

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

(10) **Patent No.:** **US 6,421,305 B1**  
(45) **Date of Patent:** **Jul. 16, 2002**

(54) **PERSONAL MUSIC DEVICE WITH A GRAPHICAL DISPLAY FOR CONTEXTUAL INFORMATION**

(75) Inventors: **Richard Gioscia**, Mahwah, NJ (US);  
**Yumi Sonoda**, Los Altos, CA (US);  
**Jan-Christoph Zoels**, Brooklyn, NY (US)

(73) Assignees: **Sony Corporation (JP); Sony Electronics, Inc.**, Park Ridge, NJ (US)

(\*) 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.: **09/190,260**

(22) Filed: **Nov. 13, 1998**

(51) **Int. Cl.**<sup>7</sup> ..... **G11B 17/22**

(52) **U.S. Cl.** ..... **369/30.06; 345/156; 345/173; 345/636; 369/24; 369/30; 369/33; 369/34; 369/37**

(58) **Field of Search** ..... **345/173, 156, 345/159, 169, 636; 369/24, 30, 30.06, 33, 34, 37**

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

5,684,511 A \* 11/1997 Westerink et al. .... 345/157

5,769,719 A \* 6/1998 Hsu ..... 345/156  
5,781,889 A \* 7/1998 Martin et al. .... 705/1  
5,848,398 A \* 12/1998 Martin et al. .... 705/14  
5,852,432 A \* 12/1998 Kim ..... 345/156  
5,914,707 A \* 6/1999 Kono ..... 345/173  
5,959,945 A \* 9/1999 Kleiman ..... 369/30  
6,031,795 A \* 2/2000 Wehmeyer ..... 369/30  
6,252,831 B1 \* 6/2001 Wehmeyer ..... 369/30

