

Title (en)

Sound field and sound image control apparatus and method.

Title (de)

Verfahren und Vorrichtung zur Schallfeld- und Tonbildsteuerung.

Title (fr)

Méthode et appareil de contrôle de champ et d'image sonores.

Publication

EP 0684751 A1 19951129 (EN)

Application

EP 94108134 A 19940526

Priority

EP 94108134 A 19940526

Abstract (en)

The apparatus of the invention calculates filter coefficients for controlling sound field and sound image, based on a plurality of first impulse response signals and a pair of second impulse response signals. The plurality of first impulse response signals indicate impulse responses from loudspeakers reproducing audio signals to both ears of a listener. The pair of second impulse response signals indicate impulse responses from a reference loudspeaker at a position at which a sound image is localized to both ears of the listener. The apparatus includes: a feature extracting section for receiving the pair of second impulse response signals, for extracting parameters representing features of the pair of second impulse response signals, and for outputting parameter signals; a signal adjusting section for adjusting at least one of the plurality of first impulse response signals based on the parameter signals, and for outputting a pair of third impulse response signals having the same features as the extracted features; and a coefficient calculating section for calculating the filter coefficients for controlling the sound field and sound image, based on the plurality of first impulse response signals and the pair of third impulse response signals applied from the signal adjusting means. <IMAGE>

IPC 1-7

H04S 1/00

IPC 8 full level

H04S 1/00 (2006.01)

CPC (source: EP)

H04S 1/002 (2013.01)

Citation (search report)

- [A] EP 0553832 A1 19930804 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- [A] EP 0487181 A2 19920527 - PIONEER ELECTRONIC CORP [JP]
- [A] US 5040219 A 19910813 - ANDO YOICHI [JP], et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 17, no. 35 (E - 1310) 22 January 1993 (1993-01-22)

Cited by

NL1010347C2; US6067361A; US6154545A; US6002775A; US6009179A; US7369665B1; WO9833356A3; WO9833357A3

Designated contracting state (EPC)

DE FR GB NL

DOCDB simple family (publication)

EP 0684751 A1 19951129; EP 0684751 B1 20000705; DE 69425132 D1 20000810; DE 69425132 T2 20010322

DOCDB simple family (application)

EP 94108134 A 19940526; DE 69425132 T 19940526