Title (en)

Method and system for artificial spatial processing of digital audio signals

Title (de)

Verfahren und Vorrichtung für künstliche Raumklangeffekte von digitalen Audiosignalen

Title (fr)

Procédé et système de spatialisation artificielle de signaux audio-numériques

Publication

EP 0559530 B1 19970806 (FR)

Application

EP 93400503 A 19930226

Priority

FR 9202528 A 19920303

Abstract (en)

[origin: EP0559530A1] The invention relates to a method and a system for artificial spatial processing of digital audio signals x(k). They consist in or make it possible to effect on elementary signals xi(k), replicas of the digital audio signal, the different delays producing delayed elementary signals (seri) which, after weighting, are summed with the signal x(k) to produce the spatially processed digital audio signal y(k). A plurality of linear combinations of the signals (seri) as combined delayed elementary signals (serci) is summed with the elementary signals xi(k). In order to simulate a sluggish reverberation, the linear combinations are effected through unit looping, and an attenuation hi(omega), a decreasing monotonic function of the reverberation time Tr(omega) to be simulated and proportional to the delay, is effected with each delay. A spectral correction prior to weighted summation is effected satisfying the relation: <IMAGE> tau i denoting the value of each delay increased by the phase delay due to the attenuation. <IMAGE>

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IPC 8 full level

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CPC (source: EP US)

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