\* cited by examiner

*Primary Examiner*—Richard Hjerpe

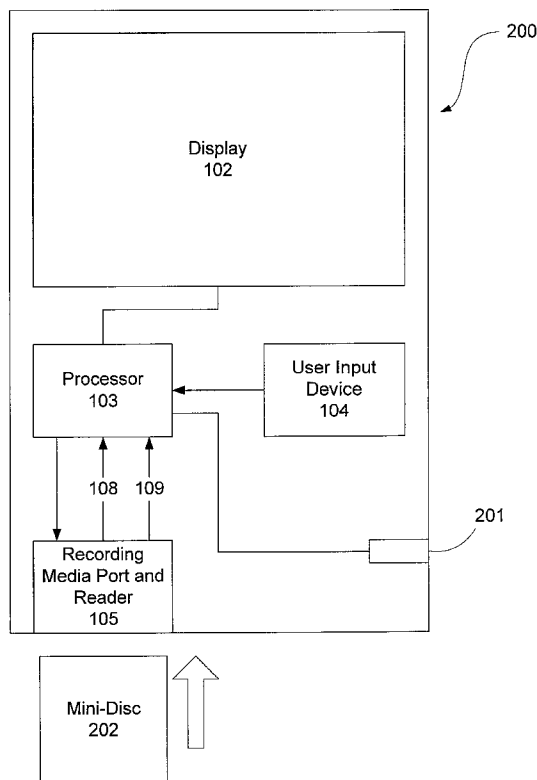
*Assistant Examiner*—Ali Zamani

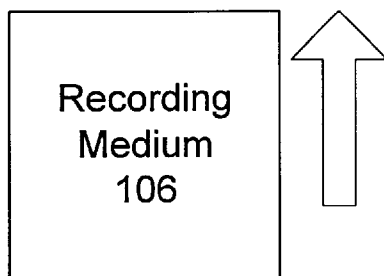
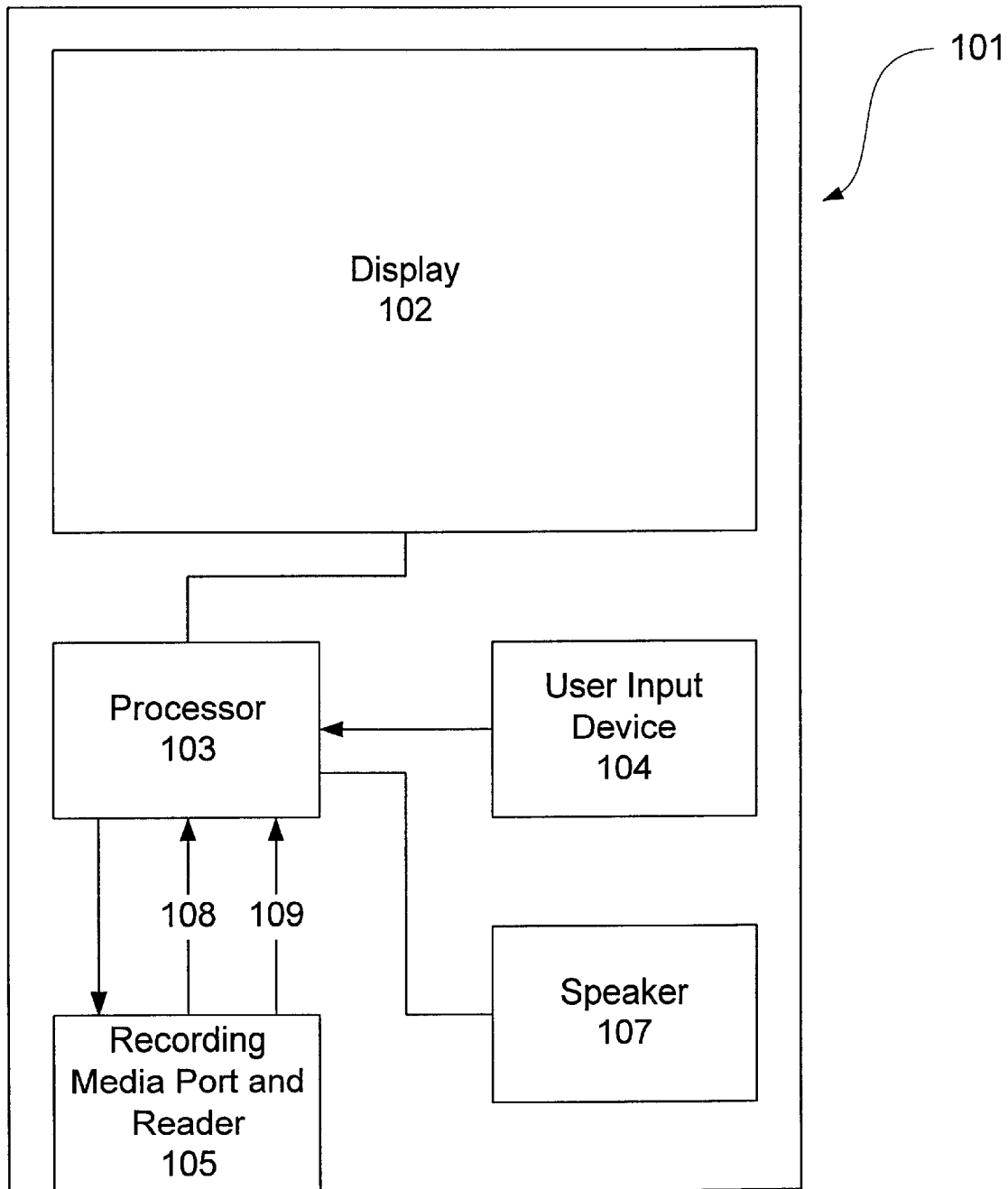
(74) *Attorney, Agent, or Firm*—Radar, Fishman & Grauer PLLC; Ronald P. Kananen, Esq.

