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(12) **United States Patent**  
**Ito**

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(54) **WIRELESS INFORMATION  
COMMUNICATION METHOD AND ITS  
DEVICE**

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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 0 days.

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(30) **Foreign Application Priority Data**

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(51) **Int. Cl.**  
**H04M 11/10** (2006.01)

(52) **U.S. Cl.** ..... **455/414.3**; 455/552.1;  
455/556.1; 455/557; 455/566

(58) **Field of Classification Search** ..... 455/414.2,  
455/414.3, 456.1, 456.3, 457, 552.1, 556.1,  
455/557, 566, 567, 569.1, 569.2  
See application file for complete search history.

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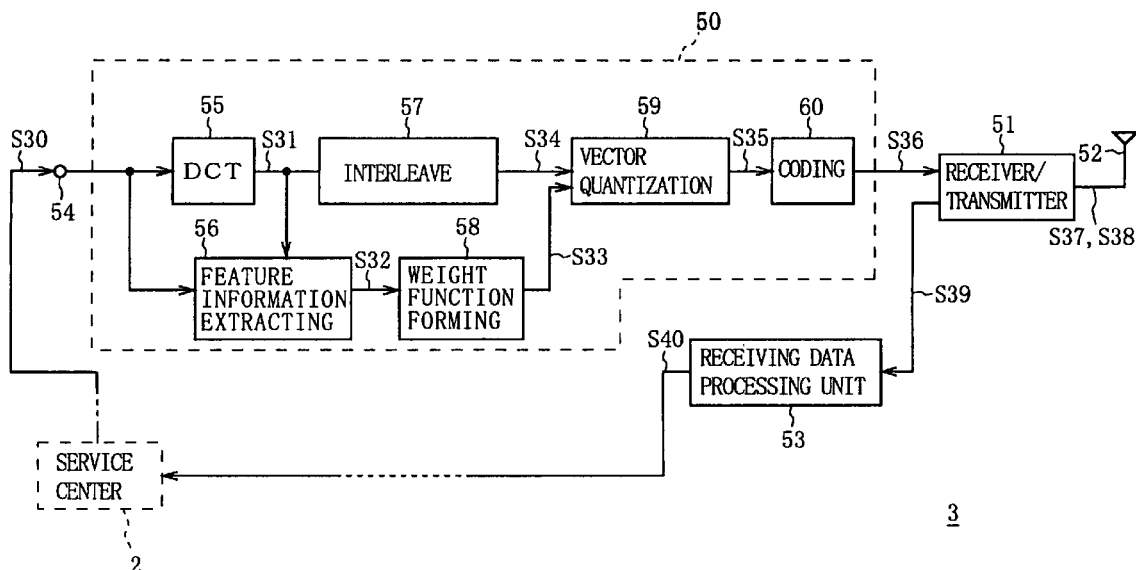
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(57) **ABSTRACT**

A wireless acoustic transmission device used in an acoustic offering service having superior convenience, includes wireless transmitter for transmitting the service request signal to request the desired acoustic signal, a wireless receiver for receiving the transmission signal containing the acoustic signal to be transmitted in response to the service request signal, a demodulator and decoder for restoring the acoustic signal applying the demodulation and/or decoding processing to the receiving signal transmitted from the wireless receiver, and an electro-acoustic transformer for transforming the acoustic signal restored by the demodulator and decoder the radio waves and for outputting. Accordingly, the desired acoustic signal can be easily obtained without having the recording medium on which the acoustic signal is recorded, and the acoustic offering service having superior convenience can be realized.

