

Title (en)  
LOUDSPEAKER ARRAY FOR ENLARGED SWEET SPOT

Title (de)  
LAUTSPRECHERANORDNUNG ZUR VERGRÖßERUNG DES IDEALEN PUNKTES

Title (fr)  
ENCEINTE ACOUSTIQUE PERMETTANT D'AMPLIFIER LE POINT IDEAL

Publication  
**EP 0988773 A4 20060111 (EN)**

Application  
**EP 98924945 A 19980528**

Priority  
• US 9810865 W 19980528  
• US 4782497 P 19970528

Abstract (en)  
[origin: WO9854926A1] The invention is a method of creating an enlarged listening sweet spot for multiloudspeaker audio reproduction. The method employs a plurality of audio drivers (52, 56) displaced generally in a horizontal dimension for a vertically oriented head of a listener (60), the drivers operating over a plurality of different passbands (42, 46). Higher frequency drivers (55, 59) are located closer to one another and displaced more towards a center line of the listening space than lower frequency drivers (53, 57), thereby causing a smaller change in acoustic ear signals for listeners (60) seated away from the designed-for listening position, but without causing increased low frequency signal capacity requirements for phantom images generally outside the array (50). Specially adapted signal processing accounting for the layout of the various drivers and their associated crossover networks (40) is employed to create desired audio images.

IPC 1-7  
**H04R 5/00**; **H04R 5/02**; **H04S 1/00**

IPC 8 full level  
**H04R 5/02** (2006.01); **H04S 1/00** (2006.01)

CPC (source: EP)  
**H04R 5/02** (2013.01); **H04R 1/26** (2013.01); **H04R 2205/022** (2013.01); **H04R 2205/024** (2013.01); **H04R 2499/15** (2013.01); **H04S 3/002** (2013.01); **H04S 2420/01** (2013.01)

Citation (search report)  
• [XY] WO 9633591 A1 19961024 - BSG LAB INC [US]  
• [YA] BAUCK J ET AL: "Developments in transaural stereo", APPLICATIONS OF SIGNAL PROCESSING TO AUDIO AND ACOUSTICS, 1993. FINAL PROGRAM AND PAPER SUMMARIES., 1993 IEEE WORKSHOP ON NEW PALTZ, NY, USA 17-20 OCT. 1993, NEW YORK, NY, USA, IEEE, 17 October 1993 (1993-10-17), pages 114 - 117, XP010130065, ISBN: 0-7803-2078-6  
• See references of WO 9854926A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 9854926 A1 19981203**; AU 7699998 A 19981230; CA 2290518 A1 19981203; CA 2290518 C 20070703; EP 0988773 A1 20000329; EP 0988773 A4 20060111; JP 2002500844 A 20020108

DOCDB simple family (application)  
**US 9810865 W 19980528**; AU 7699998 A 19980528; CA 2290518 A 19980528; EP 98924945 A 19980528; JP 50089599 A 19980528