

Title (en)

Measuring process for loudness quality assessment of audio signals

Title (de)

Messverfahren zur gehörrichtigen Qualitätsbewertung von Audiosignalen

Title (fr)

Procédé d'évaluation de la qualité de la correction physiologique de signaux audio

Publication

EP 0957471 A3 20040102 (DE)

Application

EP 99106223 A 19990412

Priority

DE 19821273 A 19980513

Abstract (en)

[origin: EP0957471A2] The method involves using filters, time blurring (low-pass filtering), level and frequency adjustment. The audio test signal is compared with a reference signal. Both signals or signal pairs are prefiltered and then separated by a filter bank (3) into frequency ranges. The filter bank characteristics and a subsequent time blurring of the filter output signals are used to produce an perceptual representation of the test signal for evaluation. By comparing the audible representations of the test signal and the reference signal after nonlinear conversion, an estimate of the hearing impression is made.

IPC 1-7

G10L 19/00

IPC 8 full level

G10L 25/69 (2013.01)

CPC (source: EP US)

G10L 25/69 (2013.01 - EP US)

Citation (search report)

- [A] US 4860360 A 19890822 - BOGGS GEORGE J [US]
- [A] EP 0417739 A2 19910320 - FUJITSU LTD [JP]
- [XA] HANSEN M ET AL: "Using a quantitative psychoacoustical signal representation for objective speech quality measurement", ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, 1997. ICASSP-97., 1997 IEEE INTERNATIONAL CONFERENCE ON MUNICH, GERMANY 21-24 APRIL 1997, LOS ALAMITOS, CA, USA, IEEE COMPUT. SOC, US, 21 April 1997 (1997-04-21), pages 1387 - 1390, XP010226062, ISBN: 0-8186-7919-0
- [A] BRANDENBURG K ET AL: "NMR AND MASKING FLAG: EVALUATION OF QUALITY USING PERCEPTUAL CRITERIA", PROCEEDINGS OF THE INTERNATIONAL TEST AND MEASUREMENT CONFERENCE. PORTLAND, MAY 21 - 31, 1992, NEW YORK, AES, US, vol. CONF. 11, 29 May 1992 (1992-05-29), pages 169 - 179, XP000300175

Cited by

WO0165543A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0957471 A2 19991117; EP 0957471 A3 20040102; EP 0957471 B1 20060201; AT E317151 T1 20060215; CA 2271445 A1 19991113; CA 2271445 C 20110222; DE 19821273 A1 19991202; DE 19821273 B4 20061005; DE 59913088 D1 20060413; DK 0957471 T3 20060606; US 7194093 B1 20070320

DOCDB simple family (application)

EP 99106223 A 19990412; AT 99106223 T 19990412; CA 2271445 A 19990512; DE 19821273 A 19980513; DE 59913088 T 19990412; DK 99106223 T 19990412; US 31149099 A 19990513