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(54) **AUDIO DEVICE WITH MICROPHONE AND MEDIA MIXING**

(57) **ABSTRACT**

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An audio device comprising an interface, a memory, and one or more processors is disclosed, wherein the one or more processors are configured to: obtain a microphone input signal; obtain a media input signal; process the microphone input signal for provision of a microphone output signal; and provide an audio output signal based on the microphone output signal, wherein to process the microphone input signal comprises to: determine a microphone gain; and apply the microphone gain to the microphone input signal for provision of the microphone output signal, and wherein to determine the microphone gain comprises: estimate a first loudness of the microphone input signal; determine a first primary average based on the first loudness; estimate a second loudness of the media input signal; determine a second average based on the second loudness; determine a first gain based on the first primary average and the second average; determine a first secondary average based on the first loudness; determine a second gain based on the first secondary average and the second average; and determine the microphone gain based on the first gain and the second gain.

