



(12) **United States Patent**
Marlowe

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(54) **AUDIO DEVICE INTEGRATION SYSTEM**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 820 days.

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(57) **ABSTRACT**

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(51) **Int. Cl.**
H04B 1/00 (2006.01)

(52) **U.S. Cl.** **381/86; 340/825.24; 700/94**

(58) **Field of Classification Search** **381/86; 307/9.1, 10.1; 340/825.25, 825.24; 700/94; 455/345, 346; 701/36; 710/303, 304**
See application file for complete search history.

An audio device integration system is provided. One or more after-market audio devices, such as a CD player, CD changer, MP3 player, satellite receiver, DAB receiver, or the like, is integrated for use with an existing OEM or after-market car stereo system, wherein control commands can be issued at the car stereo and responsive data from the audio device can be displayed on the stereo. Control commands generated at the car stereo are received, processed, converted into a format recognizable by the audio device, and dispatched to the audio device for execution. Information from the audio device, including track, disc, song, station, time, and other information, is received, processed, converted into a format recognizable by the car stereo, and dispatched to the car stereo for display thereon. One or more auxiliary input sources can be integrated with the car stereo, and selected between using the controls of the car stereo. Both an audio device and one or more auxiliary input sources can be integrated together, and a user can select between the device or the one or more auxiliary input sources by issuing selection commands through the car stereo. A docking station is provided for docking a portable audio or video device for integration with the car stereo.

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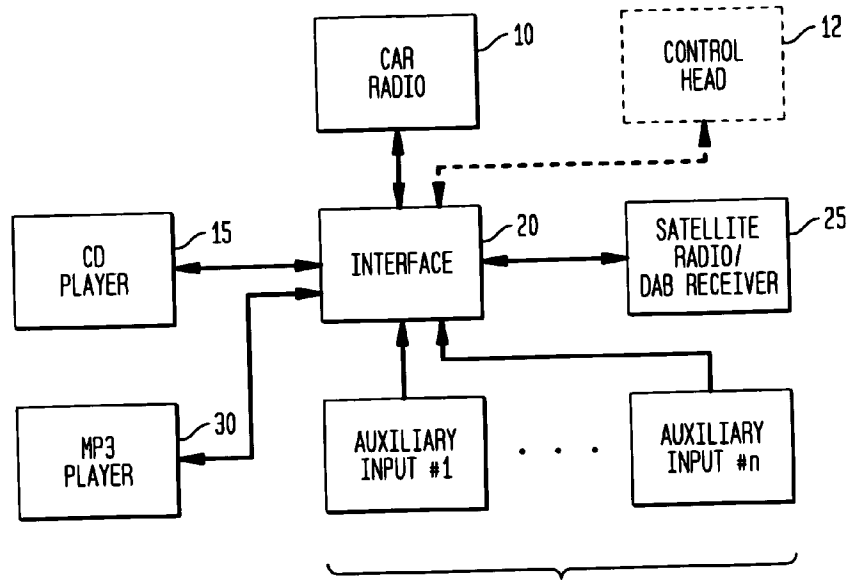
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99 Claims, 21 Drawing Sheets