**30 Claims, 17 Drawing Sheets**



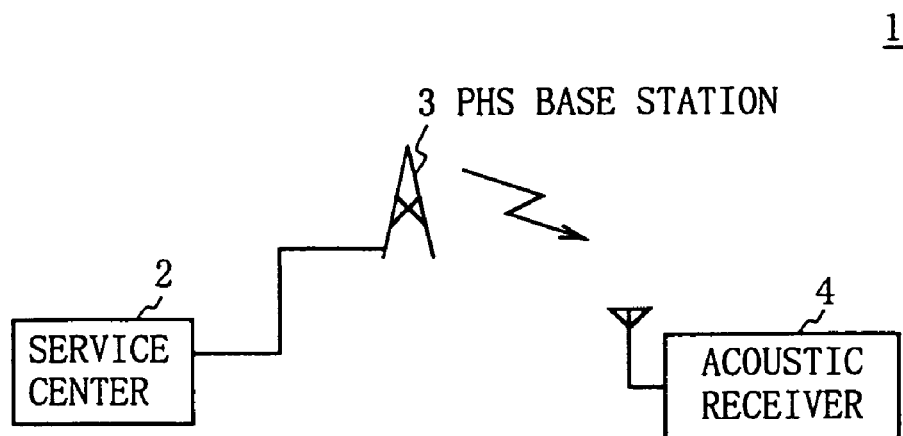


FIG. 1

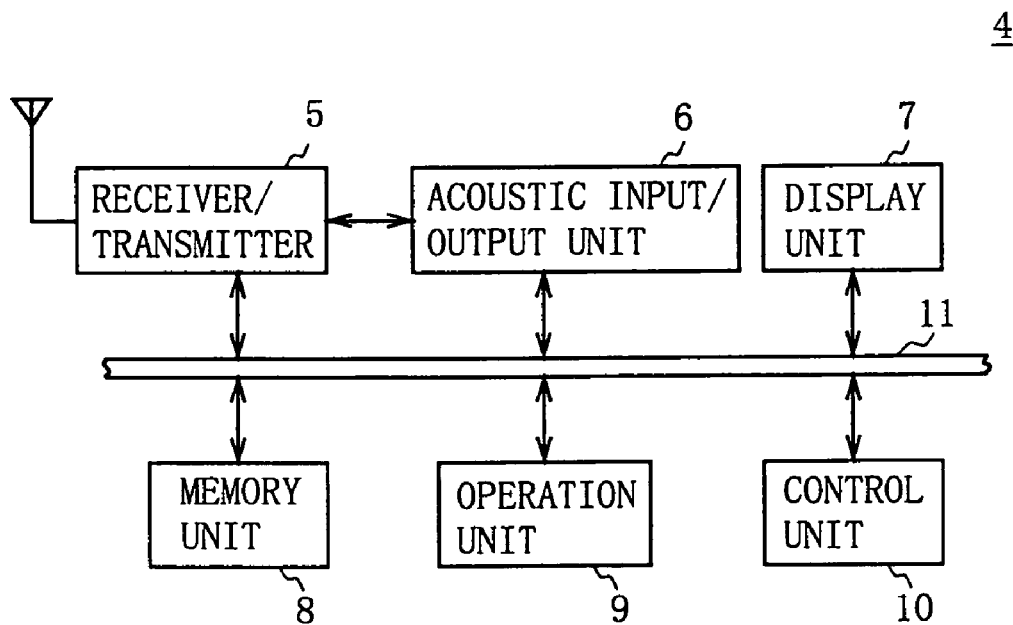


