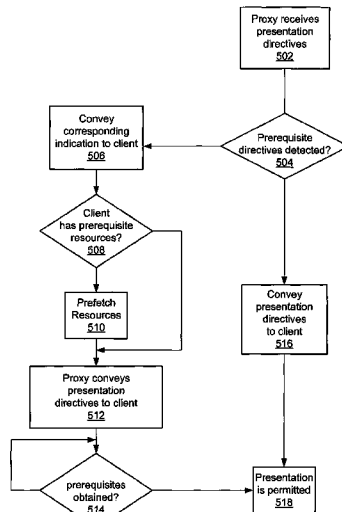
Primary Examiner—Kieu-Oanh Bui

(74) *Attorney, Agent, or Firm*—Meyertons Hood Kivlin Kowert & Goetzel, P.C.; Rory D. Rankin

(57) **ABSTRACT**

A method and mechanism for enabling the creation and/or control of interactive television content using declarative-like directives such as HTML, scripting languages, or other languages. A centrally located proxy server is configured to receive, transcode and convey transcoded web based content to client devices. Upon detecting directives which indicate particular resources required for a presentation are prerequisites, the proxy server conveys signals to a client device that these particular resources are prerequisites. In response to receiving the conveyed signals, the client device may take actions to prefetch these resources. The client device is further configured to prohibit initiation of the presentation until the prerequisite resources are acquired.

23 Claims, 5 Drawing Sheets



US 7,055,169 B2

Page 2

U.S. PATENT DOCUMENTS

6,188,401 B1 2/2001 Peyer
6,345,307 B1 2/2002 Booth
6,415,303 B1 7/2002 Meier et al.
6,539,359 B1 3/2003 Ladd et al.
2002/0010798 A1* 1/2002 Ben-Shaul et al. 709/247
2002/0088011 A1* 7/2002 Lamkin et al. 725/142