(57) **ABSTRACT**

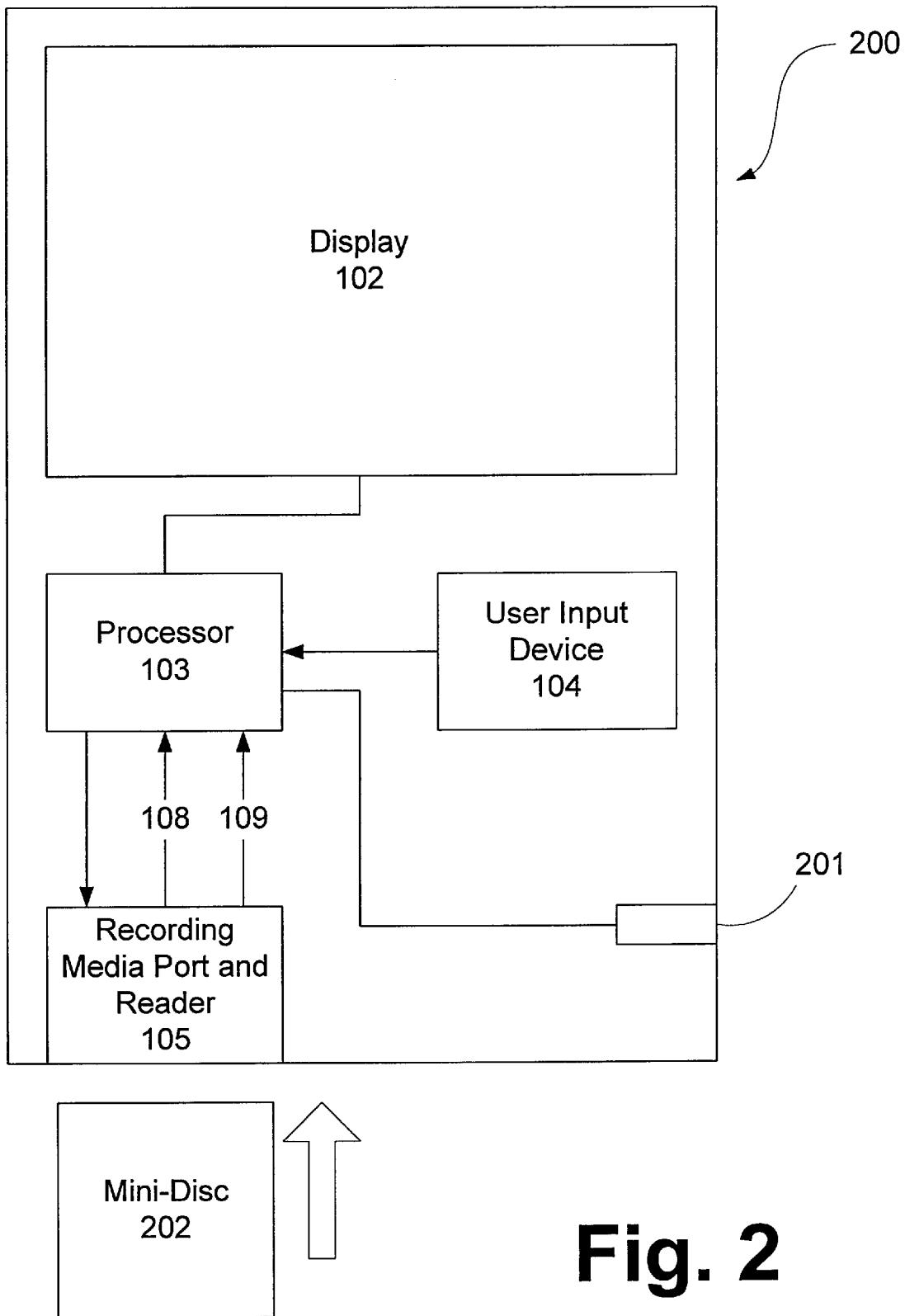
An audio system for playing recordings of audio programming includes a relatively large display device on which contextual information about the audio programming may be displayed. The contextual information is recorded on the same recording medium as the audio programming and may include any textual information or graphic images related to the audio programming or the artists who produced it. Preferably, the audio system is a personal, portable audio system which is battery-operated and which reads mini-discs.

