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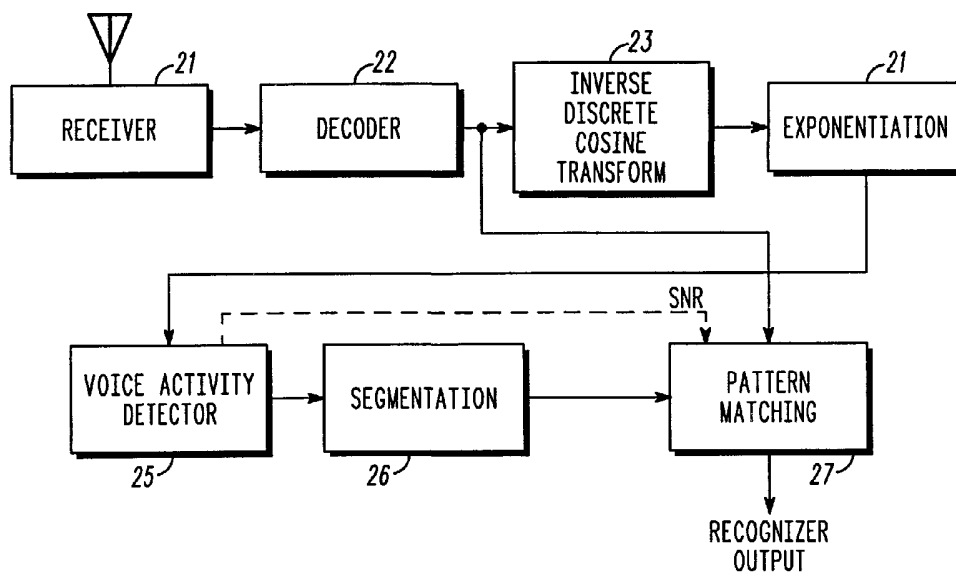
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(54) Title: DISTRIBUTED SPEECH RECOGNITION WITH BACK-END VOICE ACTIVITY DETECTION APPARATUS AND METHOD



(57) Abstract: In a distributed voice recognition system, a back-end pattern matching unit (27) can be informed of voice activity detection information as developed through use of a back-end voice activity detector (25). Although no specific voice activity detection information is developed or forwarded by the front-end of the system, precursor information as developed at the back-end can be used by the voice activity detector to nevertheless ascertain with relative accuracy the presence or absence of voice in a given set of corresponding voice recognition features as developed by the front-end of the system.

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/24040

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G10L 19/14  
 US CL : 704/205,254,225,214,208,233,270

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)  
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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)  
 EAST

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P --- Y	US 2003/0061042 A1 (GARUDADRI) 27 March 2003, paragraphs 0018 and 0051; fig 6 and paragraphs 0073-0075; col. 10, lines 25-53.	1-7 and 10-17 ----- 8,9 and 18
Y,P	US 6,453,289 B1 (ERTEM et al) 17 September 2002, col. 1, lines 43-44.	8 and 9
Y	US 6,182,032 B1 (RAPELI) 30 January 2001, fig. 3, paragraph 0041, fig. 2, paragraph 0093.	18

Further documents are listed in the continuation of Box C.

See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O" document referring to an oral disclosure, use, exhibition or other means	
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