

Title (en)
METHOD AND SYSTEM FOR AUTOMATIC ACOUSTIC EQUALISATION

Title (de)
VERFAHREN UND SYSTEM ZUR AUTOMATISCHEN AKUSTISCHEN ENTZERRUNG

Title (fr)
PROCEDE ET SYSTEME D'EGALISATION ACOUSTIQUE AUTOMATISE

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Application
EP 15703951 A 20150203

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Abstract (en)
[origin: WO2015128160A1] The present invention relates to a system and to a method for automatic acoustic equalisation, characterised in that it comprises the steps of: measuring N impulse responses R1 1, R1 2, etc., R1 N following the emission of a pre-calibrated sound signal received by N microphones; calculating N corresponding frequency responses by means of fast Fourier transform; establishing an average M of the N frequency responses; translating said average M of the N frequency responses into a logarithmic frequency scale; interpolating a target signature sound curve Cec from a specific number of points selected by a user; translating said target signature sound curve Cec into a logarithmic frequency scale; comparing said averaged response M and said target response Cec by calculating the difference between said averaged response M and said target signature sound response Cec; analysing the curve Cdiff resulting from the difference between said averaged response M and said target response Cec; and determining filter parameters for reducing the difference between said averaged response M and said target response Cec by firstly processing the local maxima in descending order according to the gain thereof, then the local minima, and by carrying out consecutive iterations.

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