



US005786789A

United States Patent [19]

[11] Patent Number: **5,786,789**

Janky

[45] Date of Patent: **Jul. 28, 1998**

[54] **GPS AND CELLPHONE UNIT HAVING ADD-ON MODULES**

5,517,682 5/1996 Dayani 455/89

[75] Inventor: **James M. Janky**, Los Altos, Calif.

Primary Examiner—Thomas H. Tarcza
Assistant Examiner—Dao L. Phan
Attorney, Agent, or Firm—Patrick T. King

[73] Assignee: **Trimble Navigation Limited**, Sunnyvale, Calif.

[57] **ABSTRACT**

[21] Appl. No.: **339,990**

A GPS unit and a cellular telephone unit each have add-on modules for providing additional functionality. A battery powered hand-held GPS unit has a battery power module with a built-in cellular telephone. The controls on the GPS unit are used to control cellular telephone operations. The GPS controlled cellular telephone transmits position location information obtained by the GPS unit. Alternatively, a battery powered hand-held cellular telephone unit has a battery power module with a built-in GPS device. The controls on the cellular telephone portion are used to control GPS device operations. The cellular telephone portion is able to transmit position location information obtained by the GPS device. The GPS and a cellular telephone device can function with either a standard battery module, or with a battery module having a cellular telephone or a GPS device built into the battery module.

[22] Filed: **Nov. 14, 1994**

[51] Int. Cl.⁶ **G01S 5/02**

[52] U.S. Cl. **342/357; 342/419; 455/33.1; 455/89**

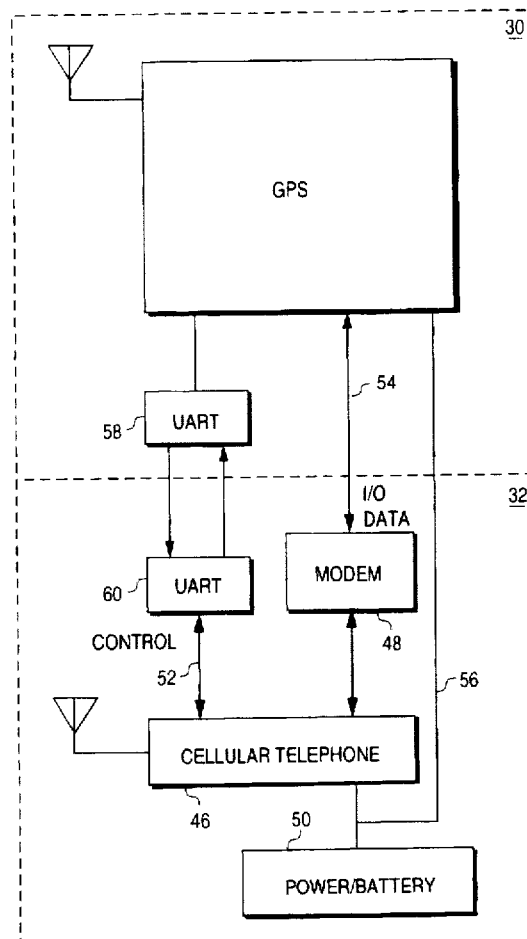
[58] Field of Search **342/357, 419; 455/33.1, 90, 89**

[56] **References Cited**

U.S. PATENT DOCUMENTS

5,043,736	8/1991	Darnell et al.	342/357
5,155,860	10/1992	McClure	455/89
5,334,824	8/1994	Martinez	235/380
5,408,513	4/1995	Busch et al.	379/59
5,479,479	12/1995	Braitberg et al.	379/58

