

Title (en)

System for sound spatial effect and method therefor

Title (de)

System für Raumklangeffekt und Verfahren dafür

Title (fr)

Système de spatialisation sonore, et procédé pour sa mise en oeuvre

Publication

EP 0790753 A1 19970820 (FR)

Application

EP 97400248 A 19970205

Priority

FR 9601740 A 19960213

Abstract (en)

The method involves using a binaural processor (*) with two channels operating for each monophonic sound channel which is to be located. The two channels include filters which are linked to combine signals linearly within the channels. The processor is linked to an orientating device (13) which determines the spatial location of a sound source and is itself connection to a position locating device (3,4,12). Convolution of the signals is performed between the monophonic signal and the user left ear transfer function and the user right ear transfer function. These functions are specific to the particular user. The transfer functions may also include use of a phase interpolation device to determine the appropriate phase for each signal within the two channels.

Abstract (fr)

Le système de spatialisation sonore de l'invention comporte, pour chaque canal monophonique à spatialiser, un processeur binaural (8) à deux voies de filtres de convolution combinés linéairement dans chaque voie, ce (s) processeur (s) étant relié (s) à un dispositif orienteur (13) de calcul de localisation spatiale des sources sonores, lui-même relié à au moins un dispositif de localisation (3, 4, 12). La convolution est effectuée entre le signal monophonique et les fonctions de transfert "oreille gauche" et "oreille droite" de l'utilisateur, ces fonctions de transfert étant propres à cet utilisateur, ce qui améliore ses performances de localisation de la source sonore monophonique. <IMAGE>

IPC 1-7

H04S 3/00

IPC 8 full level

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CPC (source: EP US)

H04S 3/004 (2013.01 - EP US); **H04S 7/30** (2013.01 - EP US); **H04S 2400/01** (2013.01 - EP US)

Citation (search report)

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EP 0790753 A1 19970820; **EP 0790753 B1 20040128**; CA 2197166 A1 19970814; CA 2197166 C 20050816; DE 69727328 D1 20040304; DE 69727328 T2 20041021; FR 2744871 A1 19970814; FR 2744871 B1 19980306; JP H1042399 A 19980213; US 5987142 A 19991116

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