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FIG. 1

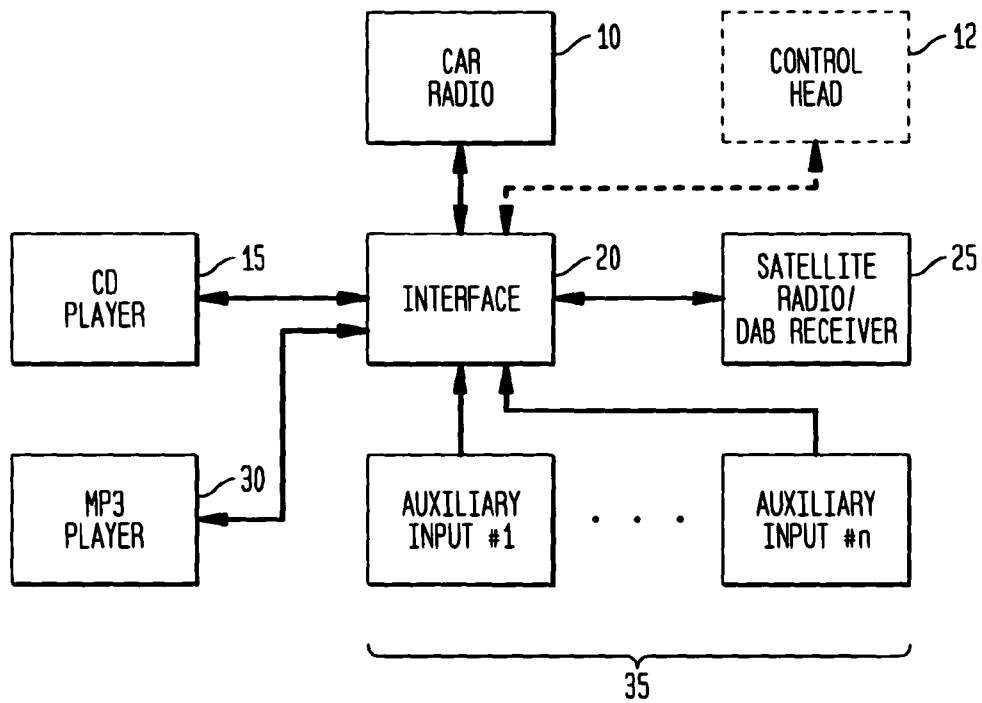


FIG. 2A

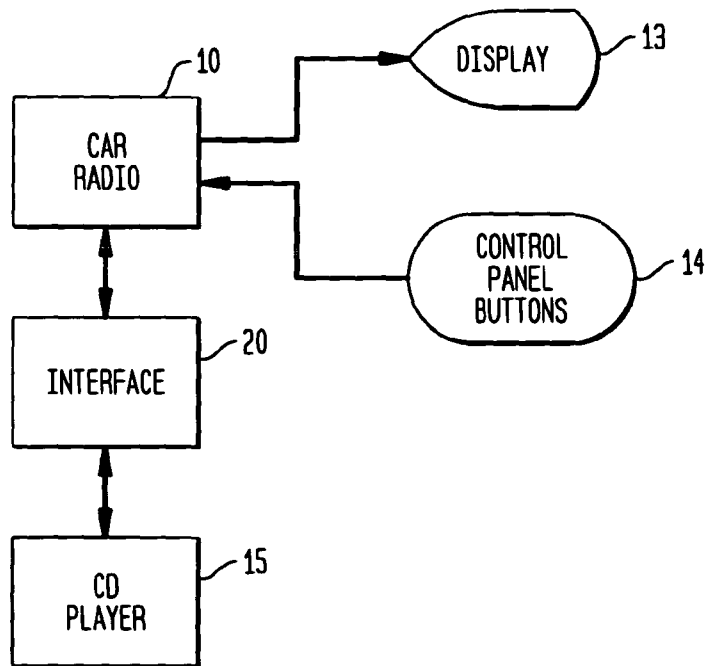


FIG. 2B

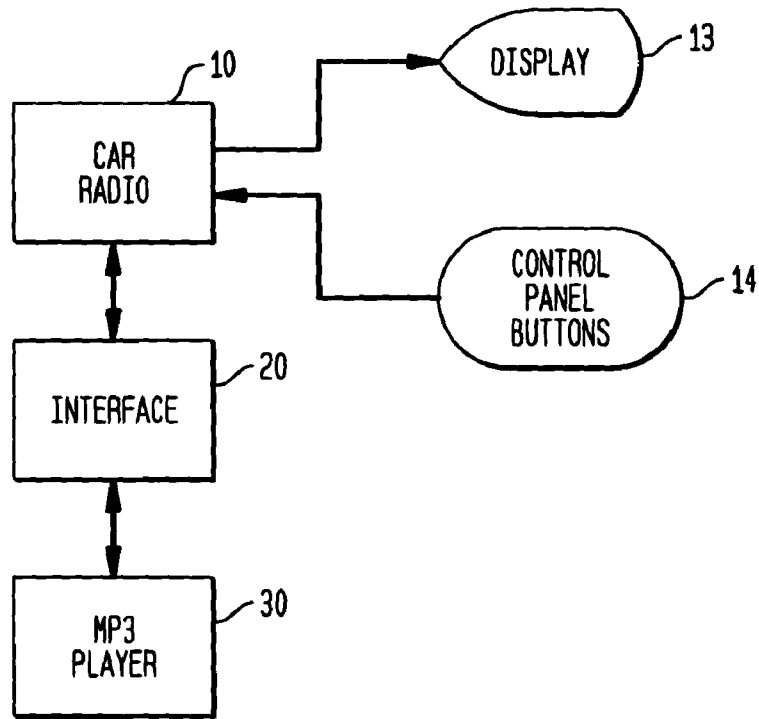
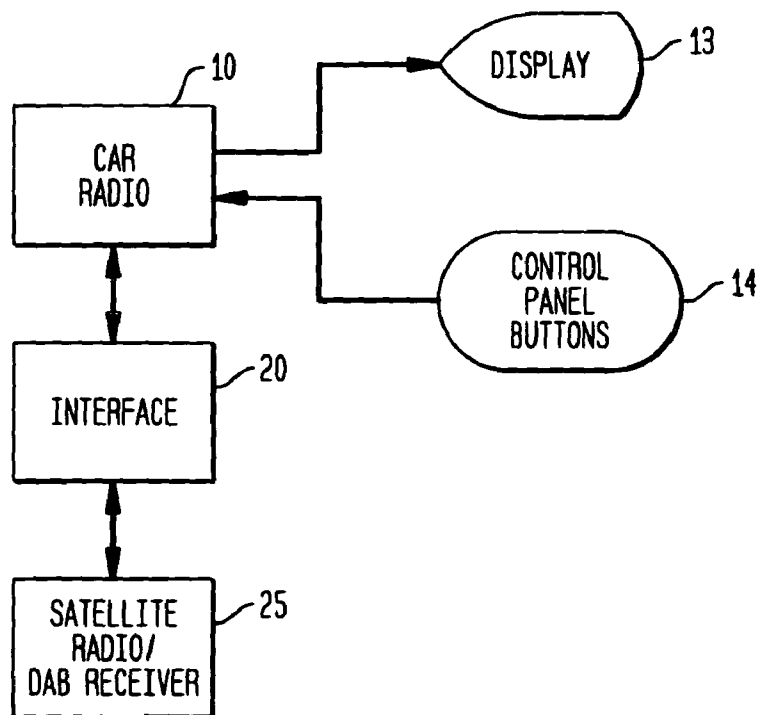


FIG. 2C



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