Title (en)

METHOD FOR FORMING THE EXCITATION SIGNAL FOR A GLOTTAL PULSE MODEL BASED PARAMETRIC SPEECH SYNTHESIS SYSTEM

Title (de)

VERFAHREN ZUR ERZEUGUNG DES ANREGUNGSSIGNALS FÜR EIN GLOTTALES IMPULSMODELLBASIERTES PARAMETRISCHES SPRACHSYNTHESESYSTEM

Title (fr)

PROCÉDÉ PERMETTANT DE FORMER LE SIGNAL D'EXCITATION POUR UN SYSTÈME DE SYNTHÈSE VOCALE PARAMÉTRIQUE BASÉ SUR UN MODÈLE D'IMPULSION GLOTTALE

Publication

EP 3363015 A4 20190612 (EN)

Application

EP 15905930 A 20151006

Priority

US 2015054122 W 20151006

Abstract (en)

[origin: WO2017061985A1] A system and method are presented for forming the excitation signal for a glottal pulse model based parametric speech synthesis system. The excitation signal may be formed by using a plurality of sub-band templates instead of a single one. The plurality of sub-band templates may be combined to form the excitation signal wherein the proportion in which the templates are added is dynamically based on determined energy coefficients. These coefficients vary from frame to frame and are learned, along with the spectral parameters, during feature training. The coefficients are appended to the feature vector, which comprises spectral parameters and is modeled using HMMs, and the excitation signal is determined.

IPC 8 full level

G10L 13/02 (2013.01); G10L 25/75 (2013.01)

CPC (source: EP KR)

G10L 13/02 (2013.01 - EP KR); **G10L 25/75** (2013.01 - KR); G10L 25/75 (2013.01 - EP)

Citation (search report)

- [XD] EP 2242045 A1 20101020 - FACULTE POLYTECHNIQUE DE MONS [BE], et al
- [X] US 2009299747 A1 20091203 - RAITIO TUOMO JOHANNES [FI], et al
- [X] TAMAS GABOR CSAPO ET AL: "A novel codebook-based excitation model for use in speech synthesis", COGNITIVE INFOCOMMUNICATIONS (COGINFOCOM), 2012 IEEE 3RD INTERNATIONAL CONFERENCE ON, IEEE, 2 December 2012 (2012-12-02), pages 661 - 665, XP032316820, ISBN: 978-1-4673-5187-4, DOI: 10.1109/COGINFOCOM.2012.6421934
- [X] TUOMO RAITIO ET AL: "Utilizing glottal source pulse library for generating improved excitation signal for HMM-based speech synthesis", 2011 IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING : (ICASSP 2011) ; PRAGUE, CZECH REPUBLIC, 22 - 27 MAY 2011, IEEE, PISCATAWAY, NJ, 22 May 2011 (2011-05-22), pages 4564 - 4567, XP032001695, ISBN: 978-1-4577-0538-0, DOI: 10.1109/ICASSP.2011.5947370
- See references of WO 2017061985A1

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)

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DOCDB simple family (application)

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