

US006317784B1

(12) United States Patent Mackintosh et al.

(54) PRESENTING SUPPLEMENTAL INFORMATION FOR MATERIAL CURRENTLY AND PREVIOUSLY BROADCAST BY A RADIO STATION

- (75) Inventors: Gregory B. Mackintosh, Roselle; Mike H. Kim, Naperville; Edwin C. Price; Edward C. Stojakovic, both of Chicago, all of IL (US)
- (73) Assignee: RadioWave.com, Inc., S. Schaumburg
- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.
- (21) Appl. No.: 09/163,292

DOCKE

- (22) Filed: Sep. 29, 1998
- (51) Int. Cl.⁷ G06F 15/16
- (52) U.S. Cl. 709/219; 709/217; 709/218

345/339; 705/1

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,204,969	4/1993	Capps et al 395/800
5,557,724	9/1996	Sampat et al
5,572,442	11/1996	Schulhof et al 364/514
5,699,089	12/1997	Murray 345/902
5,774,664	6/1998	Hidary et al 395/200.48
5,822,537	10/1998	Katseff et al 395/200.61
5,826,102	10/1998	Escobar et al 395/806
5,918,213	6/1999	Bernard et al 705/26
5,922,047	7/1999	Newlin et al 709/217
5,928,330	7/1999	Geotz et al 709/231

(10) Patent No.: US 6,317,784 B1

(45) Date of Patent:

Nov. 13, 2001

5,963,916		10/1999	Kaplan	. 705/26
6,012,086	*	1/2000	Lowell	709/218
6,151,634	*	11/2000	Glaser et al	709/236
6,161,114	*	12/2000	King et al	707/517
6,161,142	*	12/2000	Wolfe et al	709/230
6,166,735	*	12/2000	Dom et al	345/339
6,226,618	*	5/2000	Downs et al.	705/1

FOREIGN PATENT DOCUMENTS

0 847 156 A2	6/1998	(EP) .	
WO 98/21664	5/1998	(WO)	
WO 97/42582	11/1997	(WO)	G06F/17/00

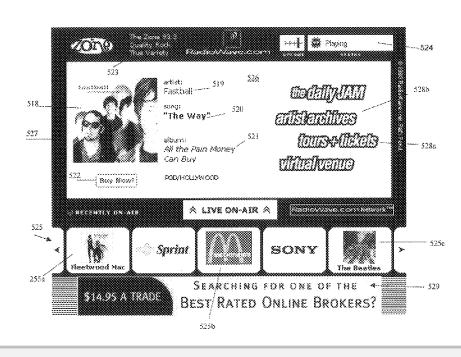
* cited by examiner

Primary Examiner—Le Hien Luu (74) Attorney, Agent, or Firm—Foley, Hoag & Eliot llp

(57) **ABSTRACT**

A media player for playing broadcast material and associated supplemental information includes a receiver configured to receive broadcast material from a broadcast service provider. The broadcast material includes program segments and program data related to one or more of said program segments. The player plays program segments of said received broadcast material on a user's terminal. An information retrieval module forwards an item of program data related to a given one of the program segments to a first server enabling the server to retrieve parameters identifying one or more items of supplemental material for said given program segment. The information retrieval module forwards the parameters to a second server to retrieve supplemental materials from said second server based on the parameters, and providesteh supplemental materials to the player for playback with a given program segment of broadcast material.

24 Claims, 13 Drawing Sheets



Find authenticated court documents without watermarks at docketalarm.com.

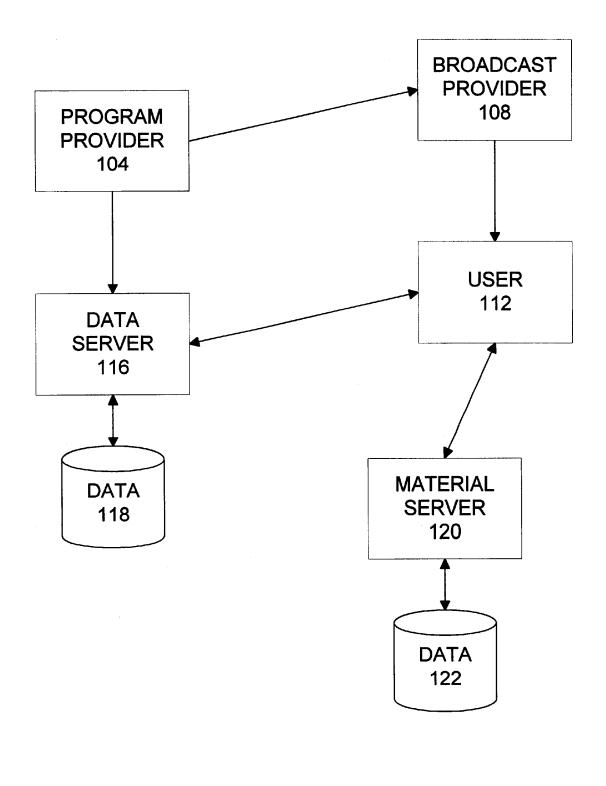


Fig. 1

DOCKET

Α

RM

Find authenticated court documents without watermarks at docketalarm.com.

