

Title (en)
STEREO HEADPHONE FOR THE "IN FRONT" LOCATION OF AUDITORY EVENTS GENERATED BY STEREO HEADPHONES.

Title (de)
STEREOKOPFHÖRER ZUR VORNEORTUNG VON MITTELS STEREOKOPFHÖRERN ERZEUGTEN HÖREREIGNISSEN.

Title (fr)
CASQUE STEREO POUR LA LOCALISATION EN AVANT DE PHASES AUDITIVES GÉNÉRÉES PAR DES CASQUES STEREO.

Publication
EP 0484354 B1 19940803

Application
EP 90910574 A 19900724

Priority
• DE 3942127 A 19890725
• DE 9000562 W 19900724

Abstract (en)
[origin: WO9101616A2] By means of an iteratively produced shift in both acoustic-transducer systems of a stereo headset, the shift being principally downwards and forwards with respect to the line of vision, starting from the reference position used in conventional acoustic-transducer installations in the earpiece, an auditory event is produced which is located substantially horizontally in front of the listener. The most important component of the empirical iterative process is a compensating shift in the headphone acoustic transducers by vector addition in a downwards direction relative to the up-in-head localization which usually occurs with head-specific exposure to acoustic waves. The frequency-dependent differences in sound level which occur, in contrast to conventional acoustic-transducer installations, as a result of this combined shift in the acoustic-transducer systems are used in the same way for a separate multi-channel antidistortion concept in conventional stereo headphones to give an individually simulated "horizontally in front" auditory environment. Sound stimuli of this kind located horizontally in front of the listener are produced independently of the recorded sound and recording technique to be reproduced by the stereo headphones. The result is an increase in quality of the auditory events generated by the stereo headphones in the context of the multi-dimensional reproduction in space of concert-hall acoustics for instance.

IPC 1-7
H04R 5/033; **H04S 1/00**; **H04R 29/00**

IPC 8 full level
H04R 5/033 (2006.01); **H04R 29/00** (2006.01); **H04S 1/00** (2006.01)

CPC (source: EP)
H04R 1/1075 (2013.01); **H04R 5/033** (2013.01); **H04S 7/305** (2013.01)

Cited by
DE19635888B4; US6658121B1; DE102022004259B3; WO2024104520A1

Designated contracting state (EPC)
AT DE FR GB IT

DOCDB simple family (publication)
WO 9101616 A2 19910207; **WO 9101616 A3 19910321**; AT E109608 T1 19940815; AU 6077590 A 19910222; DE 4091279 A1 19920130; DE 4091279 D2 19920130; DE 59006719 D1 19940908; EP 0484354 A1 19920513; EP 0484354 B1 19940803; JP 2003078989 A 20030314; JP 3397785 B2 20030421; JP 3612311 B2 20050119; JP H05502144 A 19930415

DOCDB simple family (application)
DE 9000562 W 19900724; AT 90910574 T 19900724; AU 6077590 A 19900724; DE 4091279 A 19900724; DE 4091279 D 19900724; DE 59006719 T 19900724; EP 90910574 A 19900724; JP 2002207714 A 20020717; JP 51064390 A 19900724