Title (en)
OPTIMIZED CALIBRATION OF A MULTI-LOUDSPEAKER SOUND RESTITUTION SYSTEM

Title (de)
OPTIMIERTE KALIBRIERUNG EINES KLANGWIEDERGABESYSTEMS MIT MEHREREN LAUTSPRECHERN

Title (fr)
CALIBRATION OPTIMISEE D'UN SYSTEME DE RESTITUTION SONORE MULTI HAUT-PARLEURS

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Abstract (en)
[origin: WO2014044948A1] The invention relates to a method of calibrating a sound restitution assembly for a multichannel sound signal comprising a plurality of loudspeakers. The method comprises the steps of obtaining (E201) multidirectional impulse responses of the loudspeakers to the reproduction of a predetermined audio signal, of analyzing (E202) the multidirectional impulse responses obtained, in a domain of spatio-temporal representation, over at least one time window encompassing the instants of arrival of the first reflections of the predetermined audio signal reproduced so as to determine a set of characteristics (ARi, CRi, TRi) of the first reflections, of comparing (E203) the amplitude of each of the reflections with a predetermined perceptibility threshold (E204) and of identifying (E203) the imperceptible reflections for which the amplitude is below the predetermined threshold, of modifying (E205) the impulse responses obtained so as to obtain perceptive impulse responses, by deleting the reflections identified as imperceptible and of determining (E206) a filtering matrix on the basis of the perceptive impulse responses for an application of this filtering matrix to the multichannel audio signal before sound restitution. The invention also relates to a calibration device implementing the method described.

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