14 Claims, 9 Drawing Sheets



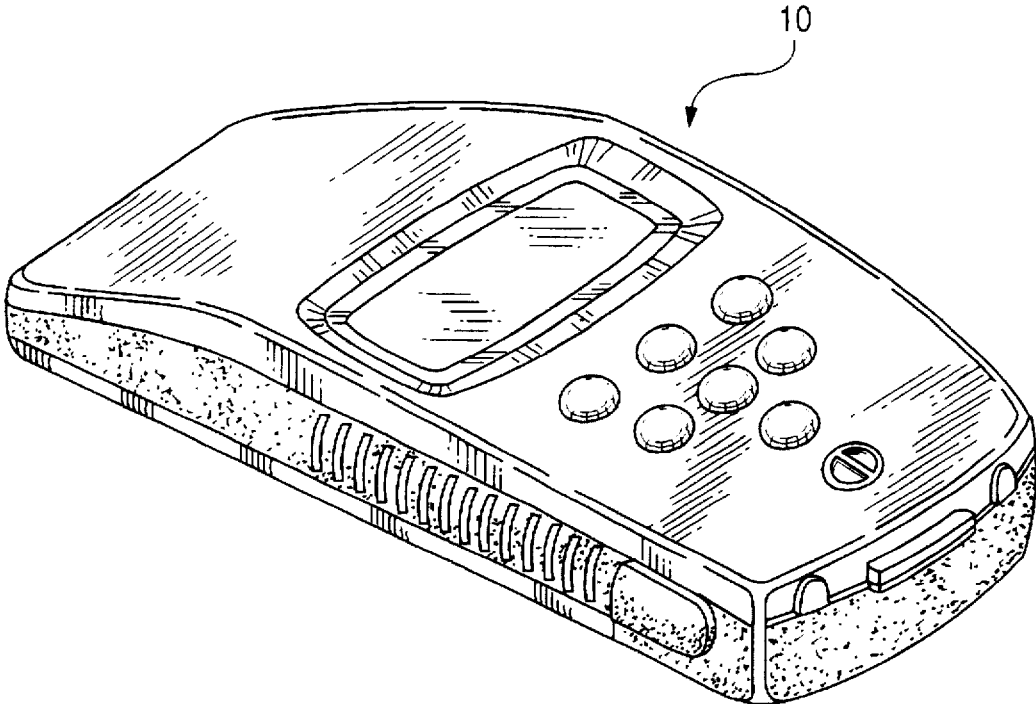


Figure 1A (Prior Art)

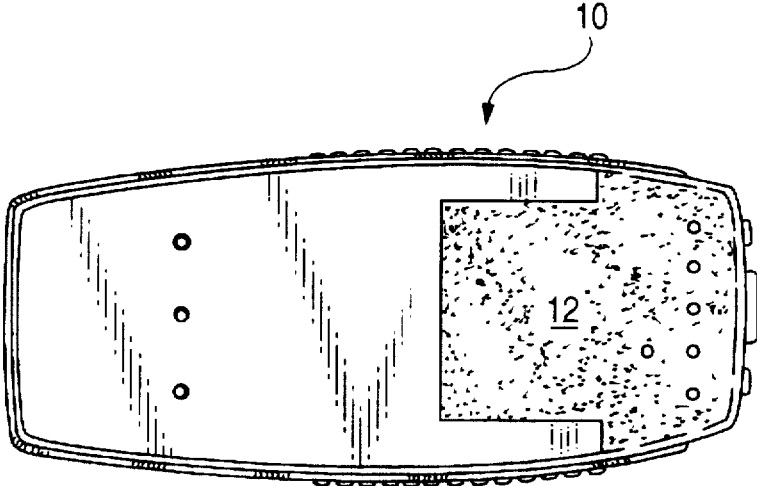


Figure 1B (Prior Art)

