

Title (en)  
Audio decoder comprising a background noise estimator

Title (de)  
Audiodekodierer mit Hintergrundgeräuschschätzer

Title (fr)  
Décodeur audio avec estimateur de bruit de fond

Publication  
**EP 2866228 A1 20150429 (EN)**

Application  
**EP 14196262 A 20120214**

Priority  
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• EP 12706002 A 20120214

Abstract (en)  
An audio decoder comprises a background noise estimator that is configured to update a parametric background noise estimate during an active phase. It further comprises a background noise generator configured to synthesize an audio signal during an inactive phase.

IPC 8 full level  
**G10L 19/03** (2013.01); **G10L 19/012** (2013.01); **G10L 19/22** (2013.01); **G10L 21/0216** (2013.01); **G10L 25/78** (2013.01)

CPC (source: EP KR RU US)  
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Citation (applicant)  
• ISO/IEC CD 23003-3, 24 September 2010 (2010-09-24)  
• R. MARTIN, NOISE POWER SPECTRAL DENSITY ESTIMATION BASED ON OPTIMAL SMOOTHING AND MINIMUM STATISTICS, 2001

Citation (search report)  
• [A] WO 02101722 A1 20021219 - GLOBESPAN VIRATA INC [US]  
• [A] US 2007050189 A1 20070301 - CRUZ-ZENO EDGARDO M [US], et al  
• [A] US 5960389 A 19990928 - JARVINEN KARI [FI], et al  
• [A] US 2005278171 A1 20051215 - SUPPAPPOLA SETH [US], et al  
• [A] MAKINEN J ET AL: "AMR-WB+: a New Audio Coding Standard for 3rd Generation Mobile Audio Services", 2005 IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING - 18-23 MARCH 2005 - PHILADELPHIA, PA, USA, IEEE, PISCATAWAY, NJ, vol. 2, 18 March 2005 (2005-03-18), pages 1109 - 1112, XP010790838, ISBN: 978-0-7803-8874-1, DOI: 10.1109/ICASSP.2005.1415603  
• [A] SJOBERG M WESTERLUND ERICSSON A LAKANIEMI S WENGER NOKIA J: "RTP Payload Format for the Extended Adaptive Multi-Rate Wideband (AMR-WB+) Audio Codec; rfc4352.txt", 20060101, 1 January 2006 (2006-01-01), XP015044785, ISSN: 0000-0003  
• [A] BRUNO BESSETTE ET AL: "The Adaptive Multirate Wideband Speech Codec (AMR-WB)", IEEE TRANSACTIONS ON SPEECH AND AUDIO PROCESSING, IEEE SERVICE CENTER, NEW YORK, NY, US, vol. 10, no. 8, 1 November 2002 (2002-11-01), XP011079675, ISSN: 1063-6676  
• [A] NEUENDORF MAX ET AL: "A Novel Scheme for Low Bitrate Unified Speech and Audio Coding - MPEG RM0", AES CONVENTION 126; MAY 2009, AES, 60 EAST 42ND STREET, ROOM 2520 NEW YORK 10165-2520, USA, 1 May 2009 (2009-05-01), XP040508995

Cited by  
CN110114827A; CN110648680A; CN116320176A; US11869519B2; WO2021255328A1

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