



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

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(54) **CELLULAR PHONE WITH EXPANSION MEMORY FOR AUDIO AND VIDEO STORAGE**

(75) Inventors: **Nils R. C. Rydbeck**, Cary, NC (US);  
**John Fussell**, Raleigh, NC (US)

(73) Assignee: **Ericsson Inc.**, Research Triangle Park, NC (US)

(\* ) Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154 (a)(2).

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1084 days.

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**H04B 1/38** (2006.01)  
**H04M 1/00** (2006.01)

(52) **U.S. Cl.** ..... **455/557**; 455/556.1; 455/569.1; 455/575.2

(58) **Field of Classification Search** ..... 455/550, 455/557, 563, 566, 568, 569, 575, 90, 95, 455/100, 66, 344, 527, 528, 415, 404, 558, 455/556, 556.1, 575.1-575.6, 57.8, 575.9, 455/517, 556.2, 90.1, 90.2, 90.3, 550.1, 569.1, 455/404.1; 379/110.01, 127, 142

See application file for complete search history.

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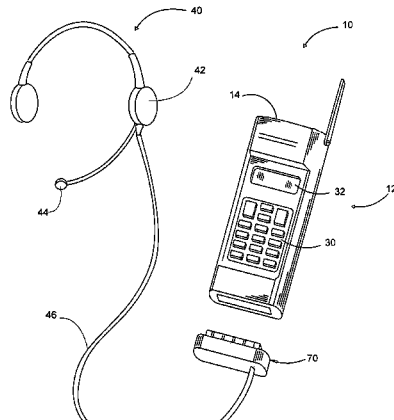
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*Primary Examiner*—Charles N. Appiah  
(74) *Attorney, Agent, or Firm*—Coats & Bennett, P.L.L.C.

(57) **ABSTRACT**

A cellular telephone includes an internally integrated digital entertainment module. The telephone includes a transceiver unit and a headset which is connected to the transceiver unit by wired or wireless link. The entertainment module includes an interchangeable ROM and/or expansion RAM for storing music or other audio signals for playback through the telephone's headset. Music or other audio signals in digitized form is stored in the interchangeable ROM or is loaded into the expansion RAM from a CD player, computer, or other source of digitized audio signals. Under control of the cellular telephone's microprocessor, the digitally stored audio signal is played back through the telephone's headset. The entertainment module may be located in the transceiver unit, a removable battery pack, or in a separate adapter.

