

Title (en)

GENERATING BINAURAL AUDIO IN RESPONSE TO MULTI-CHANNEL AUDIO USING AT LEAST ONE FEEDBACK DELAY NETWORK

Title (de)

ERZEUGUNG EINES BINAURAL EN TONS IN REAKTION AUF EIN MEHRKANALAUDIOSYSTEM MIT MINDESTENS EINEM RÜCKKOPPLUNGSVERZÖGERUNGSNETZWERK

Title (fr)

GÉNÉRATION DE FRÉQUENCE AUDIO BINAURALE EN RÉPONSE À UNE FRÉQUENCE AUDIO MULTICANAL AU MOYEN D'AU MOINS UN RÉSEAU À RETARD DE RÉTROACTION

Publication

EP 3090573 A1 20161109 (EN)

Application

EP 14824318 A 20141218

Priority

- CN 201410178258 A 20140429
- US 201461988617 P 20140505
- US 2014071100 W 20141218

Abstract (en)

[origin: WO2015102920A1] In some embodiments, virtualization methods for generating a binaural signal in response to channels of a multi-channel audio signal, which apply a binaural room impulse response (BRIR) to each channel including by using at least one feedback delay network (FDN) to apply a common late reverberation to a downmix of the channels. In some embodiments, input signal channels are processed in a first processing path to apply to each channel a direct response and early reflection portion of a single-channel BRIR for the channel, and the downmix of the channels is processed in a second processing path including at least one FDN which applies the common late reverberation. Typically, the common late reverberation emulates collective macro attributes of late reverberation portions of at least some of the single-channel BRIRs. Other aspects are headphone virtualizers configured to perform any embodiment of the method.

IPC 8 full level

H04S 3/00 (2006.01)

CPC (source: EP KR RU US)

G10L 19/008 (2013.01 - EP US); **H04S 3/004** (2013.01 - EP KR US); **H04S 7/306** (2013.01 - EP US); **H04S 3/004** (2013.01 - RU); **H04S 7/307** (2013.01 - EP US); **H04S 2400/03** (2013.01 - EP US); **H04S 2400/13** (2013.01 - EP US); **H04S 2420/01** (2013.01 - EP KR RU US)

Citation (search report)

See references of WO 2015102920A1

Cited by

WO2022182943A1; US12126986B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2015102920 A1 20150709; EP 3090573 A1 20161109; EP 3090573 B1 20181205

DOCDB simple family (application)

US 2014071100 W 20141218; EP 14824318 A 20141218