

Title (en)

Method and apparatus for reproducing speech signals

Title (de)

Verfahren und Einrichtung zur Wiedergabe von Sprachsignalen

Title (fr)

Procédé et appareil pour reproduire des signaux de parole

Publication

EP 1164577 A3 20020109 (EN)

Application

EP 01121724 A 19961025

Priority

- EP 96307741 A 19961025
- JP 27941095 A 19951026
- JP 28067295 A 19951027

Abstract (en)

[origin: EP1164577A2] A method for reproducing speech signals at a controlled speed whereby rate conversion of the time axis may be facilitated, and can be realized by a simplified structure based on the encoded speech data without changing the phoneme. With the speech reproducing method, an encoding unit 2 discriminates whether an input speech signal is voiced or unvoiced. Based on the results of discrimination, the encoding unit 2 performs sinusoidal synthesis and encoding for a signal portion found to be voiced, while performing vector quantization by closed-loop search for an optimum vector for a portion found to be unvoiced using an analysis-by-synthesis method, in order to find encoded parameters. The decoding unit 4 compands the time axis of the encoded parameters obtained every pre-set frames at a period modification unit 3 for modifying the output period of the parameters for creating modified encoded parameters associated with different time points corresponding to the pre-set frames. A speech synthesis unit 6 synthesizes the voiced speech portion and the unvoiced speech portion based on the modified encoded parameters.

<IMAGE>

IPC 1-7

G10L 19/02; **G10L 21/04**

IPC 8 full level

G10L 19/02 (2013.01); **G10L 21/04** (2013.01)

CPC (source: EP)

G10L 19/02 (2013.01); **G10L 21/04** (2013.01)

Citation (search report)

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- [A] EP 0279451 A2 19880824 - FUJITSU LTD [JP]
- [Y] NISHIGUCHI M ET AL: "HARMONIC AND NOISE CODING OF LPC RESIDUALS WITH CLASSIFIED VECTOR QUANTIZATION", PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING (ICASSP). DETROIT, MAY 9 - 12, 1995. SPEECH, NEW YORK, IEEE, US, vol. 1, 9 May 1995 (1995-05-09), pages 484 - 487, XP000658036, ISBN: 0-7803-2432-3
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Designated contracting state (EPC)

DE FR GB NL

DOCDB simple family (publication)

EP 1164577 A2 20011219; **EP 1164577 A3 20020109**

DOCDB simple family (application)

EP 01121724 A 19961025