Title (en)

Robust quantization with efficient WMSE search of a sign-shape codebook using illegal space

Title (de)

Robuste Quantisierung mit WMSE Suche in einem Vorzeichen-Form Kodebuch unter Verwendung von illegalem Raum

Title (fr)

Quantisation robuste avec recherche WMSE d'une table de codes indice-forme utilisant un espace illégal

Publication

**EP 1293967 B1 20081105 (EN)**

Application

**EP 02255723 A 20020816**

Priority

- US 31254301 P 20010816
- US 16337802 A 20020607
- US 16399502 A 20020607
- US 16334402 A 20020607

Abstract (en)

[origin: EP1293967A2] A method of searching a signed codebook to quantize a vector includes weighting a shape codevector in a set of shape codevectors with a weighting function for a Weighted Mean Square Error (WMSE) criteria, to produce a weighted shape codevector. The method further includes correlating the weighted shape codevector with the vector to produce a weighted correlation term. The method also includes determining, based on a sign of the weighted correlation term, a preferred one of a positive and a negative signed codevector associated with the shape codevector. The method further includes determining whether one of the signed codevectors does not belong to an illegal space defining illegal vectors. <IMAGE>

IPC 8 full level

**G10L 19/07** (2013.01)

CPC (source: EP)

**G10L 19/07** (2013.01); G10L 2019/0007 (2013.01); G10L 2019/0013 (2013.01)

Citation (examination)

ATAL; SCHROEDER: "Predictive Coding of Speech Signals and Subjective Error Criteria", IEEE TRANSACTIONS ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, IEEE INC., NEW YORK, US

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 1293967 A2 20030319**; **EP 1293967 A3 20040825**; **EP 1293967 B1 20081105**; DE 60227753 D1 20080904; DE 60229702 D1 20081218; DE 60234561 D1 20100114; EP 1293965 A2 20030319; EP 1293965 A3 20040818; EP 1293965 B1 20091202; EP 1293966 A2 20030319; EP 1293966 A3 20040825; EP 1293966 B1 20080723

DOCDB simple family (application)

**EP 02255723 A 20020816**; DE 60227753 T 20020816; DE 60229702 T 20020816; DE 60234561 T 20020816; EP 02255719 A 20020816; EP 02255722 A 20020816