



(19) **United States**

(12) **Patent Application Publication**
LeBoeuf et al.

(10) **Pub. No.: US 2010/0217099 A1**

(43) **Pub. Date: Aug. 26, 2010**

(54) **METHODS AND APPARATUS FOR ASSESSING PHYSIOLOGICAL CONDITIONS**

Publication Classification

(76) Inventors: **Steven Francis LeBoeuf**, Raleigh, NC (US); **Jesse Berkley Tucker**, Knightdale, NC (US); **Michael Edward Aumer**, Raleigh, NC (US)

(51) **Int. Cl.**
A61B 5/00 (2006.01)
(52) **U.S. Cl.** **600/301**
(57) **ABSTRACT**

Correspondence Address:
MYERS BIGEL SIBLEY & SAJOVEC
PO BOX 37428
RALEIGH, NC 27627 (US)

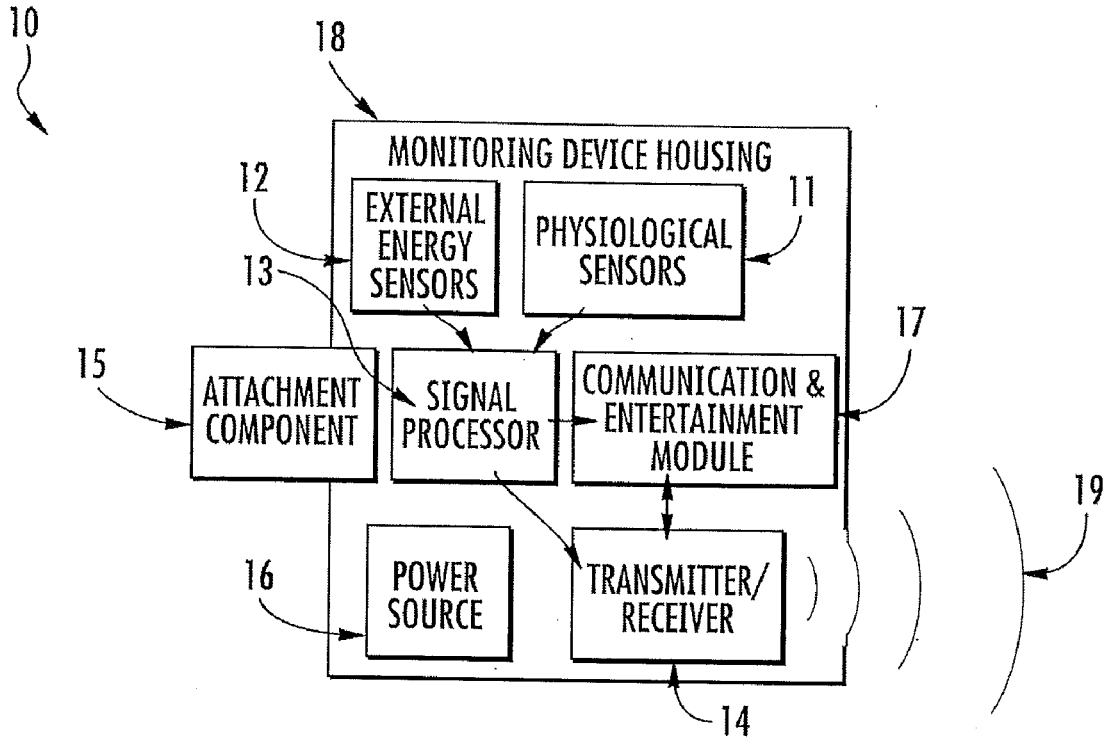
Monitoring apparatus and methods are provided for assessing a physiological condition of a subject. At least two types of physiological information are detected from a subject via a portable monitoring device associated with the subject, and an assessment of a physiological condition of the subject is made using the at least two types of physiological information, wherein each type of physiological information is individually insufficient to make the physiological condition assessment. Environmental information from a vicinity of a subject also may be detected, and an assessment of a physiological condition of the subject may be made using the environmental information in combination with the physiological information. Exemplary physiological information may include subject heart rate, subject activity level, subject tympanic membrane temperature, and subject breathing rate. Exemplary environmental information may include humidity level information in the vicinity of the subject. An exemplary physiological condition assessment may be subject hydration level.

