

Title (en)

DEVICE FOR CORRECTING THE LEVEL IN A WAVE FIELD SYNTHESIS SYSTEM

Title (de)

VORRICHTUNG ZUM PEGEL-KORRIGIEREN IN EINEM WELLENFELDSYNTHESESYSTEM

Title (fr)

DISPOSITIF DE CORRECTION DE NIVEAU DANS UN SYSTEME DE SYNTHESE DE CHAMP D'ONDES

Publication

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Application

EP 04739176 A 20040511

Priority

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Abstract (en)

[origin: WO2004103024A1] The aim of the invention is to correct the level in a wave field synthesis system comprising a wave field synthesis module and a loudspeaker array for providing sound in a projection zone. Said aim is achieved by determining (100) a correction factor (104) based on a set-point amplitude state in a projection zone, said set-point amplitude state depending on a position of the virtual source or a type of virtual source while the real amplitude state in the projection zone depends on the component signals for the loudspeakers due to the virtual source. The determined correction factor (104) is fed to a device (106) which manipulates the audio signal associated with the virtual source before said audio signal is fed into the wave field synthesis module or manipulates the component signals for the individual loudspeakers due to the virtual source in order to reduce a deviation between a set-point amplitude state and a real amplitude state at one or several points in the projection zone such that level artifacts occurring as a result of the finite number of loudspeakers being used are at least decreased in a wave field synthesis system, resulting in a more pleasant sound experience for a listener.

IPC 8 full level

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