

Title (en)

Method and assembly to enhance the intelligibility of speech

Title (de)

Verfahren und Baugruppe zur Erhöhung der Verständlichkeit von Sprache

Title (fr)

Procédé et assemblage pour améliorer l'intelligibilité de la parole

Publication

EP 2063420 A1 20090527 (EN)

Application

EP 07405332 A 20071126

Priority

EP 07405332 A 20071126

Abstract (en)

The present invention concerns a method and an assembly designed to enhance the intelligibility of speech produced by a sound device in a noisy environment. The assembly comprises a microphone, or a telecommunication unit, which provides to a data processing module the voice of a remote speech. The data processing module is designed to combine specific algorithms offering a perceptual improvement of the produced speech by increasing intelligibility, by saving an adequate signal quality and by saving as far as possible the overall power consumption. The enhanced speech as produced by the data processing module is then played in a speaker.

IPC 8 full level

G10L 21/02 (2006.01); **G10L 25/93** (2013.01)

CPC (source: EP)

G10L 21/0364 (2013.01); **G10L 25/93** (2013.01)

Citation (search report)

- [X] LEE S.H ET AL: "Real Time Speech Intelligibility enhancement based on the background noise analysis", PROCEEDINGS OF FOURTH IASTED "INTERNATIONAL CONFERENCE SIGNAL PROCESSING, PATTERN RECOGNITION AND APPLICATIONS", 14 February 2007 (2007-02-14), INNSBRUCK, AUSTRIA, pages 287 - 292, XP002472964
- [A] ATAL B S ET AL: "A PATTERN RECOGNITION APPROACH TO VOICED-UNVOICED-SILENCE CLASSIFICATION WITH APPLICATIONS TO SPEECH RECOGNITION", IEEE TRANSACTIONS ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, IEEE INC. NEW YORK, US, vol. ASSP-24, no. 3, June 1976 (1976-06-01), pages 201 - 212, XP009040248, ISSN: 0096-3518
- [A] VIRAG N: "Speech enhancement based on masking properties of the auditory system", ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, 1995. ICASSP-95., 1995 INTERNATIONAL CONFERENCE ON DETROIT, MI, USA 9-12 MAY 1995, NEW YORK, NY, USA, IEEE, US, vol. 1, 9 May 1995 (1995-05-09), pages 796 - 799, XP010625353, ISBN: 0-7803-2431-5
- [A] BEROUTI M ET AL: "ENHANCEMENT OF SPEECH CORRUPTED BY ACOUSTIC NOISE", INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH & SIGNAL PROCESSING. ICASSP. WASHINGTON, APRIL 2 - 4, 1979, NEW YORK, IEEE, US, vol. CONF. 4, 1979, pages 208 - 211, XP001079151

Cited by

CN106060714A; CN113192507A; EP2471064A4

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 2063420 A1 20090527

DOCDB simple family (application)

EP 07405332 A 20071126