

## **ABSTRACT**

### **BIT ALLOCATING, AUDIO ENCODING AND DECODING**

A bit allocating method is provided that includes determining the allocated number of bits in decimal point units based on each frequency band so that a Signal-to-Noise Ratio (SNR) of a spectrum existing in a predetermined frequency band is maximized within a range of the allowable number of bits for a given frame; and adjusting the allocated number of bits based on each frequency band.

FIG. 2