

Title (en)

IMPROVED FREQUENCY BAND EXTENSION IN AN AUDIO SIGNAL DECODER

Title (de)

VERBESSERTE FREQUENZBANDERWEITERUNG IN EINEM AUDIOSIGNALDECODIERER

Title (fr)

EXTENSION AMÉLIORÉE DE BANDE DE FRÉQUENCE DANS UN DÉCODEUR DE SIGNAUX AUDIOFRÉQUENCES

Publication

**EP 3014611 B1 20190313 (FR)**

Application

**EP 14742262 A 20140624**

Priority

- FR 1356100 A 20130625
- FR 2014051563 W 20140624

Abstract (en)

[origin: WO2014207362A1] The invention relates to a method for extending the frequency band of an audio signal during a decoding or improvement process comprising a step of decoding or extracting, in a first so-called low frequency band, an excitation signal and coefficients of a linear prediction filter. The method comprises the following steps: - obtaining a signal (UHB2(k), E403)) extended in at least a second frequency band higher than the first frequency band from an oversampled excitation signal extended in at least a second frequency band (UHB1(k), E401);- scaling (E406) the extended signal by means of a gain defined by subframe on the basis of an energy ratio of a frame and of a subframe; - filtering (E404) said scaled extended signal with a linear prediction filter of which the coefficients are derived from the coefficients of the low frequency band filter. The invention also relates to a frequency band extension device implementing the described method and a decoder comprising such a device.

IPC 8 full level

**G10L 21/038** (2013.01); **G10L 19/06** (2013.01); **G10L 19/08** (2013.01)

CPC (source: EP US)

**G10L 19/012** (2013.01 - US); **G10L 19/06** (2013.01 - US); **G10L 19/083** (2013.01 - US); **G10L 19/12** (2013.01 - US); **G10L 19/26** (2013.01 - US); **G10L 21/038** (2013.01 - EP US); **G10L 21/0388** (2013.01 - US); **G10L 19/08** (2013.01 - EP US)

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

DOCDB simple family (publication)

**FR 3007563 A1 20141226**; CN 105324814 A 20160210; CN 105324814 B 20190604; EP 3014611 A1 20160504; EP 3014611 B1 20190313; ES 2724576 T3 20190912; US 2016133273 A1 20160512; US 9911432 B2 20180306; WO 2014207362 A1 20141231

DOCDB simple family (application)

**FR 1356100 A 20130625**; CN 201480036730 A 20140624; EP 14742262 A 20140624; ES 14742262 T 20140624; FR 2014051563 W 20140624; US 201414896651 A 20140624