**19 Claims, 7 Drawing Sheets**



# US 7,123,936 B1

Page 2

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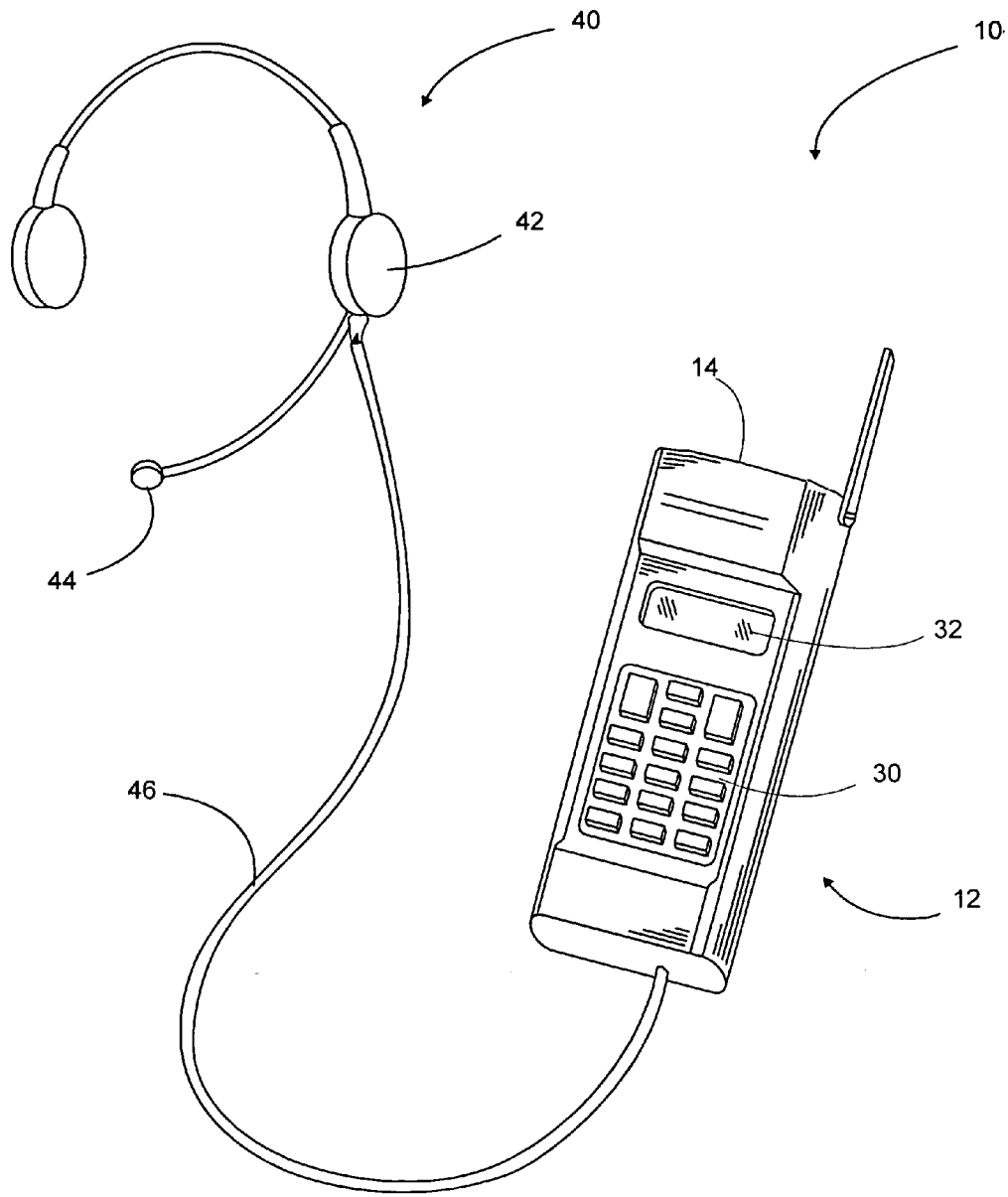


