

(12) **UK Patent Application** (19) **GB** (11) **2 409 390** (13) **A**

(43) Date of Printing by UK Office **22.06.2005**

(21) Application No: **0506653.5**  
(22) Date of Filing: **17.09.2003**  
(30) Priority Data:  
(31) **10272921** (32) **17.10.2002** (33) **US**  
(86) International Application Data:  
**PCT/US2003/029651 En 17.09.2003**  
(87) International Publication Data:  
**WO2004/036552 En 29.04.2004**

(51) INT CL<sup>7</sup>:  
**G10L 21/02**  
(52) UK CL (Edition X ):  
**H4R RPNR**  
(56) Documents Cited by ISA:  
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**WARGNIER J: Considerations for robust speech recognition and sound quality for automotive handsfree kits. AVIOS 2002, XP002266238. San Jose, CA, figure 4**

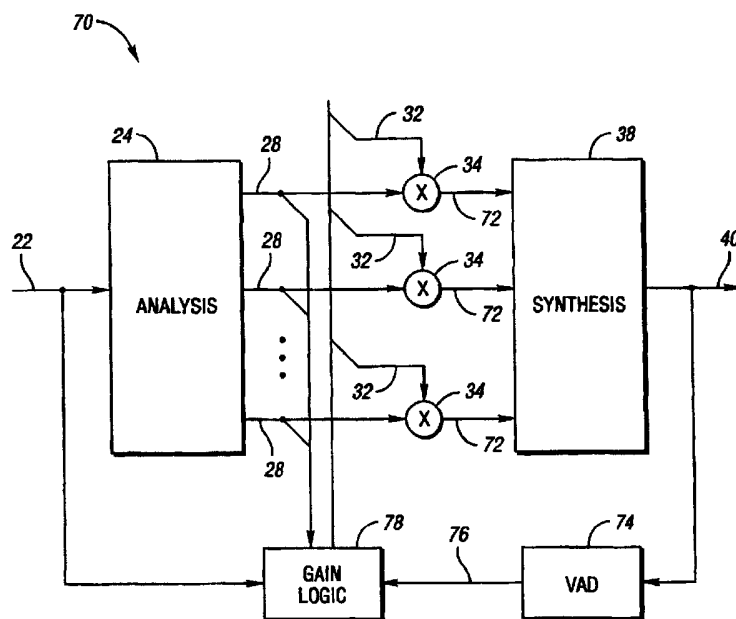
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(58) Field of Search by ISA:  
INT CL<sup>7</sup> **G10L**  
Other:

(continued on next page)

(54) Abstract Title: **Noise reduction in subbanded speech signals**

(57) The presence of speech in a filtered speech signal is detected for the purpose of suspending noise level calculations during periods of speech. A received speech signal is split into a plurality of subband signals. A subband variable gain is determined for each subband based on an estimation of the noise level in the received voice signal and on an envelope of the received signal in each subband. Each subband signal is multiplied by the subband variable gain for that subband. The subband signals are combined to produce an output voice signal.



**GB 2409390 A continuation**

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