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Abstract

Method and Apparatus for Generating A Directional Audio Signal

- 5 A directional audio signal is generated by first dividing an audio signal 1, 3 into at least a low frequency range component and a high frequency range component. The low frequency range component is used to drive a first transducer 111 (such as a PZT transducer) having a high power efficiency but a narrow bandwidth, while the high frequency range component is used to drive a
- 10 second transducer 112 (such as a PVDF transducer) having a wider bandwidth. The ultrasonic signals produced by both the transducers 111, 112 are formed into a highly directed beam. In this way the system achieves a good compromise between the requirements of high audio fidelity and power efficiency.

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[Fig. 2a]