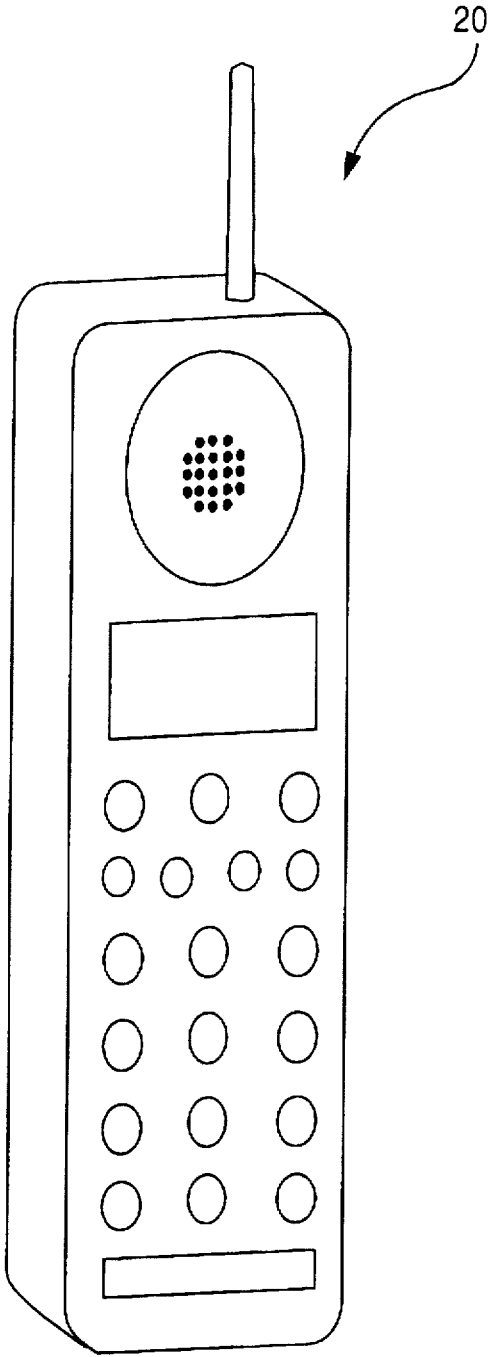


Figure 2 (Prior Art)