(21) Appl. No.: **12/709,977**

(22) Filed: **Feb. 22, 2010**

Related U.S. Application Data

(60) Provisional application No. 61/208,567, filed on Feb. 25, 2009, now abandoned, provisional application No. 61/208,574, filed on Feb. 25, 2009, provisional application No. 61/212,444, filed on Apr. 13, 2009, provisional application No. 61/274,191, filed on Aug. 14, 2009.



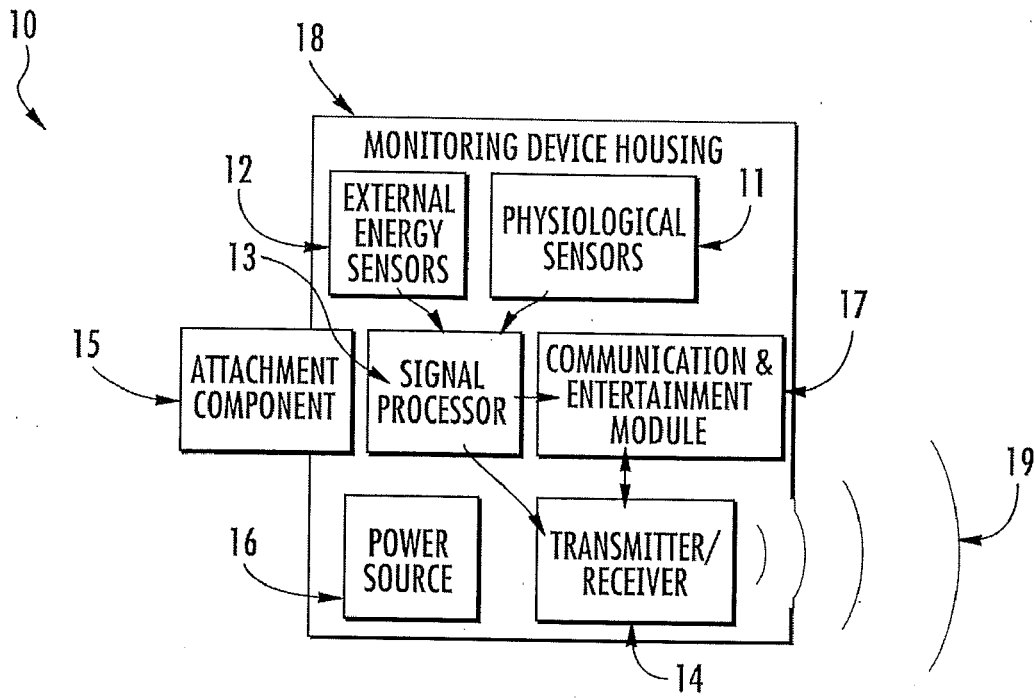


FIG. 1

