Title (en)
Coding of multi-channel signals

Title (de)
Kodierung von Mehrkanalsignalen

Title (fr)
Codage de signaux multicanaux

Publication
EP 1639580 B1 20131023 (EN)

Application
EP 04809080 A 20041215

Priority
• SE 2004001907 W 20041215
• SE 0303499 A 20031219
• SE 0400415 A 20040220

Abstract (en)
[origin: WO2005059901A1] Signals of different channels (c1-cN) are combined into one mono signal (x). A set of adaptive filters, preferably one for each channel (c-cN), is derived in a respective filter adaptation unit (30:1-30:N). when an adaptive filter is applied to the mono signal (x) it reconstructs the signal of the respective channel (c1-cN) under a perceptual constraint. The perceptual constraint is a gain and/or shape constraint. The gain constraint allows the preservation of the relative energy between the channels (c1-cN) while the shape constraint allows more stability by avoiding unnecessary filtering of spectrum nulls. The transmitted parameters are the mono signal (x), in encoded form, and the parameters (p1-pN) of the adaptive filters, preferably also encoded. The receiver reconstructs the signal of the different channels by applying the adaptive filters and possibly some additional post-processing.

IPC 8 full level
H04S 5/02 (2006.01); G10L 19/008 (2013.01)

IPC 8 main group level
H04B (2006.01)

CPC (source: EP SE)
G10L 19/008 (2013.01 - SE); **H04S 5/02** (2013.01 - EP); G10L 19/008 (2013.01 - EP)

Citation (examination)
HERRE J ET AL: "INTENSITY STEREO CODING", PREPRINTS OF PAPERS PRESENTED AT THE AES CONVENTION, XX, XX, vol. 96, no. 3799, 26 February 1994 (1994-02-26), pages 1 - 10, XP009025131

Designated contracting state (EPC)
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SE 2004001907 W 20041215; DK 04809080 T 20041215; EP 04809080 A 20041215; EP 12154099 A 20041215; ES 04809080 T 20041215; JP 2006518597 A 20041215; PL 04809080 T 20041215; PT 04809080 T 20041215; SE 0400415 A 20040220