2002/0194219 A1* 12/2002 Bradley et al. 707/506

FOREIGN PATENT DOCUMENTS

GB 2 332 803 6/1999
WO WO 02/17639 A2 2/2002

* cited by examiner

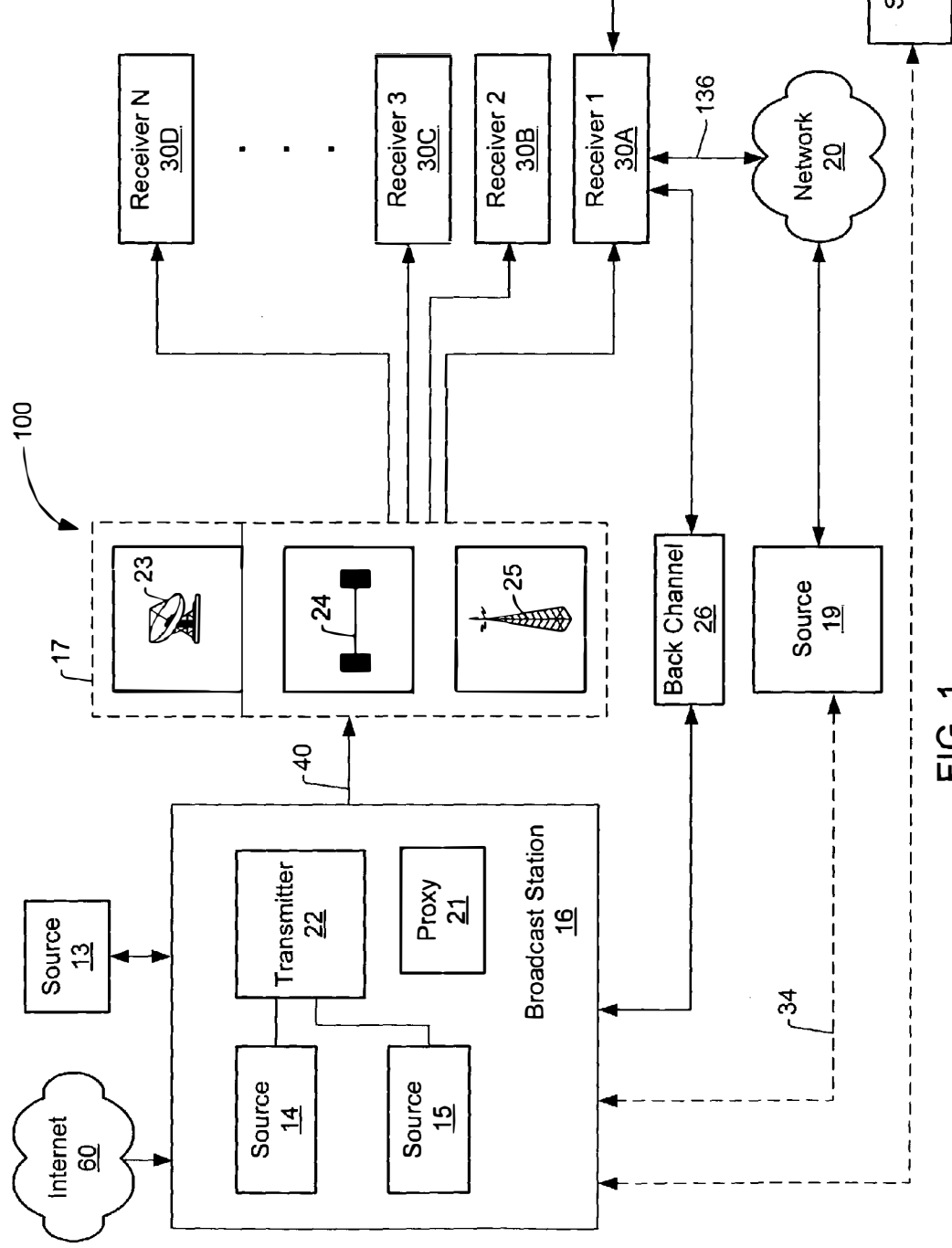


