

Title (en)

DEVICE AND METHOD FOR PRODUCING A LOW-FREQUENCY CHANNEL

Title (de)

VORRICHTUNG UND VERFAHREN ZUM ERZEUGEN EINES TIEFTONKANALS

Title (fr)

PROCEDE ET DISPOSITIF DE PRODUCTION D'UN CANAL A FREQUENCES BASSES

Publication

**EP 1671516 B1 20070214 (DE)**

Application

**EP 04797996 A 20041118**

Priority

- EP 2004013130 W 20041118
- DE 10355146 A 20031126

Abstract (en)

[origin: WO2005060307A1] The invention relates to a method for producing a low-frequency channel for a low-frequency speaker which is disposed in a predetermined low-frequency speaker position. According to said method, a plurality of audioobjects is provided (900), and an object position and an object description is associated with every audioobject. A calculation (906) of an audioobject calibration value for every audioobject is carried out in accordance with the object description so that an actual amplitude status at a reference playback position at least approximates a desired amplitude status. Every object signal is scaled with an associated audioobject scaling value (910) and the scaled object signals are summed up (914). The sum signal thereby obtained is used to derive a low-frequency channel for the low-frequency speaker and the corresponding low-frequency speaker is provided (918). The scaling of the individual object signals of the audioobjects renders the method independent of an actual situation of a multichannel projection system with respect to the number and density of the speakers and with respect to the size of the actually present projection zone.

IPC 8 full level

**H04S 3/00** (2006.01); **H04R 3/12** (2006.01)

CPC (source: EP US)

**H04S 3/00** (2013.01 - EP US); **H04R 3/12** (2013.01 - EP US); **H04R 2201/403** (2013.01 - EP US); **H04S 7/307** (2013.01 - EP US); **H04S 2420/13** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB NL

DOCDB simple family (publication)

**DE 10355146 A1 20050707**; CN 100588286 C 20100203; CN 1906971 A 20070131; DE 502004002926 D1 20070329; EP 1671516 A1 20060621; EP 1671516 B1 20070214; JP 2007512740 A 20070517; JP 4255031 B2 20090415; US 2006280311 A1 20061214; US 8699731 B2 20140415; WO 2005060307 A1 20050630

DOCDB simple family (application)

**DE 10355146 A 20031126**; CN 200480041003 A 20041118; DE 502004002926 T 20041118; EP 04797996 A 20041118; EP 2004013130 W 20041118; JP 2006540333 A 20041118; US 44085306 A 20060525