Title (en)

METHOD FOR SPEECH SYNTHESIZING WITH UNLIMITED VOCABULARY, AND ARRANGEMENT FOR REALIZING THE SAME

Publication

EP 0058130 B1 19860716 (DE)

Application

EP 82730011 A 19820211

Priority

DE 3105518 A 19810211

Abstract (en)

[origin: EP0058130A2] 1. A method for the synthesis of speech with an unlimited vocabulary in the time domain from sound elements which are obtained from natural speech samples and are coded with low redundancy in digital form, stored and also reduced in length, in each case to the significant area of the relevant time signal typical of the sound, and in number, by utilizing related sounds which are mutually transformable into each other, having regard to the necessary storage space requirement, these sound elements being linked, with respect to the form, number and sequence required, into digital signal sequences on the basis of input commands and of predetermined rules of linkage for the purposes of speech synthesis, these signal sequences being used to generate, by means of digital/analog conversion and controllable amplification, sound waves which can be perceived as speech, characterized in : providing a total of about 100 sound elements, that is to say - about 50 elements for transitions sounds with an average of 240 samples each for an output frequency of 8 kHz, and - about 40 elements for phonemes with an average of 500 samples for unvoiced and 140 samples for voiced phonemes each and an output frequency of 8 kHz, and enabling the pitch to be varied for reproduction, in the case of the elements for the voiced transition sounds and phonemes, by omitting or using at least once, as a result of appropriate input commands, those samples and/or values which are preset as suitable by means of marker words at discrete positions in the time signal, depending on requirement, when the digital signal sequences are being formed.

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G10L 5/04

IPC 8 full level

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CPC (source: EP)

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Cited by

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