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(54) **AUDIO SIGNAL ENCODING METHOD AND AUDIO SIGNAL DECODING METHOD, AND ENCODER AND DECODER PERFORMING THE SAME**

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G10L 19/16   (2013.01)

(52) **U.S. Cl.**
CPC *G10L 19/167* (2013.01)

(58) **Field of Classification Search**
CPC G10L 19/02; G10L 19/0018; G10L 15/00
See application file for complete search history.

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(57) **ABSTRACT**

Disclosed are an audio signal encoding method and audio signal decoding method, and an encoder and decoder performing the same. The audio signal encoding method includes applying an audio signal to a training model including N autoencoders provided in a cascade structure, encoding an output result derived through the training model, and generating a bitstream with respect to the audio signal based on the encoded output result.

12 Claims, 6 Drawing Sheets
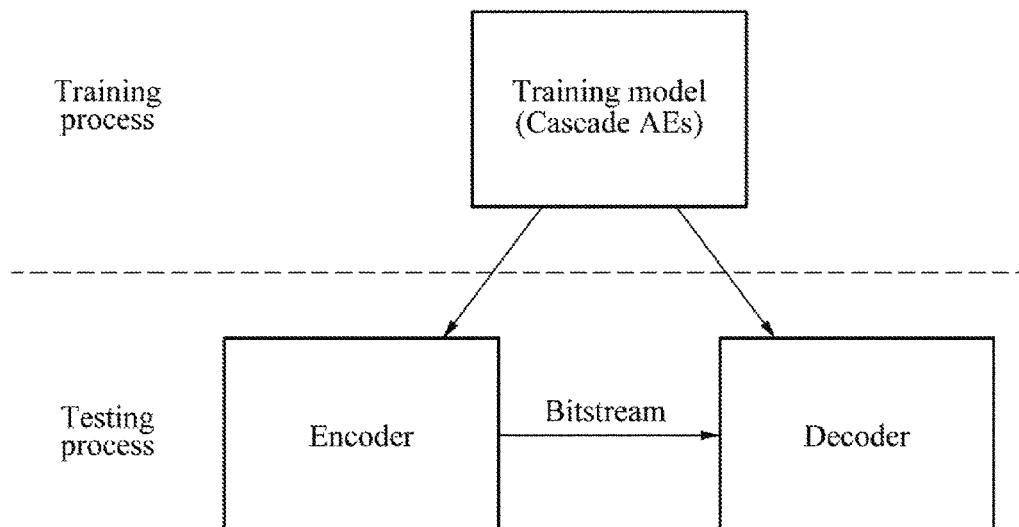
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FIG. 1