FIG. 2

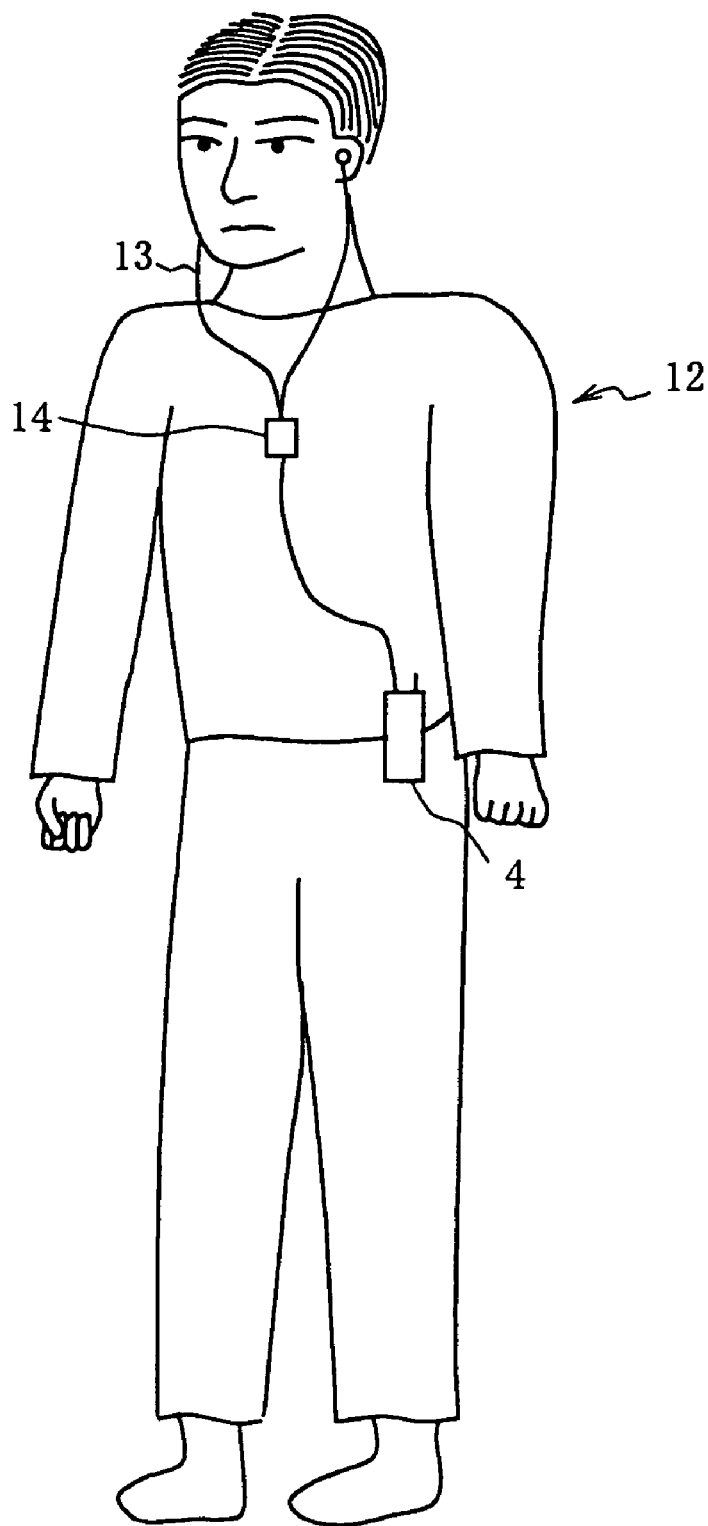


FIG. 3

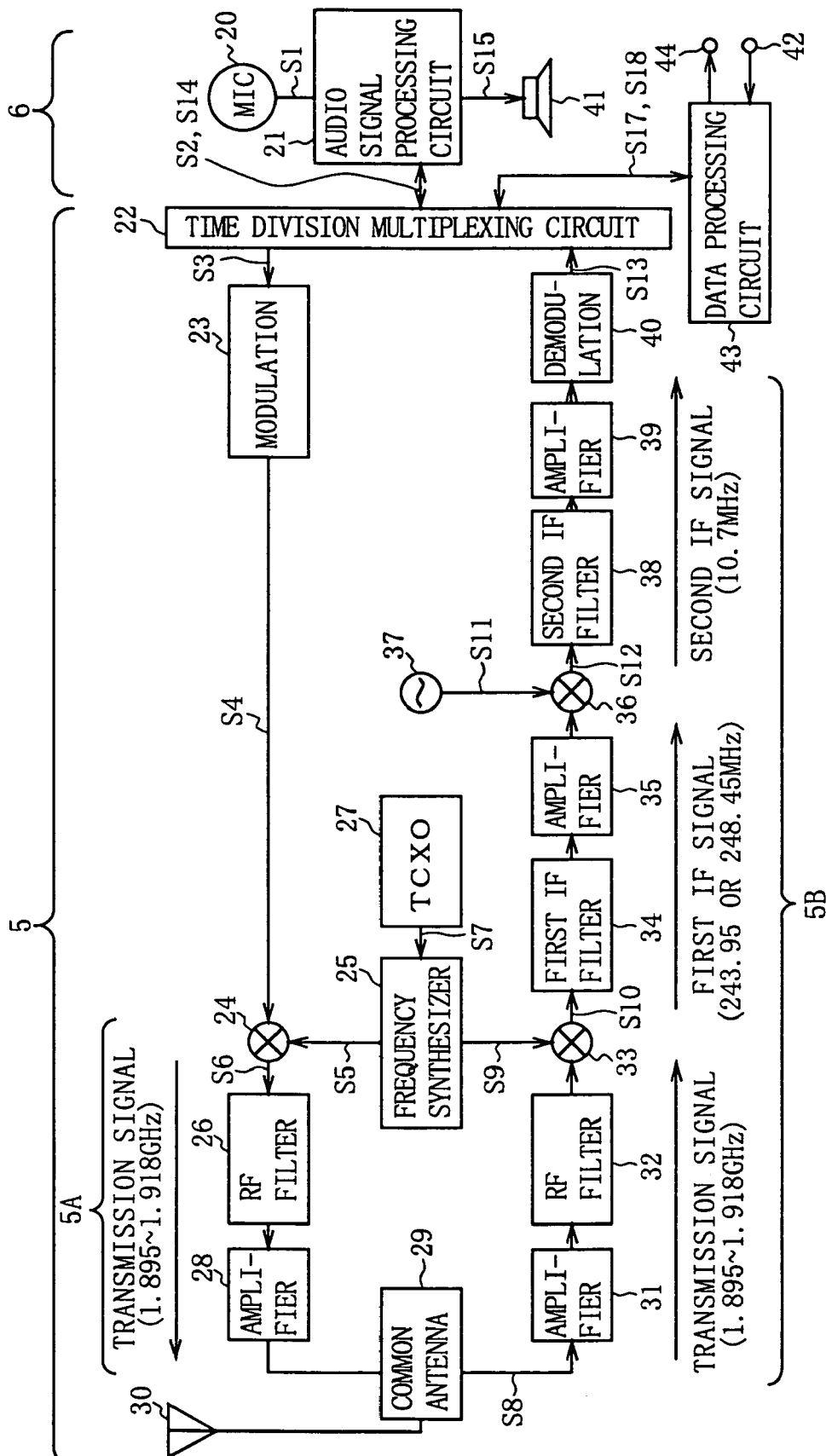


