

Title (en)

Method and apparatus for modifying the playback rate of audio-video signals

Title (de)

Verfahren und Vorrichtung zum Verändern der Wiedergabegeschwindigkeit von Audio- und Videosignalen

Title (fr)

Procédé et appareil pour modifier la vitesse de reproduction de signaux audio-video

Publication

EP 2261900 A1 20101215 (EN)

Application

EP 10165115 A 20100607

Priority

IT GE20090037 A 20090608

Abstract (en)

Method for modifying the playback rate of audio-video signals comprising the following steps: a) receiving an input signal from any source, b) storing said signal into a working memory of an apparatus, c) setting the playback rate of said audio-video signal, d) reading out said audio-video signal into said working memory, e) separating the audio portion from the video portion of said signal f) processing the playback rate both of the audio portion and of the video portion wherein the parameter of the playback rate set at step c) is used in order to define the new frame-rate value of the video portion and the new samples/second value of the audio portion, that have been modified individually and in a balanced way, g) joining the audio portion with modified playback rate to the video portion with modified playback rate, h) generating and transmitting an output signal providing synchronization between the audio portion and the video portion without leading to distortions and/or artefacts and/or losses of information on said output signal and wherein the playback rate of the audio signal is set by finding the audio signal components related to pauses, that is without voice emission, and related to speech, that is voice emission, a different playback rate being defined for said two components of the audio signal, and said different playback rate being applied also for processing the different playback rate of video signal components coinciding with the audio signal components related to pauses and speech. The present invention relates also to an apparatus for performing said method.

IPC 8 full level

G10L 21/04 (2006.01)

CPC (source: EP)

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Citation (applicant)

- WO 2005045830 A1 20050519 - COSMOTAN INC [KR], et al
- US 5717818 A 19980210 - NEJIME YOSHITO [JP], et al
- US 5175769 A 19921229 - HEJNA JR DONALD J [US], et al
- "an overlap-add technique based on waveform similarity (WSOLA) for high quality time scale modification of speech-IEEE", PROCEEDINGS OF ICASSP-93, vol. II, 1993, pages 554 - 557
- "an overlap-add technique based on waveform similarity (WSOLA) for high quality time scale modification of speech IEEE", PROCEEDINGS OF ICASSP-93, vol. II, 1993, pages 554 - 557

Citation (search report)

- [Y] WO 2005045830 A1 20050519 - COSMOTAN INC [KR], et al
- [Y] WO 2004077381 A1 20040910 - DUBLIN INST OF TECHNOLOGY [IE], et al

Cited by

CN107112029A; CN112750436A; US8245071B2; US2009172456A1

Designated contracting state (EPC)

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