

Title (en)

A system and a method for detecting acoustic features of a loudspeaker system in a limited environment

Title (de)

System und Verfahren zur Erkennung akustischer Merkmale eines Lautsprechersystems in einer begrenzten Umgebung

Title (fr)

Système et procédé pour détecter des caractéristiques acoustiques d'un système de haut-parleurs dans un environnement limité

Publication

EP 3016413 A1 20160504 (EN)

Application

EP 14461583 A 20141027

Priority

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Abstract (en)

A system for detecting acoustic features of a loudspeaker system in a limited environment, the system comprising: a matrix microphone (110) comprising a plurality of microphones (112) configured to detect sound waves approaching from various directions; a sound generator (411) configured to consecutively generate sound impulses in a plurality of frequency bands to be played by the speakers (122) of the loudspeaker system, each generated sound impulse having an impulse duration; a sound recorder (412) configured to register sound received by the microphones (112) of the matrix microphone in a recording storage (413), wherein the sound is registered in response to each generated sound impulse for a period longer than the sound impulse, such as to register direct and reflected sound impulses; and a model generator (414) configured to analyze the recorded sound from the recording storage (413) and to generate a model of the environment including the position and properties of walls (125) and other objects (124) within the environment.

IPC 8 full level

H04S 7/00 (2006.01); **E04B 1/99** (2006.01); **G01H 7/00** (2006.01); **H04R 29/00** (2006.01)

CPC (source: EP)

H04S 7/305 (2013.01); **H04R 29/007** (2013.01); **H04S 7/301** (2013.01)

Citation (applicant)

US 7804972 B2 20100928 - MELANSON JOHN L [US]

Citation (search report)

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Designated contracting state (EPC)

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