Exhibit 2

JS006778073B2

(12) United States Patent

Lutter et al.

(10) Patent No.: US 6,778,073 B2

(45) **Date of Patent:** Aug. 17, 2004

(54) METHOD AND APPARATUS FOR MANAGING AUDIO DEVICES

(75) Inventors: Robert Pierce Lutter, Tacoma, WA (US); Dan Alan Preston, Bainbridge

Island, WA (US)

(73) Assignee: Medius, Inc., Seattle, WA (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.: 09/892,295

(22) Filed: Jun. 26, 2001

(65) **Prior Publication Data**

US 2002/0196134 A1 Dec. 26, 2002

(51) Int. Cl.⁷ B60Q 1/00

(56) References Cited

U.S. PATENT DOCUMENTS

4,528,563	Α	*	7/1985	Takeuchi 340/903
5,552,773	Α	計	9/1996	Kuhnert 340/573
5,761,320	Α	*	6/1998	Farinelli et al 381/81
5,872,508	Α	*	2/1999	Taoka 340/436
5,943,427	Α	*	8/1999	Massie et al 381/17
6,097,285	Α	計	8/2000	Curtin 340/436
6,163,711	Α	*	12/2000	Juntunen et al 455/557
6,243,450	B 1		6/2001	Jansen et al.
6,275,231	B 1	*	8/2001	Obradovich 345/349
6,294,987	B1	*	9/2001	Matsuda et al 340/436

FOREIGN PATENT DOCUMENTS

WO	WO96/24229	8/1996
WO	WO99/08436	2/1999
WO	WO99/57662	11/1999
WO	WO99/65183	12/1999
WO	WO01/30061	4/2001
WO	WO01/58110	8/2001

OTHER PUBLICATIONS

Luttge, Karsten; "E-Charging API: Outsource Charging to a Payment Service Provider"; IEEE; 2001 (pp. 216–222). Product description of Raytheon RT Secure, "Embedded Hard Real-Time Secure Operating System", Copyright 2000, pp. 1–2.

Product description of Raytheon RT Secure, Copyright 2001, pp. 1–2.

Product description of Raytheon RT Secure, "Development Environment", Copyright 2001, pp. 1–2.

Product description of Raytheon Electronic Systems (ES), Copyright 2002, pp. 1–2.

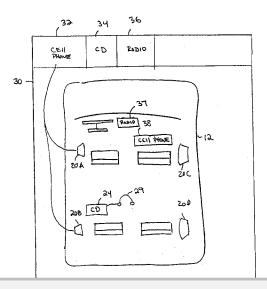
(List continued on next page.)

Primary Examiner—Davetta W. Gioins (74) Attorney, Agent, or Firm—Marger Johnson & McCollom, P.C.

(57) ABSTRACT

A vehicle audio system includes a wireless audio sensor configured to wirelessly detect different portable audio sources brought into the vehicle. Audio output devices are located in the vehicle for outputting audio signals from the different audio sources. A processor selectively connects the different audio sources to the different audio output devices. In another aspect, the audio system includes object sensors that detect objects located outside the vehicle. The processor generates warning signals that are output from the different audio output devices according to where the objects are detected by the object sensors.

21 Claims, 8 Drawing Sheets





US 6,778,073 B2

Page 2

OTHER PUBLICATIONS

H. Chung, L. Ojeda, and J. Borenstein, "Sensor Fusion for Mobile Robot Dead-reckoning with a Precision-calibrated Fiber Optic Gyroscope", 2001 IEEE International Conference on Robotics and Automation, Seoul, Korea, May 21–26, pp. 1–6.

A. Das, R. Fierro, V. Kumar, J. Ostrowski, J. Spletzer, and C. Taylor, "A Framework for Vision Based Formation Control", IEEE Transactions on Robotics and Automation, vol. XX, No. Y, 2001, pp. 1–13.

J. Takezaki, N. Ueki, T. Minowa, H. Kondoh, "Support System for Safe Driving—A Step Toward ITS Autonomous Driving—", Hitachi Review, vol. 49, No. 3, 2000, pp. 1–8. S.G. Goodridge, "Multimedia Sensor Fusion for Intelligent Camera Control and Human—Computer Interaction", Dissertation submitted to the Graduate Faculty of North Carolina State University in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Electrical Engineering, Raleigh, NC, 1997, pp. 1–5.

