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Woolfork

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(54) **WIRELESS DIGITAL AUDIO 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 199 days.

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(22) Filed: **Aug. 26, 2003**

Related U.S. Application Data

(63) Continuation-in-part of application No. 10/027,391,
filed on Dec. 21, 2001, now abandoned.

(51) **Int. Cl.**

G06F 17/00 (2006.01)
H04H 40/00 (2008.01)

(52) **U.S. Cl.** **700/94; 455/3.06**

(58) **Field of Classification Search** **700/94;**
714/709, 780, 795, 794, 75; 706/8, 9; 455/3.06,
455/41, 66.1, 41.3, 564.1, 412, 413; 375/224,
375/295-297, 346, 348, 219, 341, 140, 147,
375/146, 130, 340, 316, 148, 262, 265, 413;
381/79; 705/8, 9

See application file for complete search history.

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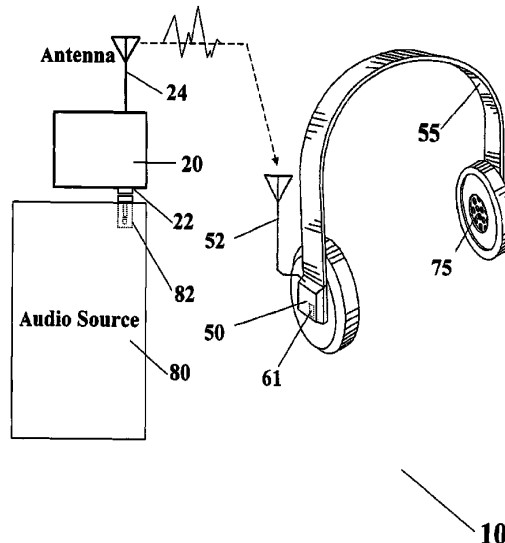
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Assistant Examiner—Andrew C Flanders
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(57) **ABSTRACT**

A wireless digital audio system includes a portable audio
source with a digital audio transmitter operatively coupled
thereto and an audio receiver operatively coupled to a head-
phone set. The audio receiver is configured for digital wire-
less communication with the audio transmitter. The digital
audio receiver utilizes fuzzy logic to optimize digital signal
processing. Each of the digital audio transmitter and receiver
is configured for code division multiple access (CDMA) com-
munication. The wireless digital audio system allows private
audio enjoyment without interference from other users of
independent wireless digital transmitters and receivers shar-
ing the same space.

19 Claims, 3 Drawing Sheets



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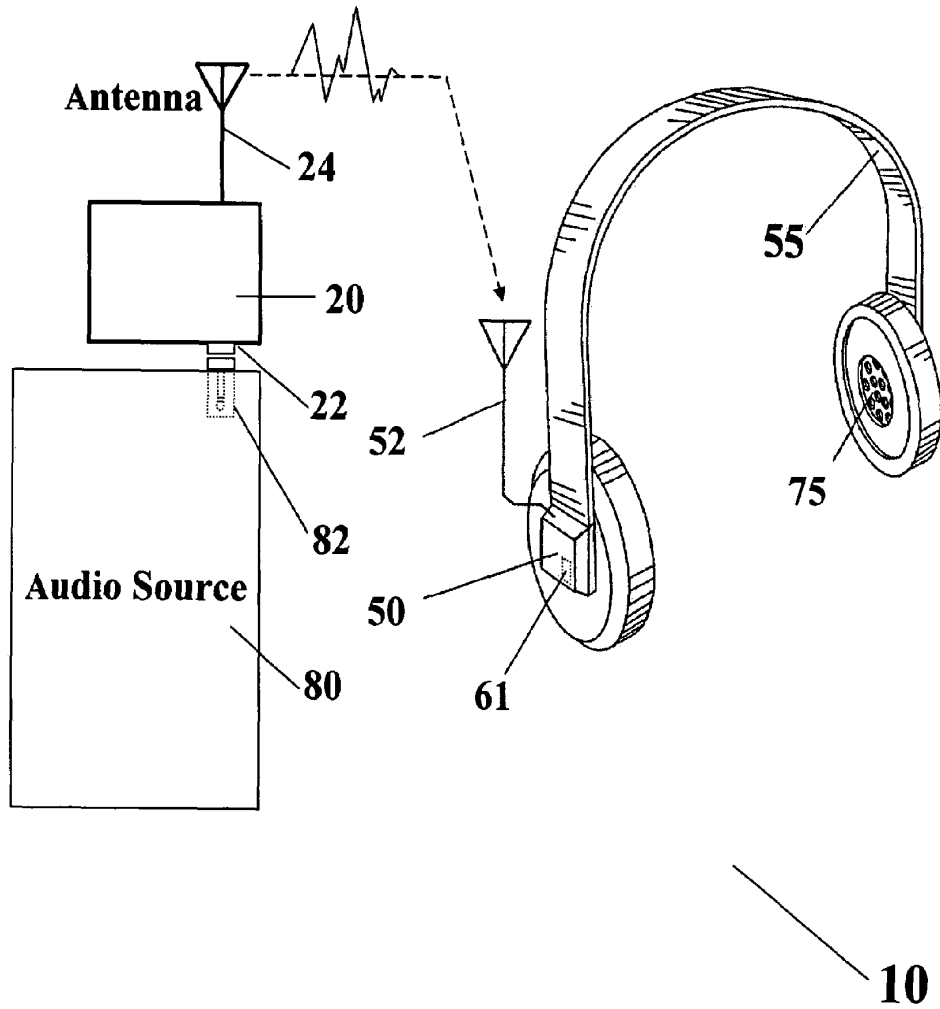


