

Title (en)

DETERMINING FEATURES OF HARMONIC SIGNALS

Title (de)

BESTIMMUNG DER MERKMALE VON HARMONISCHEN SIGNALLEN

Title (fr)

DÉTERMINATION DE CARACTÉRISTIQUES DE SIGNAUX HARMONIQUES

Publication

**EP 3254282 A1 20171213 (EN)**

Application

**EP 16706703 A 20160203**

Priority

- US 201562112836 P 20150206
- US 201562112796 P 20150206
- US 201562112832 P 20150206
- US 201562112850 P 20150206
- US 201514969029 A 20151215
- US 201514969022 A 20151215
- US 201514969036 A 20151215
- US 201514969038 A 20151215
- US 2016016261 W 20160203

Abstract (en)

[origin: CN107430850A] Features that may be computed from a harmonic signal include a fractional chirp rate, a pitch, and amplitudes of the harmonics. A fractional chirp rate may be estimated, for example, by computing scores corresponding to different fractional chirp rates and selecting a highest score. A first pitch may be computed from a frequency representation that is computed using the estimated fractional chirp rate, for example, by using peak-to-peak distances in the frequency distribution. A second pitch may be computed using the first pitch, and a frequency representation of the signal, for example, by using correlations of portions of the frequency representation. Amplitudes of harmonics of the signal may be determined using the estimated fractional chirp rate and second pitch. Any of the estimated fractional chirp rate, second pitch, and harmonic amplitudes may be used for further processing, such as speech recognition, speaker verification, speaker identification, or signal reconstruction.

IPC 8 full level

**G10L 25/90** (2013.01); **G10L 15/02** (2006.01); **G10L 17/02** (2013.01)

CPC (source: CN EP)

**G10L 15/02** (2013.01 - CN EP); **G10L 17/02** (2013.01 - CN EP); **G10L 25/90** (2013.01 - CN EP)

Citation (search report)

See references of WO 2016126753A1

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)

CN 107430850 A 20171201; EP 3254282 A1 20171213

DOCDB simple family (application)

CN 201680017664 A 20160203; EP 16706703 A 20160203