Title: VOICE ACTIVITY DETECTOR

Abstract: A voice activity detector (100) includes an analyser (101) for analysing an input signal representing an audio signal to determine if speech is present in the audio signal and for producing an output state signal (01) accordingly, a state change delay (103) for receiving an output state signal (01) from the analyser, for detecting a change of value of the received output state signal and for maintaining a current state of the received output state signal until a pre-determined delay period has elapsed to produce an output state signal (02) and a signal quality estimator (105) for estimating a current quality value of the analysed input signal and for producing an output signal (03) indicating the estimated value, wherein the state change delay (103) is operable to apply a delay period which has a variable value which is determined adaptively according to a current value of the output signal (03) of the signal quality estimator.
before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.
INTERNATIONAL SEARCH REPORT

International application No.
PCT/US06/34350

A. CLASSIFICATION OF SUBJECT MATTER
IPC: G10L ll/00( 2006.01), ll/02( 2003.01), H06( 2001.01)
USPC: 704/231,233;379/406.01
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.: 704/231,233; 370/406.01
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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>US 6,522,746 A (MARCHOK et al) 18 February 2003 (18.02.2003), Fig. 2.</td>
<td>1-10</td>
</tr>
<tr>
<td>A</td>
<td>US 6,526,139 A (ROUSELL et al) 25 February 2003 (25.02.2003), Fig. 2.</td>
<td>1-10</td>
</tr>
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<td>A</td>
<td>US 6,526,140 A (MARCHOK et al) 25 February 2003 (25.02.2003), Fig. 2.</td>
<td>1-10</td>
</tr>
<tr>
<td>A</td>
<td>US 7,003,097 A (MARCHOK et al) 21 February 2003 (21.02.2003), Fig. 2.</td>
<td>1-10</td>
</tr>
</tbody>
</table>

D. Further documents are listed in the continuation of Box C.

D. See patent family annex.

Date of the actual completion of the international search
3 January 2007 (31.01.2007)

Name and mailing address of the ISA/US
Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
Facsimile No. (571) 273-3201

Authorized officer
Susan McFadden
Telephone No. 571-272-2600

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