FIG. 1

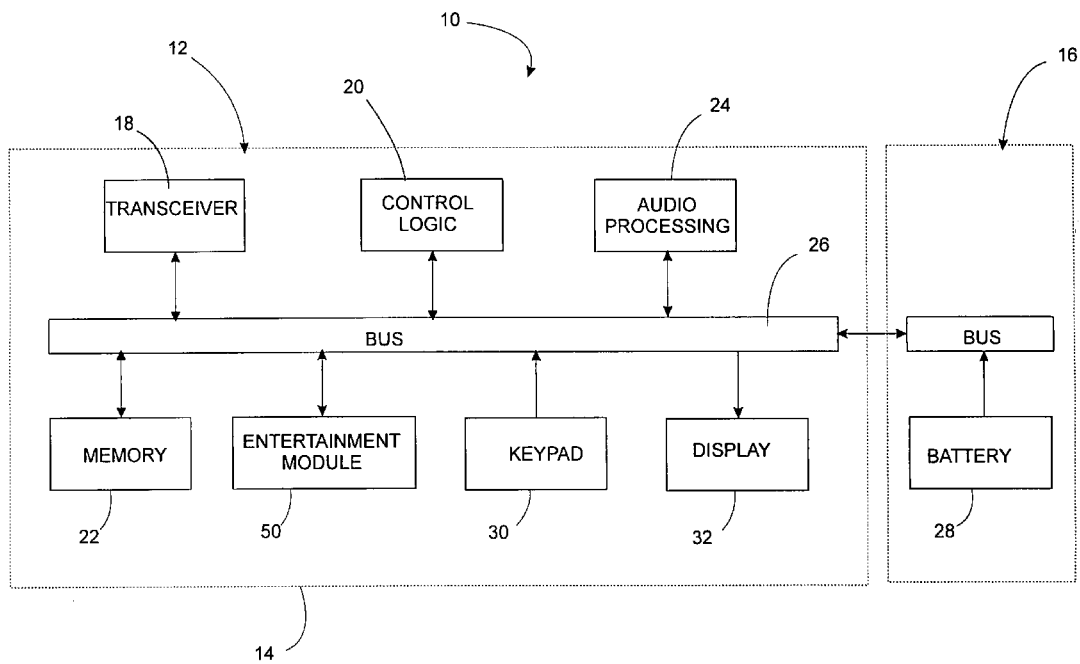


FIG. 2

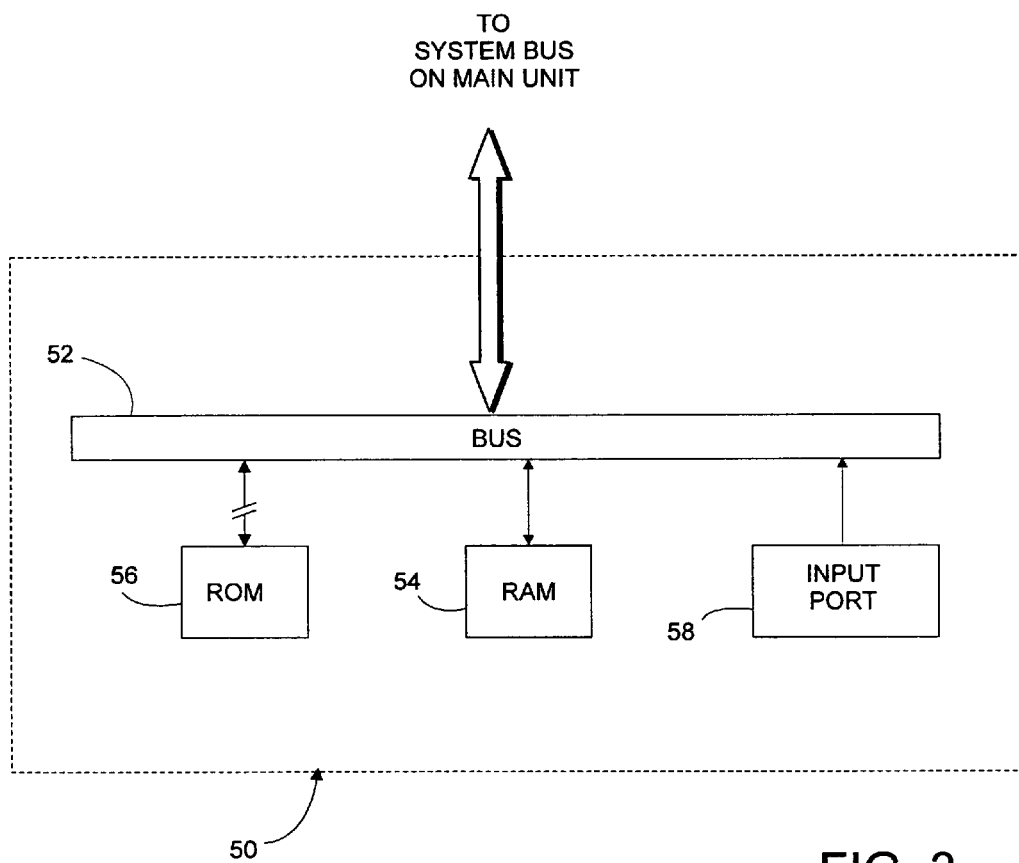


FIG. 3

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