FIG.1

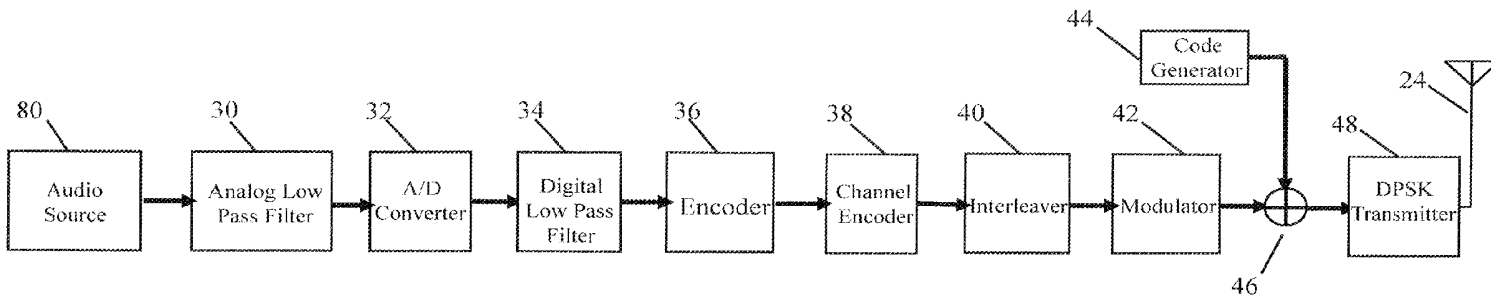


FIG. 2

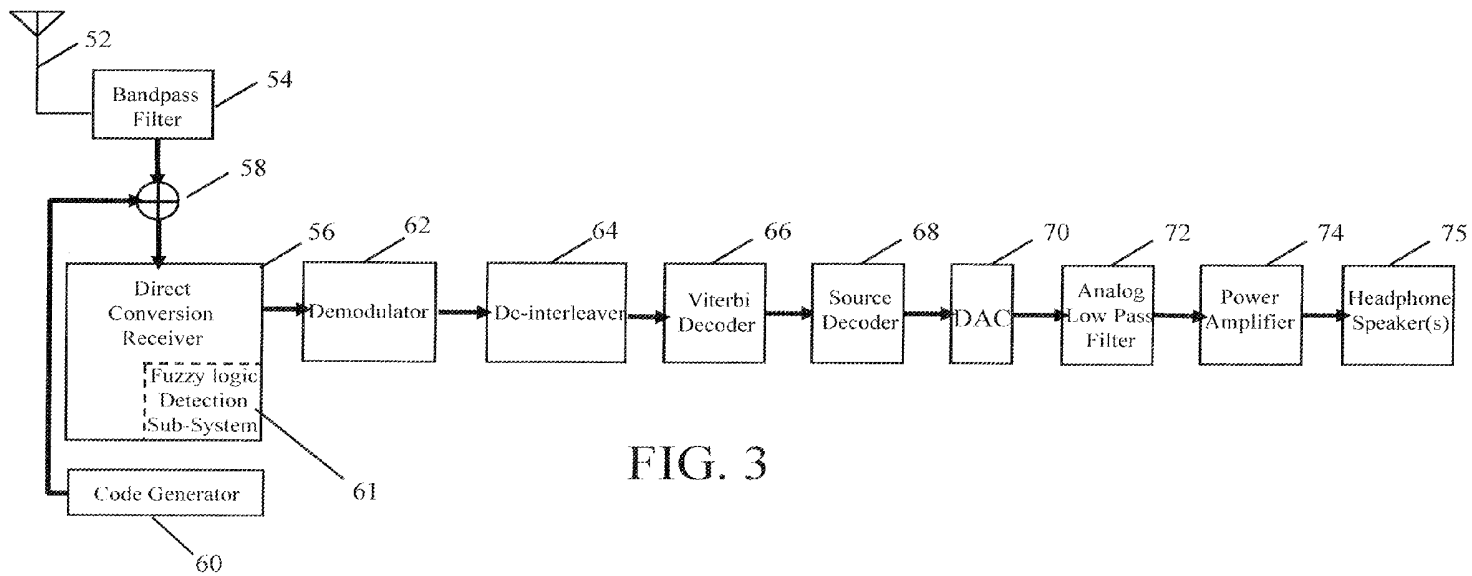


FIG. 3