M. Chantler, G. Russel, and R. Dunbar, "Probabilistic Sensor Fusion for Reliable Workspace Sensing", pp. 1–14. ISIS Project: Sensor Fusion, Linkoping University Division of Automatic Control and Communication Systems in cooperation with SAAB (Dynamics and Aircraft), 18 pages. Hitachi Automated Highway System (AHS), Automotive Products, Hitachi, Ltd., Copyright 1994–2002, 8 pages. Vehicle Dynamics Lab, University of California, Berkeley, funded by BMW, current members: D. Caveney and B. Feldman, "Adaptive Cruise Control", 17 pages.

Counterair: The Cutting Edge, Ch. 2 "The Evolutionary Trajectory The Fighter Pilot-Here to Stay?" AF2025 v3c8-2, Dec. 1996, pp. 1-7.

Counterair: The Cutting Edge, Ch. 4 "The Virtual Trajectory Air Superiority without an "Air" Force?" AF2025 v3c8–4, Dec. 1996, pp. 1–12.

TNO FEL Annual Review 1998: Quality works, 16 pages.

Boeing News Release, "Boeing Demonstrates JSF Avionics Multi-Sensor Fusion", Seattle, WA, May 9, 2000, pp. 1–2.

Boeing Statement, "Chairman and CEO Phil Condit on the JSF Decision", Washington, D.C., Oct. 26, 2001, pp. 1–2.

Ada 95 Transition Support—Lessons Learned, Sections 3, 4, and 5, CACI, Inc.—Federal, Nov. 15, 1996, 14 pages.

Joint Strike Fighter Terrain Database, ets-news.com "Simulator Solutions" 2002, 3 pages.

MSRC Redacted Proposal, 3.0 Architecture Development, pp. 1–43.

Powerpoint Presentation by Robert Allen—Boeing Phantom Works entitled "Real-Time Embedded Avionics System Security and COTS Operating Systems", Open Group Real-Time Forum, Jul. 18, 2001, 16 pages.

Green Hills Software, Inc., "The AdaMULTI 2000 Integrated Development Environment", Copyright 2002, 7 pages.

* cited by examiner

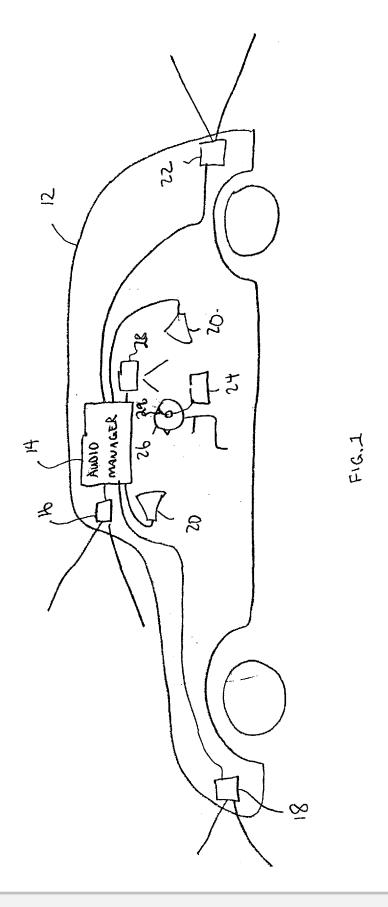


U.S. Patent

Aug. 17, 2004

Sheet 1 of 8

US 6,778,073 B2



U.S. Patent

Aug. 17, 2004

Sheet 2 of 8

US 6,778,073 B2

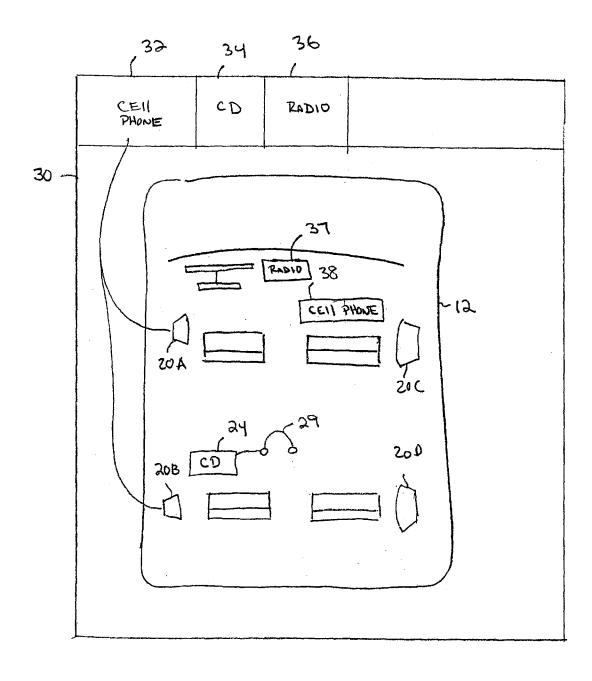


FIG. 2



DOCKET

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.

