

Title (en)

AMBIENCE GENERATION FOR SPATIAL AUDIO MIXING FEATURING USE OF ORIGINAL AND EXTENDED SIGNAL

Title (de)

AMBIENTEERZEUGUNG FÜR RÄUMLICHE AUDIOMISCHUNG MIT VERWENDUNG EINES ORIGINAL- UND ERWEITERTEN SIGNALS

Title (fr)

GÉNÉRATION D'AMBIANCE POUR MÉLANGE AUDIO SPATIAL COMPRENANT L'UTILISATION DE SIGNAL ORIGINAL ET ÉTENDU

Publication

EP 3613043 A4 20201223 (EN)

Application

EP 18787482 A 20180419

Priority

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- FI 2018050273 W 20180419

Abstract (en)

[origin: GB2561595A] An apparatus for generating at least one audio signal associated with a sound scene is configured to receive at least one audio signal and analyse 101 the audio signal(s) to determine at least one attribute parameter such as peakiness, impulsiveness and voice activity. At least one control signal is determined based on the at least one attribute and is then used to generate a spatially extended audio signal from the at least one audio signal. The initial audio signal(s) and the spatially extended audio signal(s) are then mixed 121 in a proportion based on the control signal, to generate at least one audio signal associated with the sound scene where the timbre of the original audio signal is preserved. The spatial extension may comprise applying at least one of: a vector base amplitude panning; a direct binaural panning, a direct assignment to channel output location; synthesized ambisonics; or wavefield synthesis. The technique is particularly suited to synthesis of sound objects containing percussive or impulsive sounds, and speech. The apparatus may be used in virtual reality or computer game applications.

IPC 8 full level

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CPC (source: EP GB)

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Citation (search report)

- [A] WO 2012116934 A1 20120907 - FRAUNHOFER GES FORSCHUNG [DE], et al
- [A] PIHLAJAMÄKI TAPANI ET AL: "Synthesis of Spatially Extended Virtual Source with Time-Frequency Decomposition of Mono Signals", JAES, AES, 60 EAST 42ND STREET, ROOM 2520 NEW YORK 10165-2520, USA, vol. 62, no. 7/8, 22 August 2014 (2014-08-22), pages 467 - 484, XP040638925
- [A] MIKKO-VILLE LAITINEN ET AL: "Parametric time-frequency representation of spatial sound in virtual worlds", ACM TRANSACTIONS ON APPLIED PERCEPTION, vol. 9, no. 2, 1 June 2012 (2012-06-01), NEW YORK, NY, US, pages 1 - 20, XP055711132, ISSN: 1544-3558, DOI: 10.1145/2207216.2207219
- See also references of WO 2018193160A1

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