FIG. 4

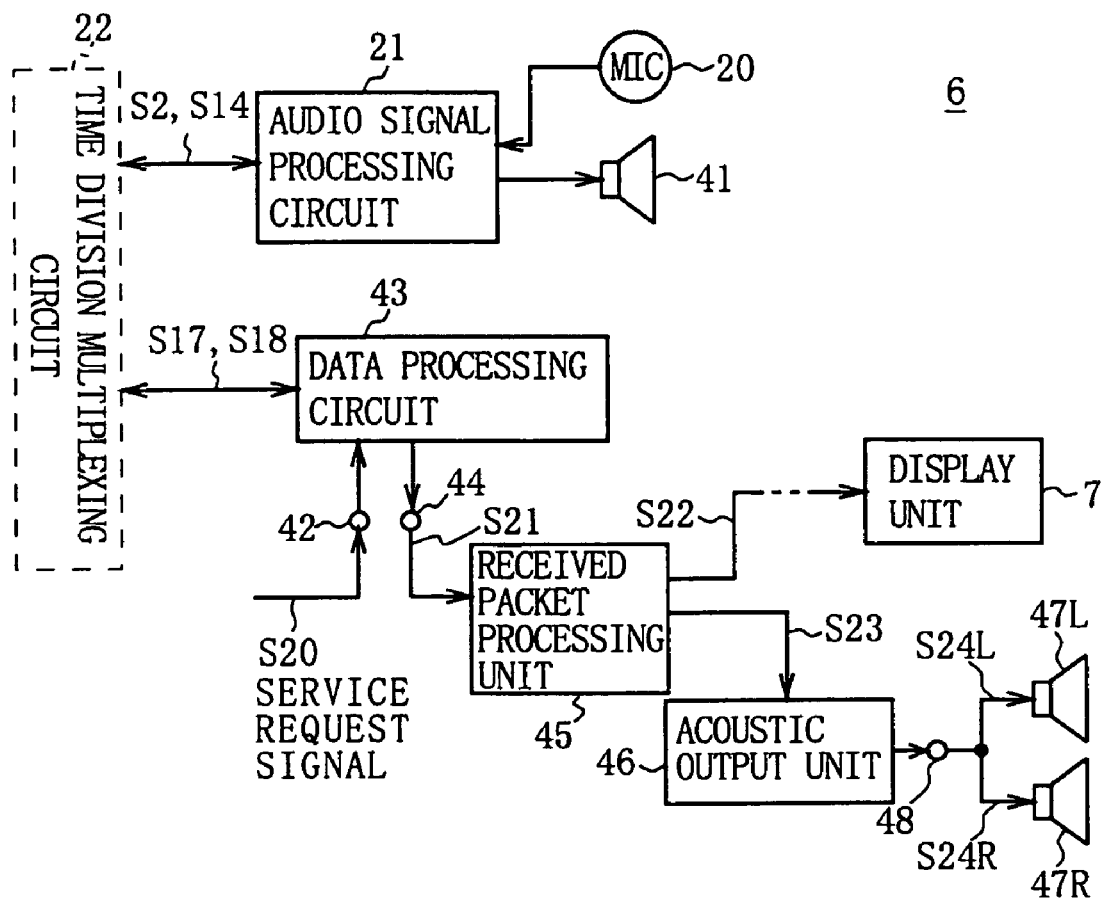


FIG. 5

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