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(54) **Vector quantization system and method of operation**

(57) A method of providing robust quantization of speech spectral parameters tolerant to spectral balance and speaker variations, the method including the steps of, for each of a plurality of line spectral frequencies (LSFs) of a speech spectrum, quantizing (14) the displacement

ment (12) of the LSF from an estimate (42) of its long-term mean, reconstructing (22,34) an estimate of the LSF from the quantized displacement and the long-term LSF mean estimate, and filtering (26,30,32) the reconstructed LSF estimate, thereby providing a subsequent long-term LSF mean estimate.

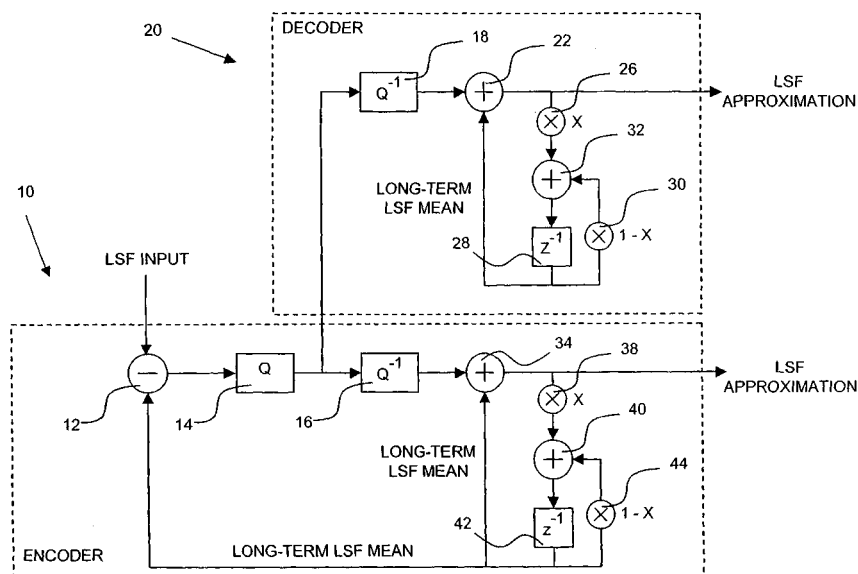


Fig. 1



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EUROPEAN SEARCH REPORT

Application Number
EP 01 11 6530

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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A	OHMURO H ET AL: "VECTOR QUANTIZATION OF LSP PARAMETERS USING MOVING AVERAGE INTERFRAME PREDICTION" ELECTRONICS & COMMUNICATIONS IN JAPAN, PART III - FUNDAMENTAL ELECTRONIC SCIENCE, SCRIPTA TECHNICA. NEW YORK, US, vol. 77, no. 10, PART 3, 1 October 1994 (1994-10-01), pages 12-25, XP000527379 ISSN: 1042-0967 * the whole document * ---	1,4,5,8,11,14	
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 14 November 2003	Examiner Ramos Sánchez, U
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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EUROPEAN SEARCH REPORT

Application Number
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Place of search		Date of completion of the search	Examiner
THE HAGUE		14 November 2003	Ramos Sánchez, U
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone</p> <p>Y : particularly relevant if combined with another document of the same category</p> <p>A : technological background</p> <p>O : non-written disclosure</p> <p>P : intermediate document</p> <p>T : theory or principle underlying the invention</p> <p>E : earlier patent document, but published on, or after the filing date</p> <p>D : document cited in the application</p> <p>L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 01 11 6530

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on

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14-11-2003

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82