FIG. 1

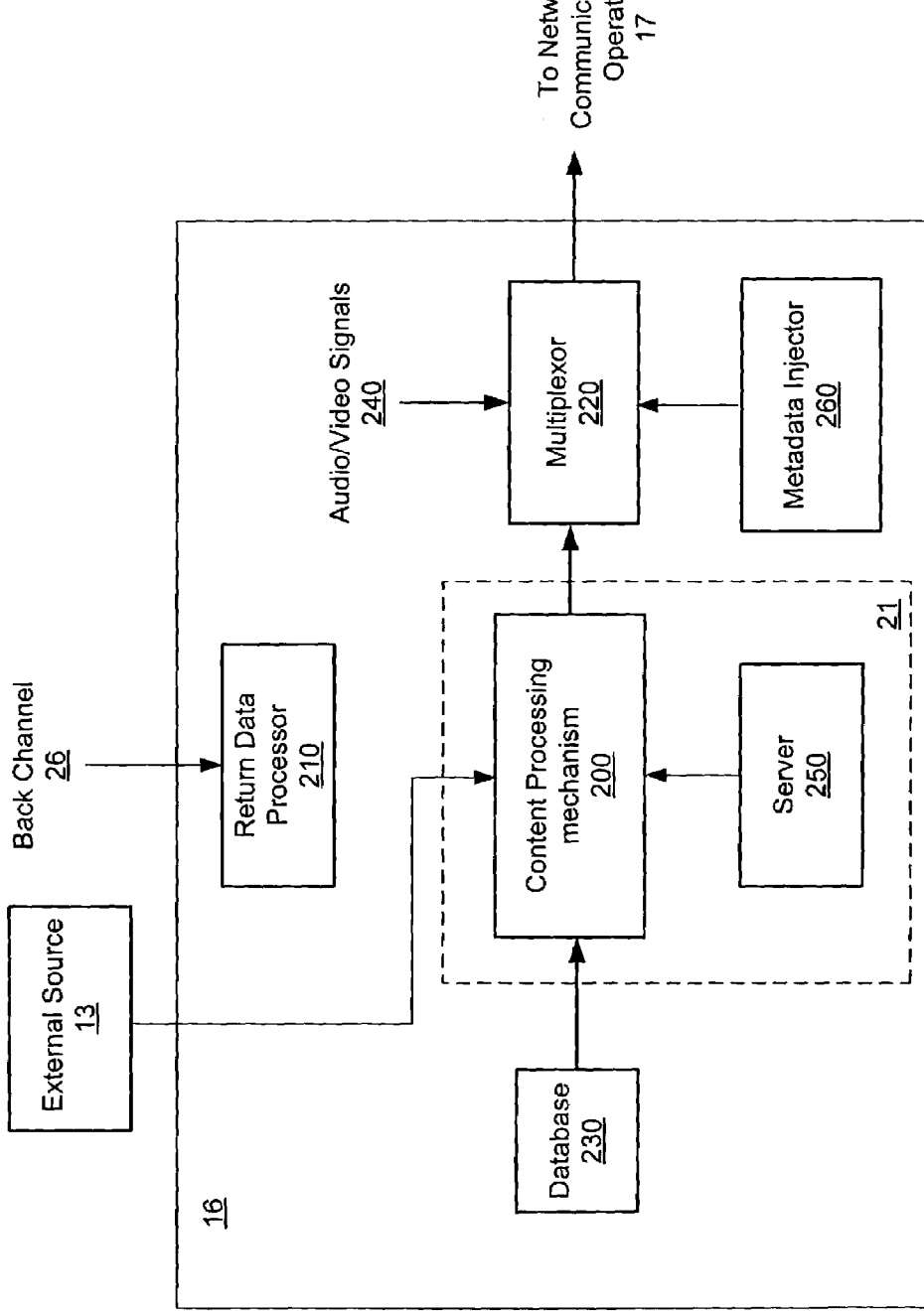


FIG. 2

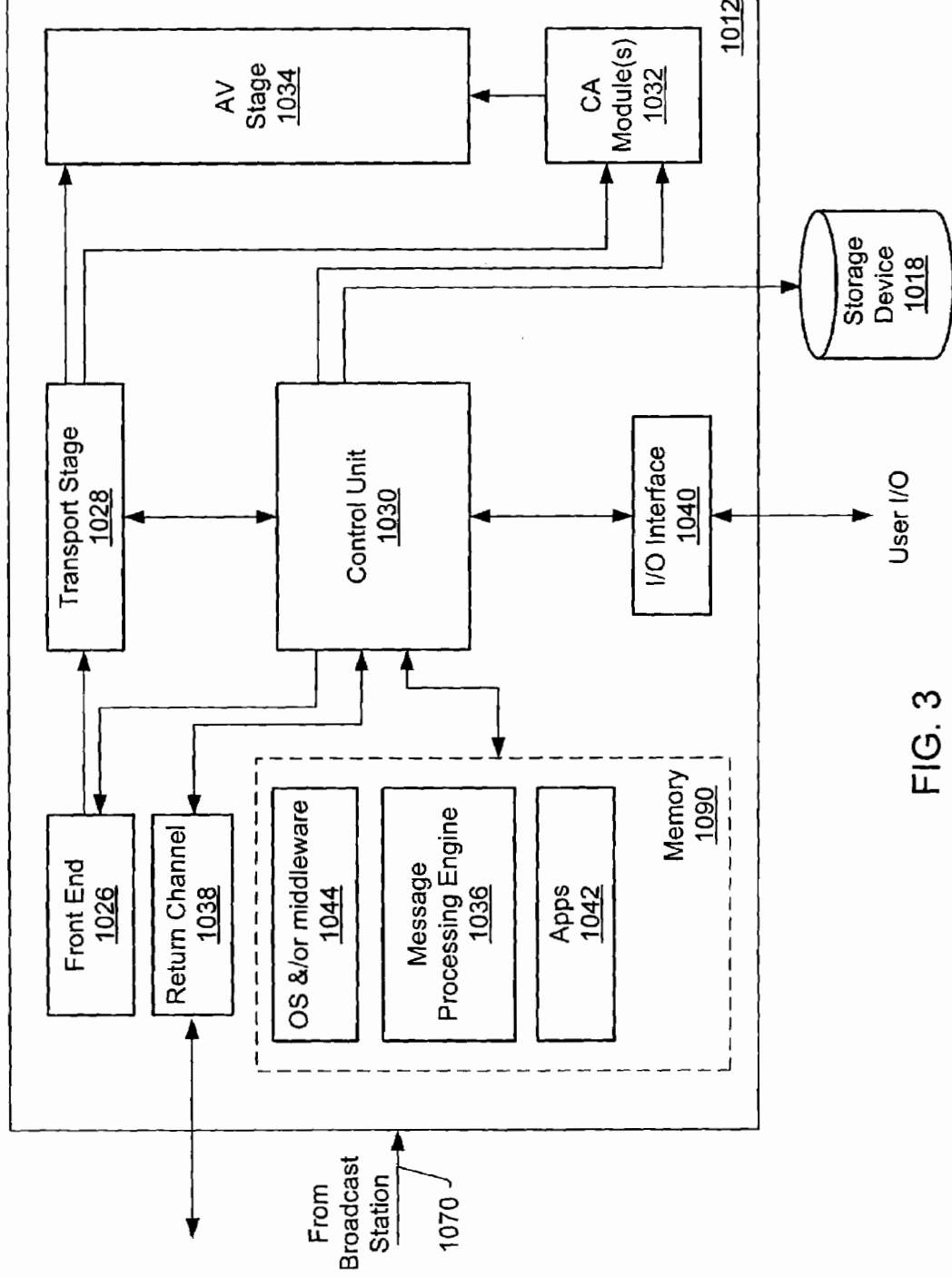


FIG. 3

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.