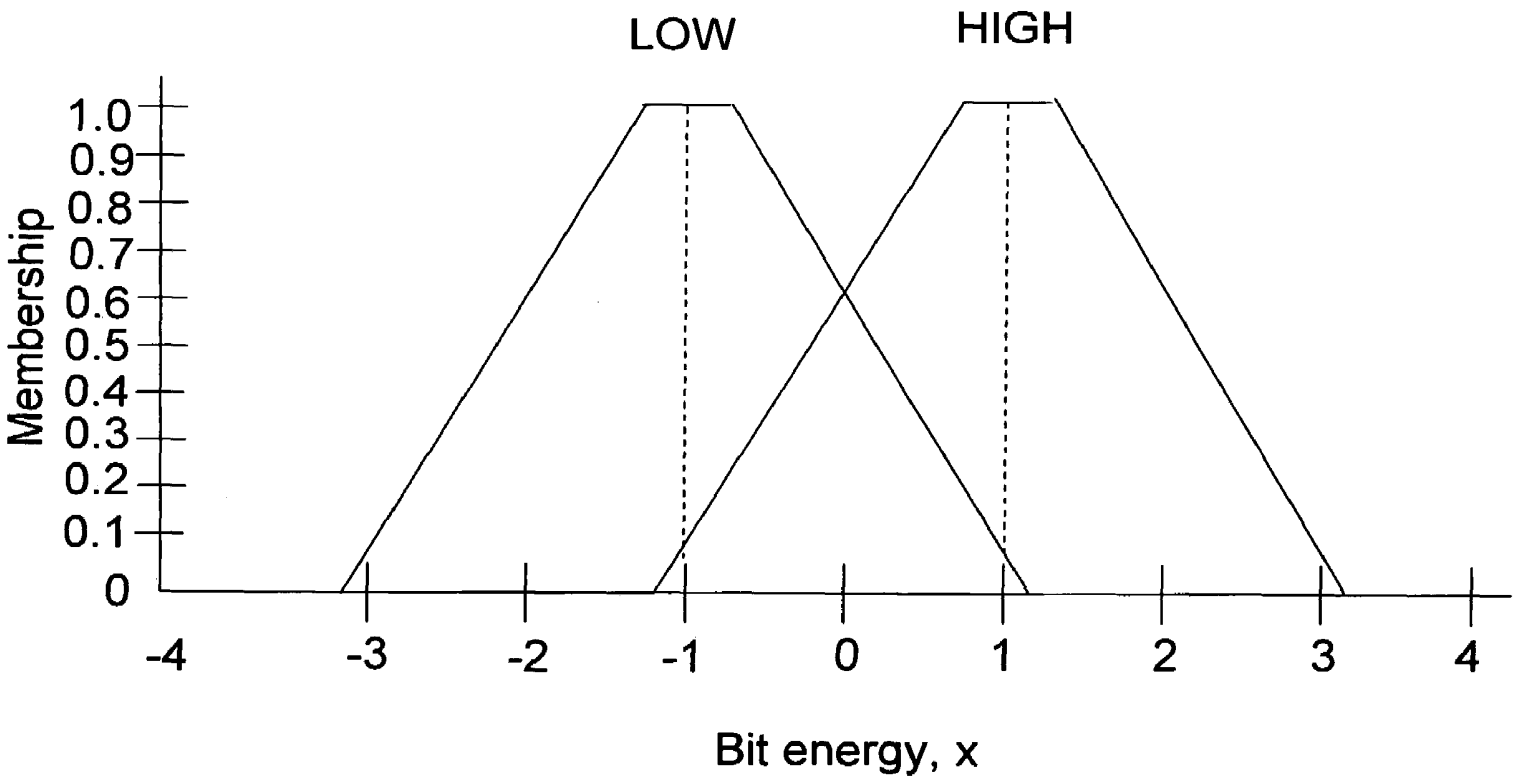


Fig. 4

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