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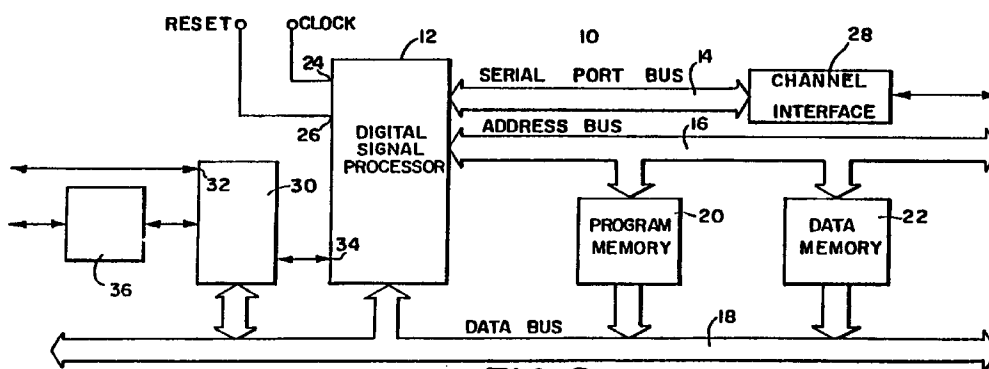
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**Central Approach**  
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(54) **Adaptive transform coding**

(57) Determining formant information of a speech signal in a transform coder in order to reduce noise and distortion caused by quantization is disclosed. Dividing the signal into blocks using a window (52) is followed by dynamic scaling (54) used to conserve necessary processing for the discrete cosine transform (64) and the use of LPC coefficients (68) for pitch generation (82) and bit allocation (108). Consequently, the transformed

information (64), pitch (106), and bit allocation (108) are utilized for accurate quantization (66) of the speech signal. Dynamic scaling (54), pitch (97), and quantization (66 and 80) information are then converted to a standard format (116) for transmission and subsequent decoding.



**FIG. 2**



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 96 20 0973

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	IEEE ACOUSTICS, SPEECH, AND SIGNAL PROCESSING MAGAZINE, vol. ASSP-29, no. 2, April 1981, NEW YORK US, pages 147-154, XP002017066 R.V.COX ET AL.: "REAL-TIME SIMULATION OF ADAPTIVE TRANSFORM CODING" * the whole document * -----	1,9	G10L7/06
			TECHNICAL FIELDS SEARCHED (Int.Cl.6) G10L
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 5 November 1996	Examiner Greiser, N
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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