(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 475 520 A3**

(12) **EUROPEAN PATENT APPLICATION**

(21) Application number: **91202274.6**

(51) Int. Cl.5: **G10L 9/14**

(22) Date of filing: **06.09.91**

(30) Priority: **10.09.90 NL 9001985**

(43) Date of publication of application:
18.03.92 Bulletin 92/12

(84) Designated Contracting States:
AT BE CH DE DK ES FR GB GR IT LI LU NL SE

(88) Date of deferred publication of the search report:
30.09.92 Bulletin 92/40

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(54) **Method for coding an analog signal having a repetitive nature and a device for coding by said method.**

(57) Method and device for coding a signal segment of a sampled analog signal having a repetitive nature according to the principle of long-term prediction (LTP). According to the method, after determining the number of samples D between the beginning of the segment to be coded and the beginning of the most similar segment determined according to the LTP principle:

- the number of samples in the segment to be coded is increased by a predetermined factor Ob by always placing (Ob - 1) samples having a value equal to 0 between two consecutive samples, and the number of samples in the preceding segment is also increased by the factor Ob,
- in the preceding segment, partial segments Cd are determined for which it is the case that the number of samples Dd, expressed in the numbers of samples after oversampling, between the initial time instant of the segment to be coded and the initial time instant of a partial segment Cd fulfils: Dd = (D * Ob)/d, in which d = 1, 2, 3, 4 ...n, where n is a positive integer and where Ob and n are chosen in a manner such that Dd is always an integer,
- in the segments Cd, sample values are determined by an interpolation technique at predetermined positions, which predetermined positions are situated at a spacing Dd from the original samples in the segment to be coded before its number of samples was increased,
- a partial segment Cd is determined which is most similar to the segment to be coded,
- that segment Cd is chosen as the most similar segment which has a correlation value Rd with the samples of the segment to be coded for which it is the case that $Rd \geqq q * R_{max}$, where $q < 1$ and R_{max} is the maximum correlation value which has been found in correlating the segments Cd and the segment to be coded, and is that segment which yields the smallest associated value of Dd.

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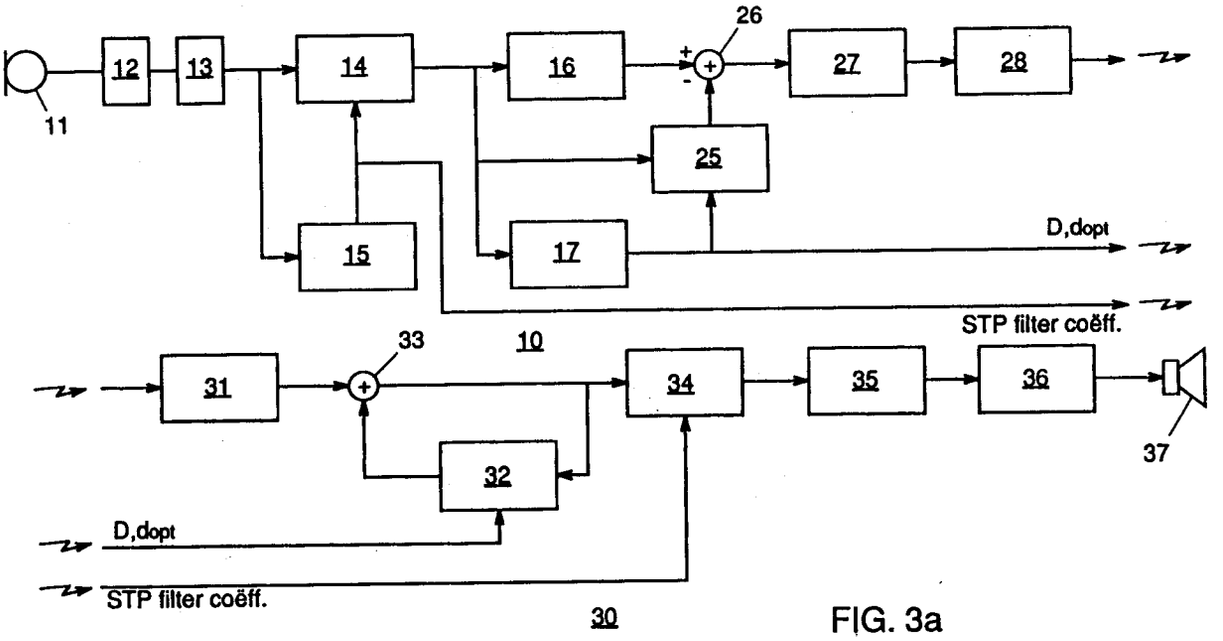
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FIG. 3a

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EUROPEAN SEARCH REPORT

Application Number

EP 91 20 2274

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.5)
A	ICASSP'90 (1990 INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, Albuquerque, New Mexico, 3rd - 6th April 1990), vol. 2, pages 661-664, IEEE, New York, US; P. KROON et al.: "Pitch predictors with high temporal resolution" * Page 662: "Increasing the temporal resolution" * ---	1,5	G 10 L 9/14
A	GB-A-2 061 071 (HITACHI, LTD) * Abstract; figures 2,3 * ---	1,5	
A	ICASSP'86 (IEEE-IECEJ-ASJ INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, Tokyo, 7th - 11th April 1986), vol. 3, pages 1717-1720, IEEE, New York, US; T. MIYAMOTO et al.: "Single DSP 8kbps speech codec" * Paragraph 2.4: "Pitch extraction and modification" * ---	1,3-5	TECHNICAL FIELDS SEARCHED (Int. Cl.5)
A	EP-A-0 280 827 (IBM CORP.) * Claim 2 * -----	2	G 10 L 9/14

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	14-07-1992	ARMSPACH J.F.A.M.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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