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54 **Method and apparatus for generating a signal transformation and the use thereof in signal processings.**

57 A method and apparatus for generating a signal transformation useful in signal processing is provided. According to the preferred embodiment, a signal, e.g., a speech waveform, is first converted into a sequence of digital data samples, and a reference position along a first sub-part of the sequence is then selected. A "weighted" histogram corresponding to the reference position is then generated according to a correlation function. Thereafter, a new reference position is selected, for example, at a sub-part of the sequence located a pitch period of the signal from the original reference position, and an additional histogram is generated for this sub-part. The plurality of histograms comprise the transformation of the signal, which retains a substantial part of the informational content of the original signal. Therefore, the transformation is then used as the signal itself in signal processing applications such as

speech compression and synthesis.

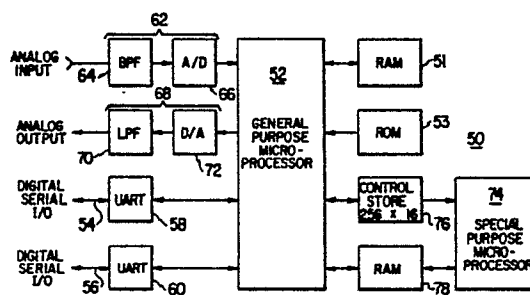


FIG. 3



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. 4)
A	JOURNAL OF THE AUDIO ENGINEERING SOCIETY, vol. 10, no. 2, April 1962, pages 163-166; M.R. SCHROEDER: "Correlation techniques for speech bandwidth compression" * Page 164, "Autocorrelation vocoder"; figure 2 *	1,4,5,9 ,13-15	G 10 L 9/08
A	US-A-4 004 096 (W.R. BAUER et al.) * Abstract; column 6, lines 22-34; figure 1 *	1,2,5, 13	
A	SIGNAL PROCESSING, vol. 5, no. 6, November 1993, pages 491-513, Elsevier Science Publishers B.V., Amsterdam, NL; E. AMBIKAIRAJAH et al.: "The time-domain periodogram algorithm" * Page 492, paragraph: "2.A The periodogram" *	1,2,5	
A	FR-A-2 337 393 (DIALOG SYSTEMS INC.) * Page 6, line 4 - page 8, line 32 *	1,4,5	TECHNICAL FIELDS SEARCHED (Int. Cl.4) G 10 L 9/00 G 10 L 3/00 G 06 F 15/00
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 17-12-1987	Examiner DELPORTE B.P.M.
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			