

AbstractMethod and system for evaluating acoustic directivity

5 A method of conducting acoustic characterization of air impedance of a sound
emitting device 104 is proposed. Air pressure in front of the acoustic source is
detected by an array 202 of micro-sized capillary tubes 101, each coupled to a
respective pressure detection device 102. This permits the evaluation of the
sound transmission efficiency between air and vibrating source. Owing to the
10 micro-sized capillary, the sensitivity of pressure detection is increased, and the
local change in sound emission behavior can be quantified. The variations of air
propagation distribution across an acoustic field and can be recorded
simultaneously, and are useful for understanding acoustic generation.

15 [Fig. 1]



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