

Title (en)
Digital electro-acoustic transducer

Title (de)
Digitaler elektroakustischer Wandler

Title (fr)
Transducteur électroacoustique digital

Publication
EP 0966178 A2 19991222 (EN)

Application
EP 99304612 A 19990614

Priority
JP 17186598 A 19980618

Abstract (en)
A digital electro-acoustic transducer for improving the speech quality of sound under noisy circumstances is disclosed. A plurality of sound generating units A (22) constituted by electrostatic electro-acoustic transducers (condenser earphones) and a sound receiving unit B (23) constituted by an electrostatic acousto-electric transducer (condenser microphone) are disposed in a cavity of a soundproof housing (21). The units A (22) are provided in a feedback loop and an output level of the unit B (23) is adjusted by a preamplifier (24). An output of the preamplifier is sampled by a sample-and-hold circuit (25) and an output thereof is delta-modulated by a delta modulation circuit (26). The number of pulses produced by the circuit (26) is subjected to arithmetic operation in an arithmetic circuit (27) to produce a drive signal for the units A. Vibration of a vibration film of the unit B (23) is detected and arithmetical control is made to be always maintained to zero. On the other hand, an audio signal supplied from a signal terminal (28) is superposed on a drive signal for the units A and is emitted into the cavity. <IMAGE>

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CPC (source: EP)
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DE FR GB

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