

Title (en)  
Sound scene manipulation

Title (de)  
Klangszenenmanipulation

Title (fr)  
Manipulation de scène sonore

Publication  
**EP 2437517 B1 20140402 (EN)**

Application  
**EP 10275102 A 20100930**

Priority  
EP 10275102 A 20100930

Abstract (en)  
[origin: EP2437517A1] An audio-processing device. The device comprises: an audio input, for receiving one or more audio signals detected at respective microphones. Each of the audio signals comprises a mixture of a plurality of components, each component corresponding to a sound source. The device also comprises a control input, for receiving, for each sound source, a desired gain factor associated with the source, by which it is desired to amplify the corresponding component. The device further comprises an auxiliary signal generator, adapted to generate at least one auxiliary signal from the one or more audio signals, the at least one auxiliary signal comprising a different mixture of the components as compared with a reference one of the one or more audio signals; and a scaling coefficient calculator, adapted to calculate a set of scaling coefficients in dependence upon the desired gain factors and upon parameters of the different mixture, each scaling coefficient associated with one of the at least one auxiliary signal and optionally the reference audio signal. It also comprises an audio synthesis unit, adapted to synthesize an output audio signal by applying the scaling coefficients to the at least one auxiliary signal and optionally the reference audio signal and to combine the results. The scaling coefficients are calculated from the desired gain factors and the parameters of the different mixture such that the synthesized output signal provides the desired gain factor for each component.

IPC 8 full level  
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CPC (source: EP)  
**G10L 21/0272** (2013.01); **H04R 3/005** (2013.01); **G10L 2021/02166** (2013.01); **H04R 2430/20** (2013.01)

Cited by  
CN114203163A; KR101721424B1; CN112384975A; CN114863944A; US9838821B2; WO2018219582A1; WO2013184299A1; US10869126B2; TWI502584B

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