Title (en)
METHOD FOR GENERATING THREE-DIMENSIONAL SOUND

Title (de)
VERFAHREN ZUR ERZEUGUNG DREIDIMENSIONALEN SCHALLS

Title (fr)
PROCEDE DE GENERATION DE SON TRIDIMENSIONNEL

Publication
EP 0706745 A4 19951120 (EN)

Application
EP 92924182 A 19921102

Priority
US 9209348 W 19921102

Abstract (en)
[origin: WO9410815A1] A method for producing three-dimensional sound associated with an object that is moving from a first position (P1) to a second position (P2) with respect to the listener (10). The method includes the effects of doppler shifting, head shadowing, distance on frequency components of the sound as well as the volume of the sound, and the natural sensitivity of the human ear in the 7-8 kHz range. The method provides a sequence of digital sound samples which when converted into analog waveforms and for production of audio signals will provide an audio signal which will provide sound queues to the listener for the location of the sound in three-dimensional space.

IPC 1-7
H04R 5/00; G06K 9/00; H04S 5/00; H04S 1/00

IPC 8 full level
H04S 1/00 (2006.01); **H04S 7/00** (2006.01)

CPC (source: EP)
H04S 1/007 (2013.01)

Citation (search report)
- [A] EP 0036337 A2 19810923 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- [A] GB 2238936 A 19910612 - Q SOUND LTD [CA]
- [A] E.A.MACPHERSON: "A COMPUTER MODEL OF BINAURAL LOCALIZATION FOR STEREO IMAGING MEASUREMENT", AES, vol. 39, no. 9, NEW YORK, pages 604 - 622, XP000226141
- [A] D.R.BEGAULT: "CHALLENGES TO THE SUCCESSFUL IMPLEMENTION OF 3-D SOUND.", AES, vol. 39, no. 11, NEW YORK, pages 864 - 870, XP000436498
- [A] KUROZUMI AND AL.: "METHOD OF CONTROLLING SOUND IMAGE DISTANCE BY VARYING THE CROSS-CORRELATION COEFFICIENT BETWEEN TWO-CHANNEL ACOUSTIC SIGNALS.", ELECTRONICS & COMMUNICATIONS IN JAPAN, vol. 68, no. 4, SILVER SPRING,MARYLAND, pages 54 - 63
- See references of WO 9410815A1

Designated contracting state (EPC)
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