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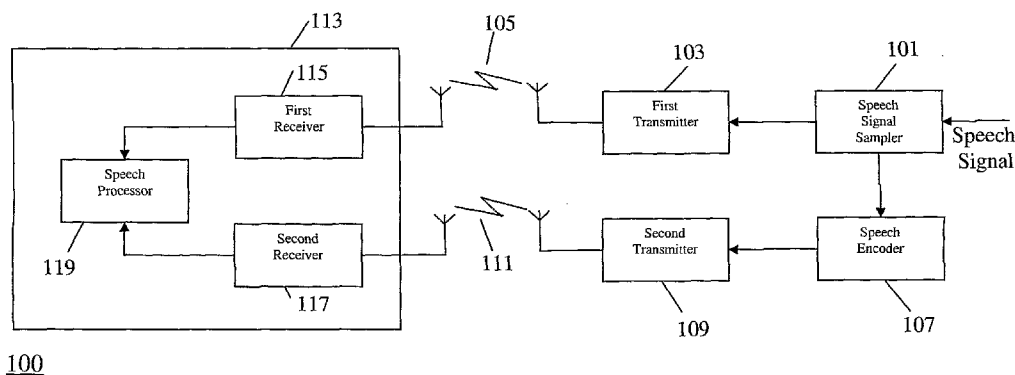
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(54) Title: METHOD AND APPARATUS FOR SPEECH QUALITY ASSESSMENT IN A CELLULAR COMMUNICATION SYSTEM



(57) Abstract: The invention relates to an apparatus and method for speech quality assessment in a cellular communication system. The apparatus (113) comprises a second receiver (117) which receives encoded speech data for a speech segment from a remote speech source over an air interface voice channel (111) of the cellular communication system. The apparatus (113) further comprises a first receiver (115) which receives a reference speech sample corresponding to the speech segment from a remote reference speech sample source. The first and second receivers (115, 117) are coupled to a speech processor (119) which determines a speech quality characteristic by comparison of the reference speech sample and the encoded speech data. The encoded voice data may be transmitted over an air interface voice channel (111) whereas the reference sample may be transmitted over a first air interface channel (105) which specifically may be a data channel having a very low bit error rate. The invention may allow an effective, flexible and distributed speech assessment.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC: G10L 11/00;H04B 3/46,17/00;H04Q 7/20

USPC: 704/270;375/224;455/67.13,67.14,424
 According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 704/270;375/224;455/67.13,67.14,424

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 Google Scholar

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,201,960 B1 (MINDE et al) 13 March 2001 (13.03.2001), whole document	1,3,8,9
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Y		2,4-7
Y	US 5,742,929 A (KALLMAN et al) 21 April 1998 (21.4.1998), col 4-5 and Figure 2	2,4-7
X	US 5,848,384 A (HOLLIER at el) 08 December 1998 (08.12.1998) , col 2 lines, 50-65 and col 6-8.	1,3,4
X	US 5,978,783 A (MEYERS et al) 02 November 1999 (2.11.1999), col 1, lines 45-55.	1,8
X	WO 02/37694 A2 (ESMAILZADEH, R et al) 10 May 2002 (10.05.2002), whole document	1,9

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