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Lee et al.

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(54) **FLEXIBLE PIEZOELECTRIC
SOUND-GENERATING DEVICES**

(56) **References Cited**

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(57) **ABSTRACT**

(30) **Foreign Application Priority Data**

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A sound-generating device comprises at least two first enclosures and a thin film. The at least two first enclosures with at least one first bendable element coupled between two neighboring first enclosures. The thin film comprising at least one electrode and at least one piezoelectric layer, the at least one electrode being coupled with a terminal of an audio signal output, wherein the at least one piezoelectric layer is configured to respond to a signal supplied by the audio signal output and to generate sound waves. The thin film and the at least two first enclosures are coupled together forming at least two first cavities between the thin film and the first enclosure, and the first bendable element is attached to the thin film.

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(52) **U.S. Cl.**
USPC **381/190**; 381/191

(58) **Field of Classification Search**
USPC 381/190
See application file for complete search history.

36 Claims, 4 Drawing Sheets

