Title (en)
IMPROVED LOCATION OF AN ACOUSTIC SOURCE

Title (de)
VERBESSERTE ORTUNG EINER AKUSTISCHEN QUELLE

Title (fr)
LOCALISATION PERFECTIONNÉE D'UNE SOURCE ACOUSTIQUE

Publication
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Application
EP 21810072 A 20211015

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Abstract (en)
[origin: WO2022106765A1] The invention relates to the processing of audio signals acquired by a least one microphone, for example of the ambisonic type, with a view to locating at least one audio source in a space comprising at least one wall. A time-frequency transform is applied to the acquired signals and, on the basis of the acquired signals, a general complex velocity vector V(f) with a real part and imaginary part is expressed in the frequency domain, the velocity vector having a component other than an omnidirectional component W(f) in its denominator. In particular, this vector characterises a composition between: * a direct first acoustic path between the source and the microphone, this path being represented by a first vector U0, and * at least one second acoustic path resulting from a reflection from the wall and represented by a second vector U1, the second path having, at the microphone, a first delay TAU1, with respect to the direct path. Depending on the delay TAU1 of the first vector U0 and the second vector U1, at least one parameter among a direction (DoA) of the direct path, a distance d0 from the source to the microphone, and a distance z0 from the source to said wall is determined.

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