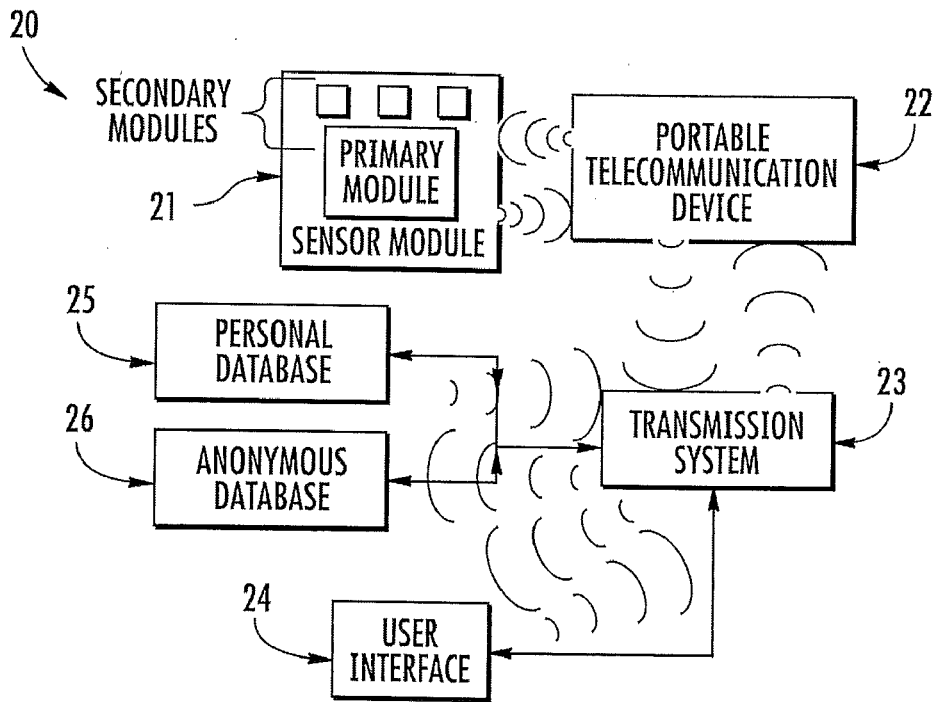


FIG. 2

30

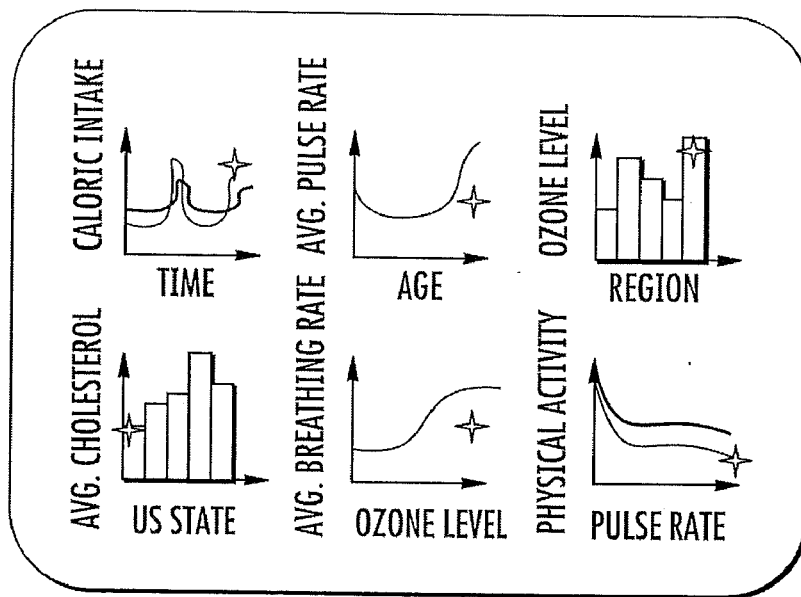


FIG. 3

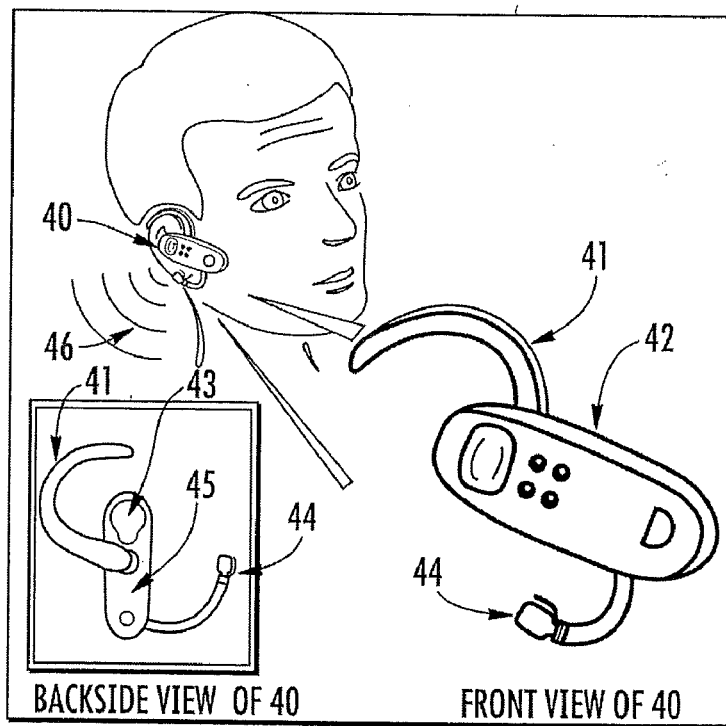
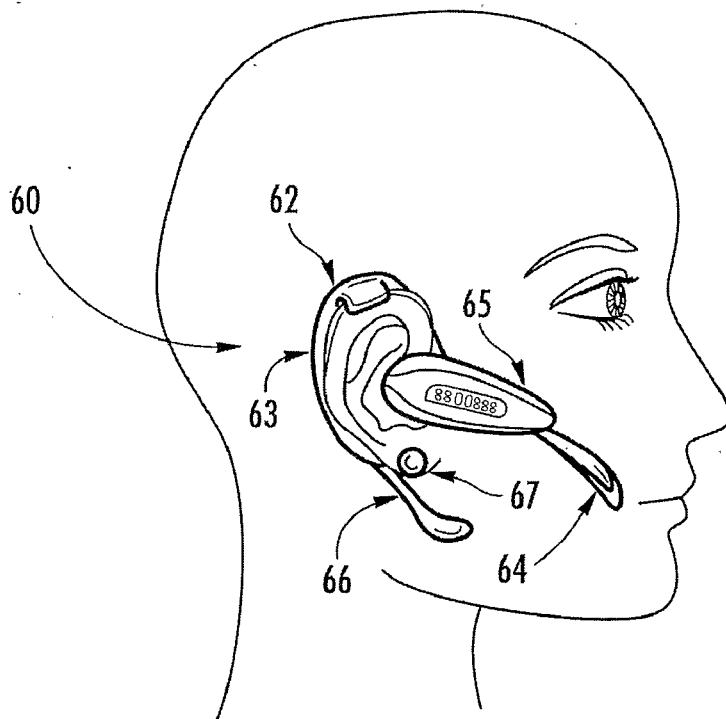
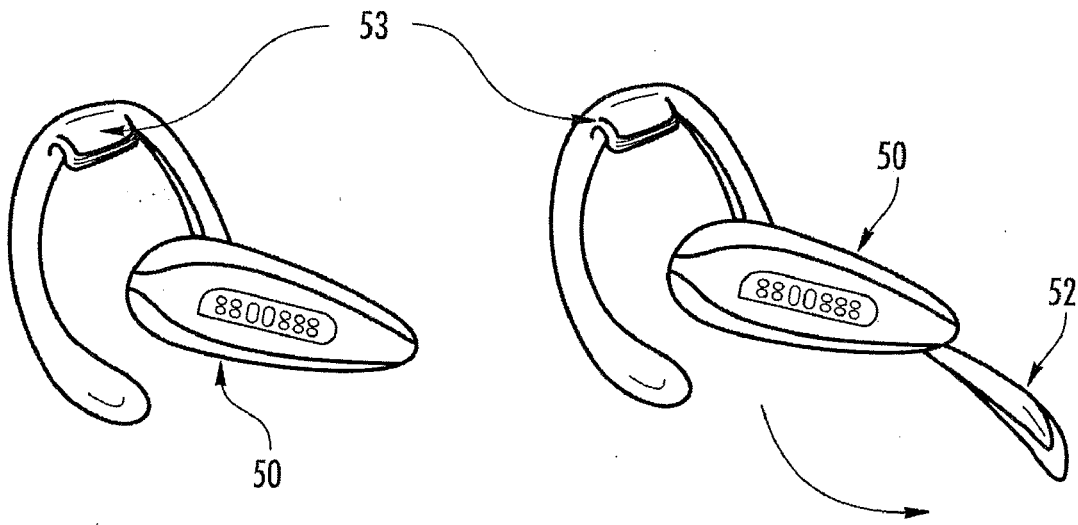


