

Title (en)
METHOD FOR GENERATING A DOWNWARD-COMPATIBLE SOUND FORMAT

Title (de)
VERFAHREN ZUM ERZEUGEN EINES ABWÄRTSKOMPATIBLEN TONFORMATES

Title (fr)
PROCÉDÉ DE PRODUCTION D'UN FORMAT SONORE À COMPATIBILITÉ DESCENDANTE

Publication
EP 2353305 B1 20160323 (DE)

Application
EP 09753036 A 20091107

Priority
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• DE 102008056704 A 20081111

Abstract (en)
[origin: WO2010054780A1] In order to convert multi-channel sound formats, in particular five-channel sound formats with the following sound channels:- left channel (L) - right channel (R) - centre channel (C) - rear left channel (Ls) - rear right channel (Rs), into downward-compatible sound formats, in particular into two-channel sound formats with a right channel and a left channel, the following steps are proposed according to ITU-R BS.775: the level of the centre channel (C) is lowered (for example - 3 dB), the centre channel (C), the level of which has been lowered, is distributed to the left channel (L) so as to form a first sum signal (L'), the level of the rear left channel (Ls) is lowered (for example by - 3 dB), the rear left channel (Ls), the level of which has been lowered, is distributed to the first sum signal so as to form the third sum signal which corresponds to the left channel (LIRT) of the two-channel sound format, the centre channel (C), the level of which has been lowered, is distributed to the right channel (R) so as to form a second sum signal (R'), the level of the rear right channel (Rs) is lowered (for example by - 3dB), the rear right channel (Rs), the level of which has been lowered, is distributed to the second sum signal so as to form a fourth sum signal which corresponds to the right channel (RIRT) of the two-channel sound format. In order to largely compensate for a shift in the phantom sound sources, a change in the level difference between coherent and incoherent signal components and timbre changes, the invention provides for the spectral values of overlapping time windows to each be dynamically corrected with k samples of the left channel (L) and right channel (R) when forming the first sum signal (L') and the second sum signal (R') and for the spectral values of overlapping time windows to each be dynamically corrected with k samples of the first sum signal (L') and the second sum signal (R') when forming the third and fourth sum signals, and for each sum of the spectral values to be compared with a desired value (Asoll, where Asoll ? R) before each dynamic correction of spectral values of the left channel (L) and right channel (R).

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Cited by
US11498235B2; US11641863B2

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