

## (19) United States

## (12) Patent Application Publication (10) Pub. No.: US 2003/0086341 A1 Wells et al.

## (43) Pub. Date: May 8, 2003

## (54) AUTOMATIC IDENTIFICATION OF SOUND RECORDINGS

## (75) Inventors: Maxwell Wells, Seattle, WA (US); Vidya Venkatachalam, Bellevue, WA (US); Luca Cazzanti, Bellevue, WA (US); Kwan Fai Cheung, Bellevue, WA (US); Navdeep Dhillon, Seattle, WA (US); Somsak Sukittanon, Seattle, WA (US)

Correspondence Address: STAAS & HALSEY LLP 700 11TH STREET, NW **SUITE 500** WASHINGTON, DC 20001 (US)

(73) Assignee: GRACENOTE, INC., Berkeley, CA

(21) Appl. No.: 10/200,034

Jul. 22, 2002 (22) Filed:

## Related U.S. Application Data

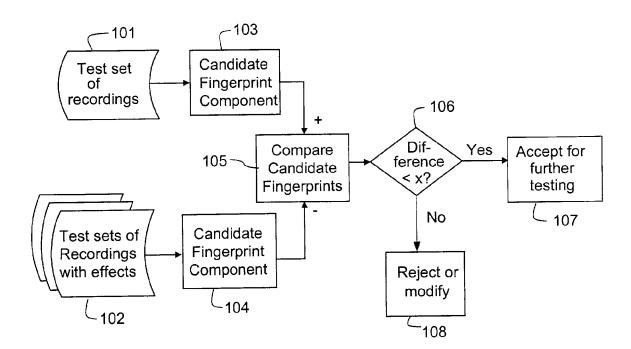
(60) Provisional application No. 60/306,911, filed on Jul. 20, 2001.

#### **Publication Classification**

(51)	Int. Cl. <sup>7</sup>	<b>G11B 11/00</b> ; G06F 17/00
(52)	U.S. Cl.	
` ′		704/208

#### (57)**ABSTRACT**

Copies of original sound recordings are identified by extracting features from the copy, creating a vector of those features, and comparing that vector against a database of vectors. Identification can be performed for copies of sound recordings that have been subjected to compression and other manipulation such that they are not exact replicas of the original. Computational efficiency permits many hundreds of queries to be serviced at the same time. The vectors may be less than 100 bytes, so that many millions of vectors can be stored on a portable device.



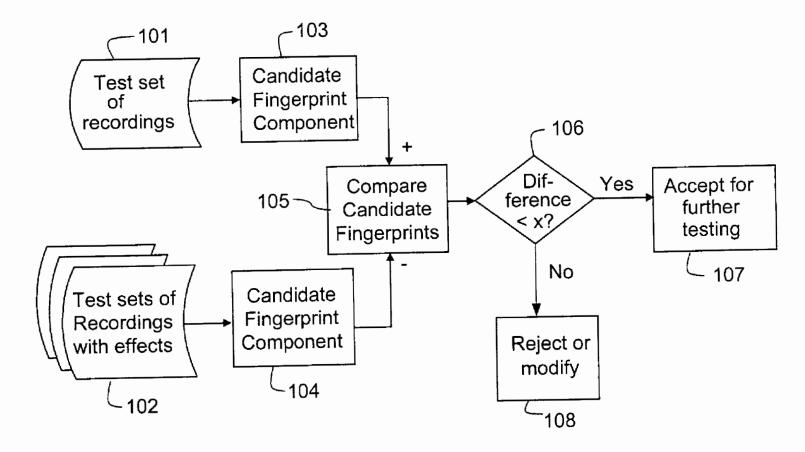


FIG. 1A

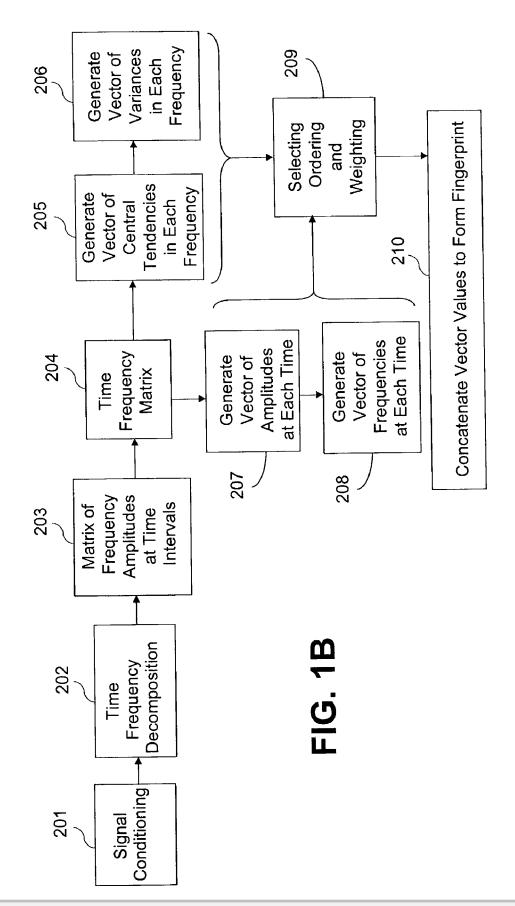
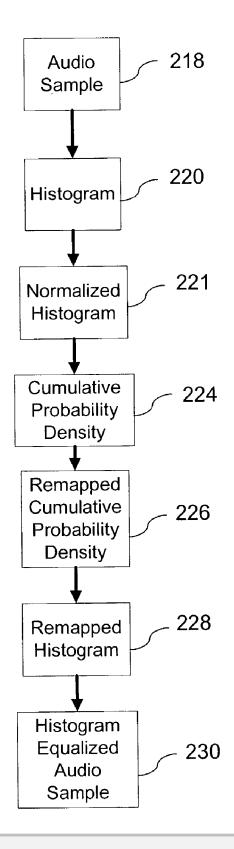
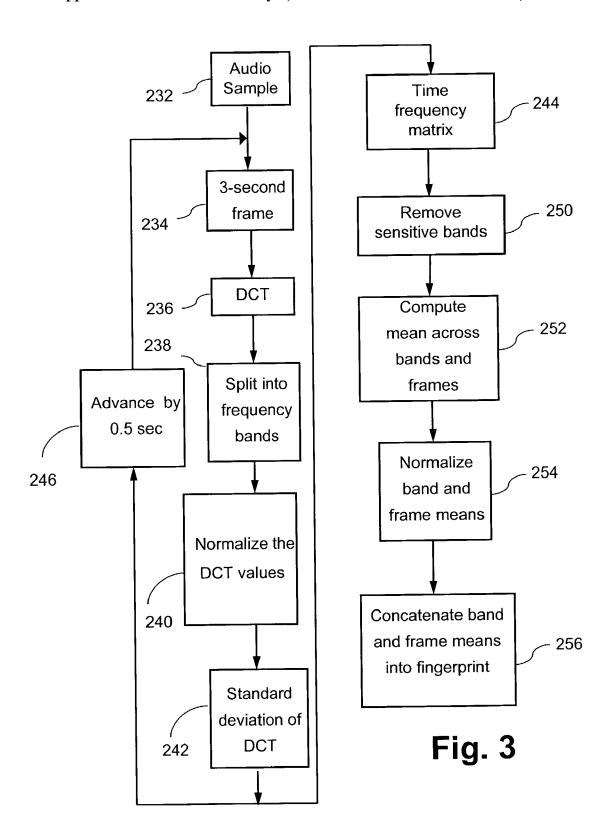


FIG. 2







# 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.

