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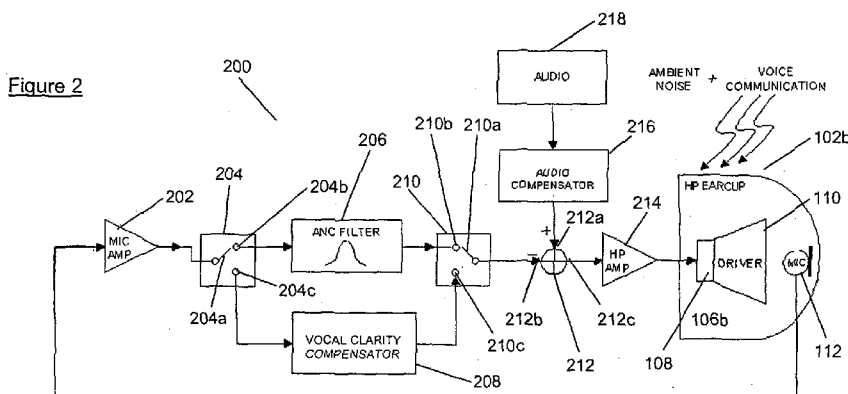
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(54) Title: A NOISE REDUCTION CIRCUIT WITH MONITORING FUNCTIONALITY



(57) Abstract: A noise reduction circuit (200) for a headphone (100) is disclosed herein. In a described embodiment, the headphone (100) includes a speaker driver (110) and the circuit (200) comprises a microphone (112) configured to convert ambient sound into a corresponding electrical ambient signal and which is disposed adjacent to the speaker driver's diaphragm. The circuit (200) further includes an active noise reduction path configured to provide active noise reduction of the ambient sound based on the corresponding electrical ambient signal and a vocal signal compensation path configured to restore attenuated signals within the vocal range of the corresponding electrical ambient signal to increase audibility of vocal signals of the ambient sound. The circuit 200 also includes a switching device (204,210) arranged to selectively deliver the corresponding electrical ambient signal to the active noise reduction path or to the vocal signal compensation path.