Δ

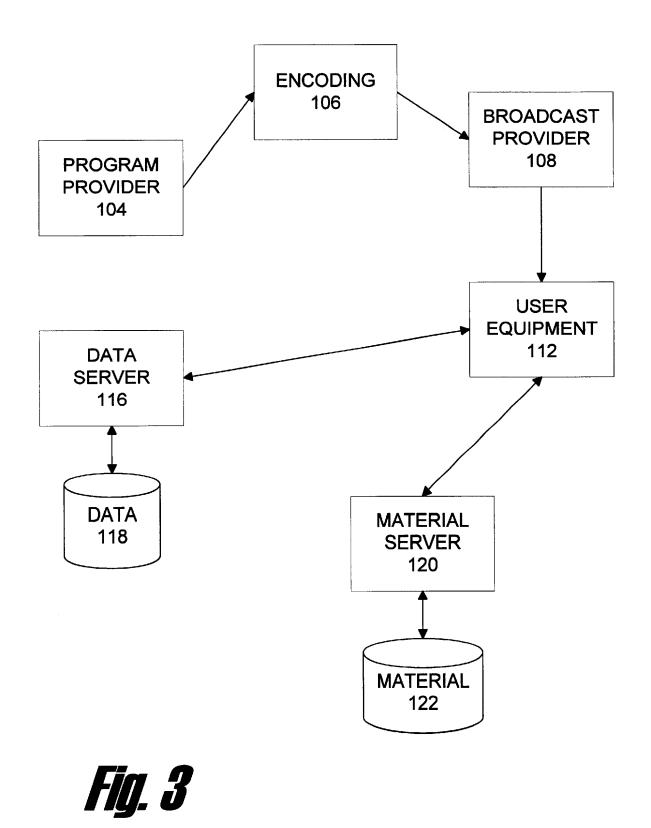
Δ

132 DELIVER PROGRAM TO USER 134 DELIVER PROGRAM DATA TO DATA SERVER 142 136 DATA SERVER RETREIVES DATA SERVER RETRIEVES PARAMETERS AND SENDS TO USER EQUIPMENT SUPPLEMENTAL MATERIAL - 144 138 **USER EQUIPMENT USES** SUPPLEMENTAL MATERIAL PARAMETERS TO **PROVIDED TO USER RETRIEVE SUPPLEMENTAL** TERMINAL MATERIAL 140 - 146 SUPPLEMENTAL MATERIAL SUPPLEMENTAL MATERIAL PLAYED IN CONJUNCTION PLAYED IN CONJUNCTION WITH PROGRAM MATERIAL WITH PROGRAM MATERIAL

Fig. 2

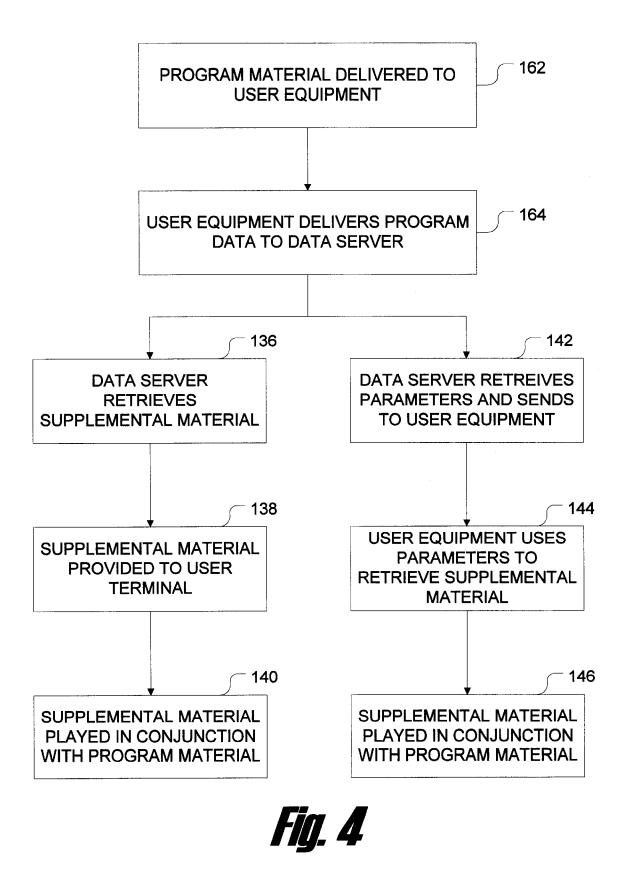
Α

Δ



DOCKET RM Find authenticated court documents without watermarks at docketalarm.com.

Δ



DOCKET A L A R M



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.