FIG. 4



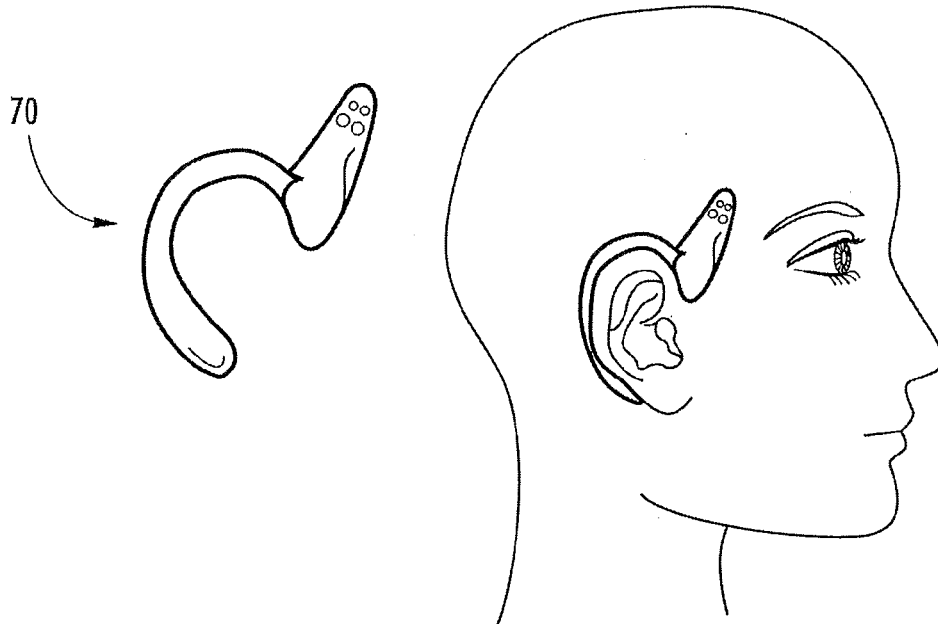


FIG. 7

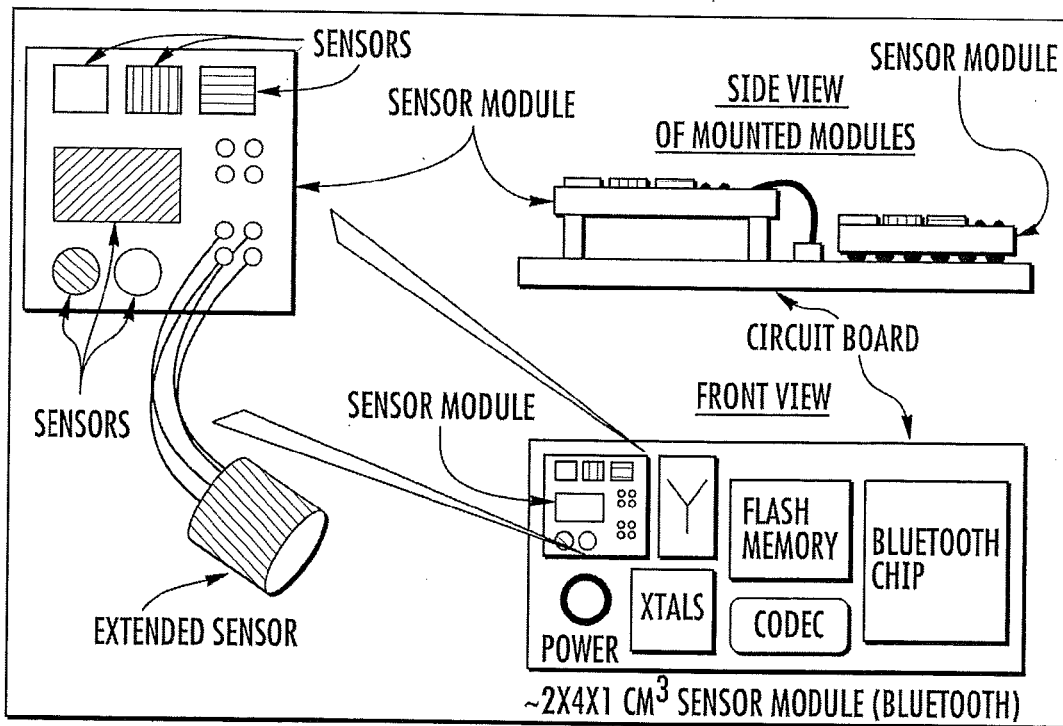


FIG. 8

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.