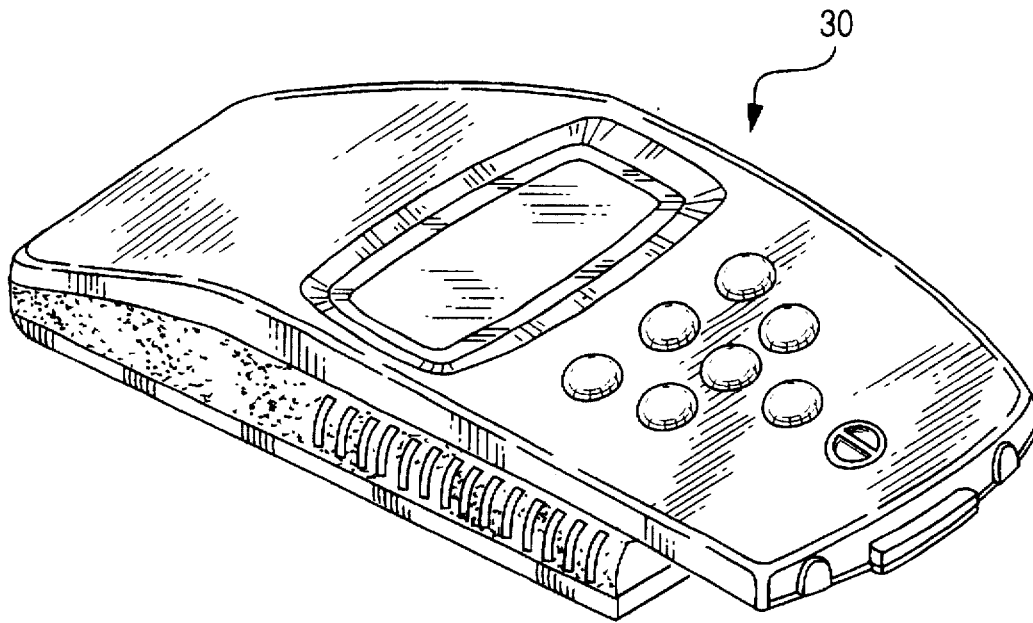


Figure 3A

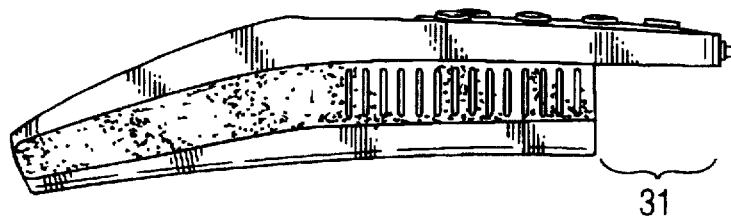


Figure 3B

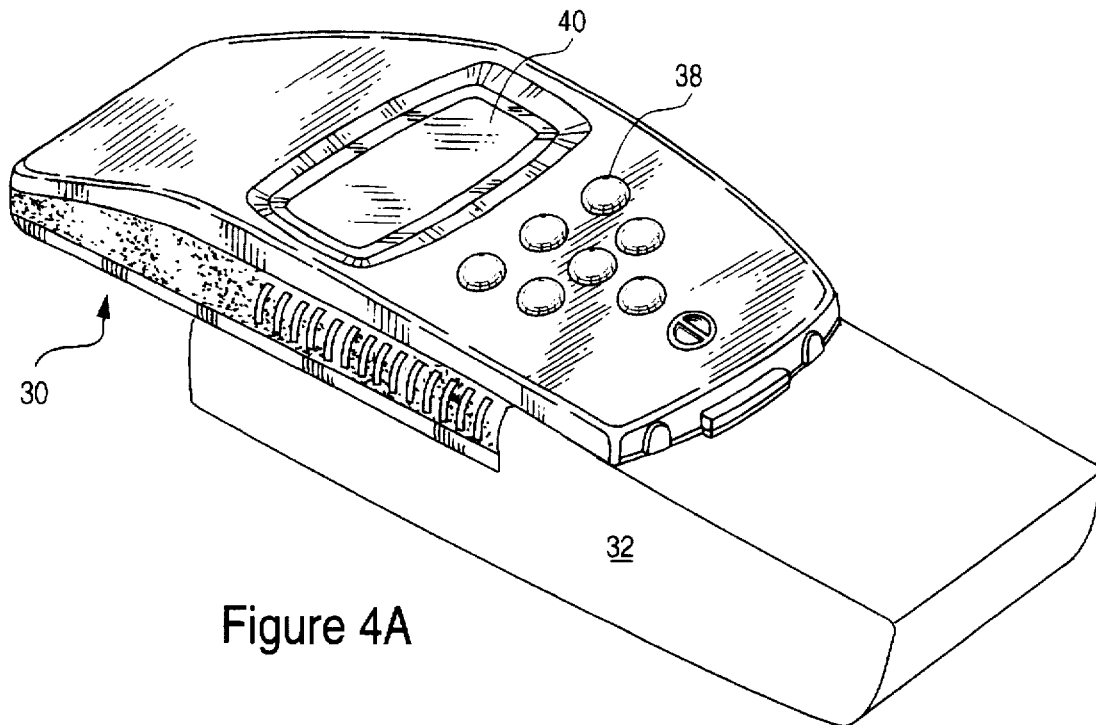


Figure 4A

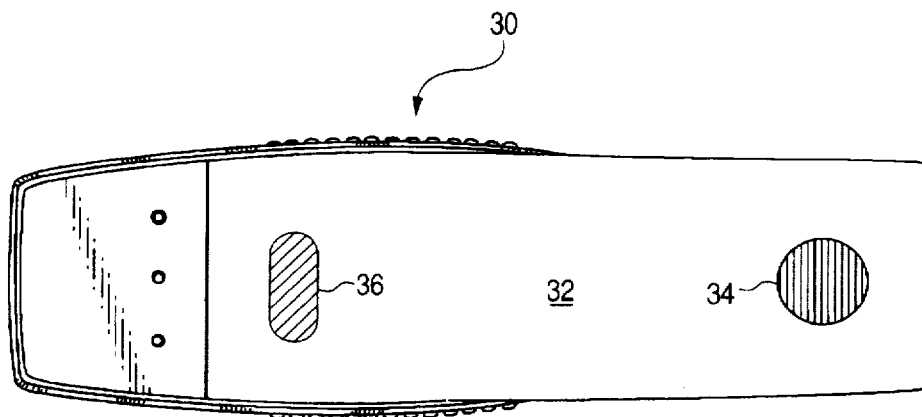


Figure 4B

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.