**15 Claims, 4 Drawing Sheets**

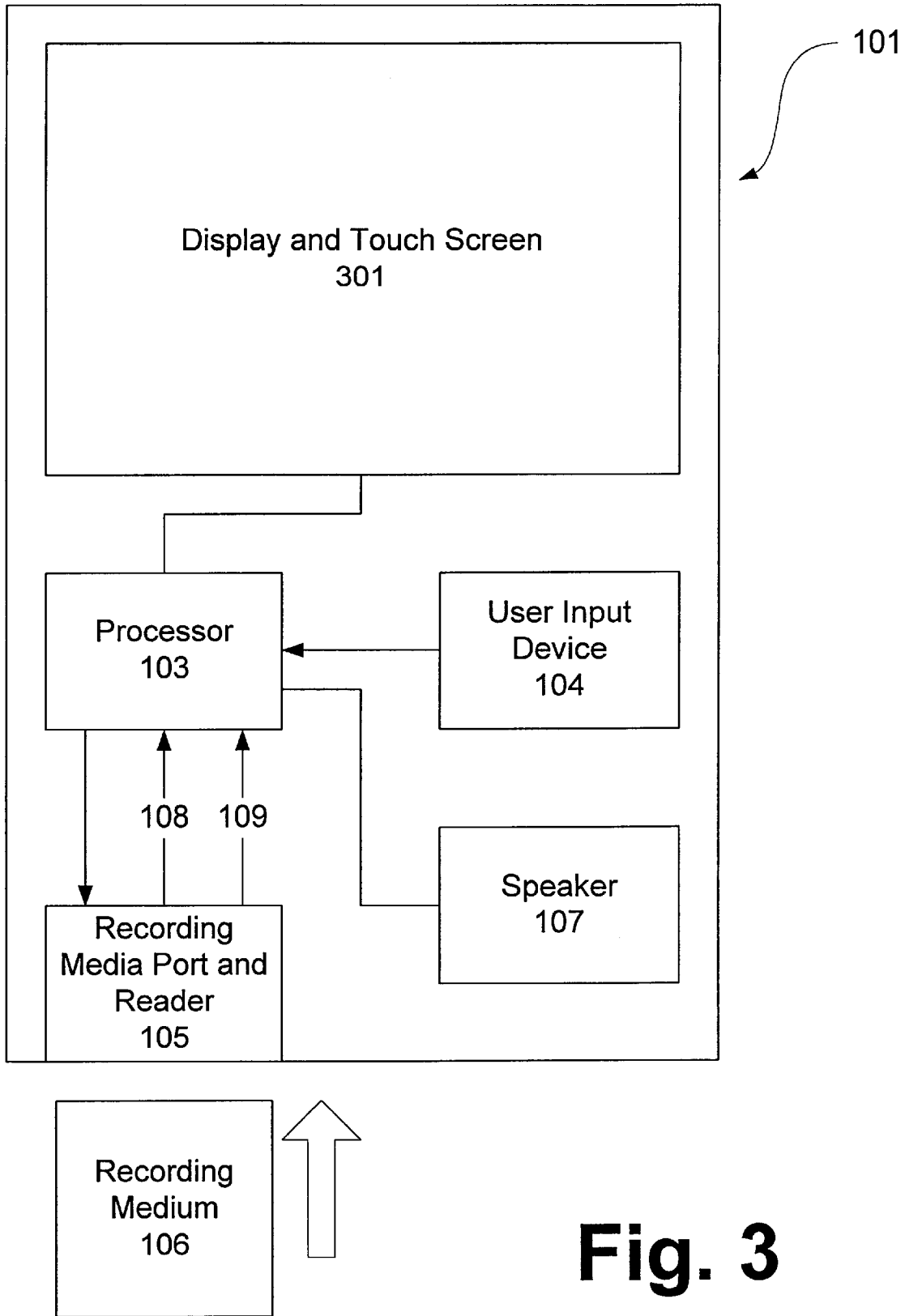




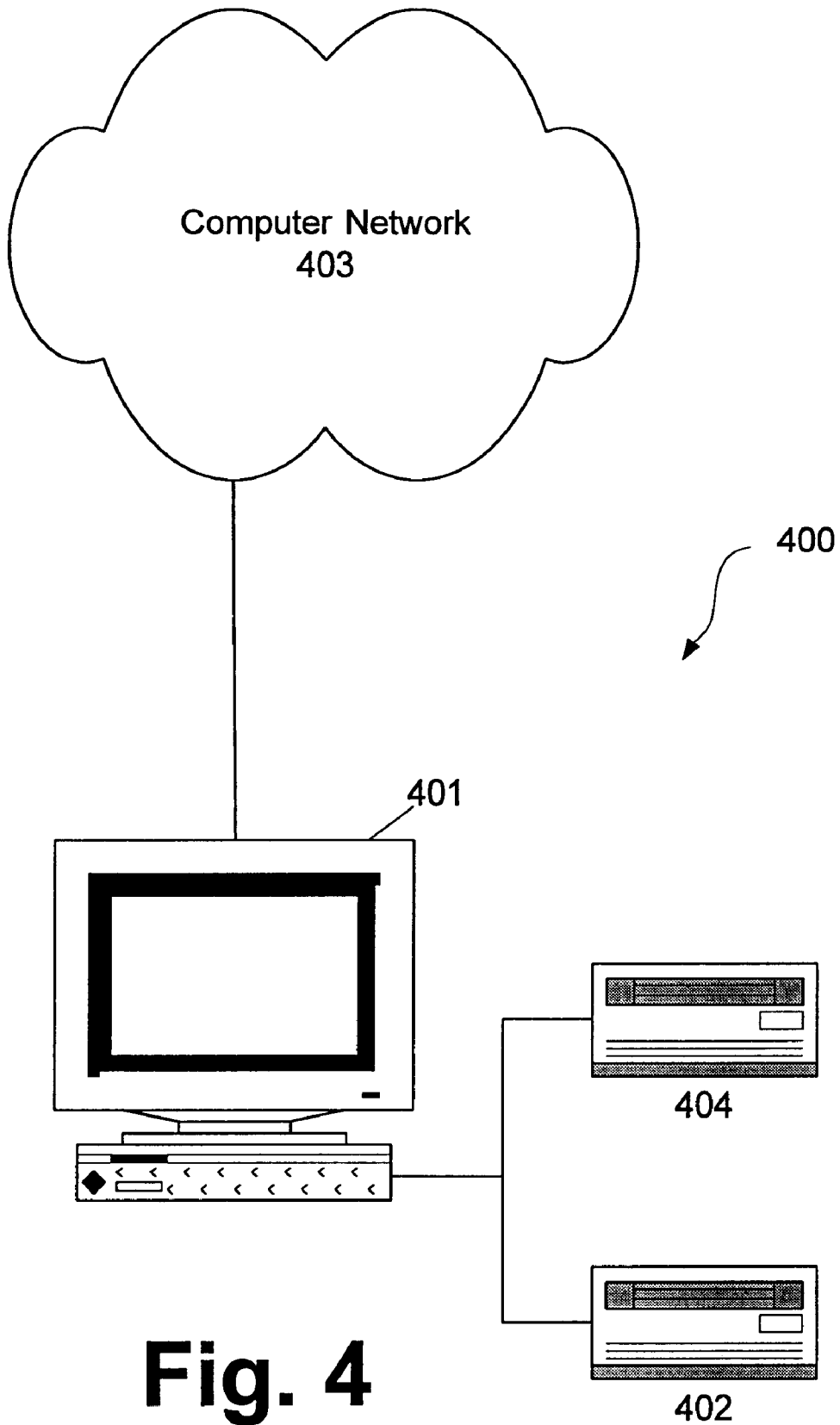
**Fig. 1**



**Fig. 2**



**Fig. 3**



**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.