Title (en)

Method and apparatus for the reproduction of multi-channel audio signals

Title (de)

Verfahren und Vorrichtung zur Wiedergabe von mehrkanaligen Audiosignalen

Title (fr)

Procédé et dispositif pour la reproduction de signaux audio multicanaux

Publication

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Application

EP 00100054 A 20000105

Priority

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Abstract (en)

Virtual surround systems enable a spatial representation of audio signals merely using the front loudspeakers (SL, SR). In this case, the surround channels (C, Ls, Rs) are fed to the two front channels (L, R), the virtual surround effect being attained by these surround channels being processed beforehand. In particular in the case of static objects or objects which are only moving slowly, the quality of the acoustic reproduction by known virtual surround systems is, however, behind the quality in the case of a reproduction by a high-grade multi-channel audio system. According to the invention, it is possible to achieve an improvement in the acoustics by the virtual surround sources being moved. This can be done with constant periodicity or as a function of the amplitude of the front channel signals (L, R). If the virtual position of the surround loudspeakers (SLs, SRs) is specified by filtering of the rear channel signals (Ls, Rs), then this can be varied in particular by alteration of the filter parameters. Equally, however, this can be done exclusively or additionally by means of a different propagation delay, amplification or matrixing of the rear channel signals (Ls, Rs). <IMAGE>

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