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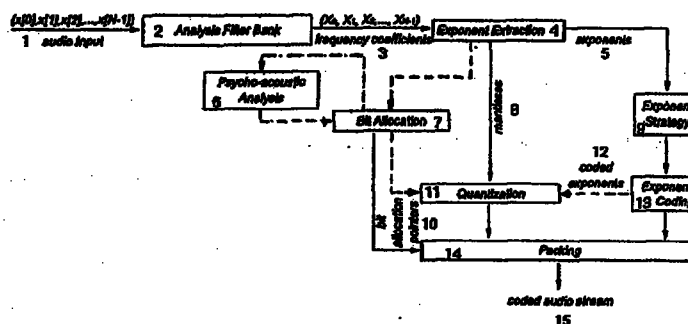
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(21) International Application Number: PCT/SG98/00014 (22) International Filing Date: 21 February 1998 (21.02.98) (71) Applicant (for all designated States except US): SGS-THOMSON MICROELECTRONICS ASIA PACIFIC (PTE) LTD [SG/SG]; 28 Ang Mo Kio Industrial Park 2, Singapore 569508 (SG). (72) Inventors; and (75) Inventors/Applicants (for US only): ABSAR, Mohammed, Javed [IN/SG]; Block 411, #09-1006 Hougang Avenue 10, Singapore 530411 (SG). GEORGE, Sapna [IN/SG]; Block 315, #06-220 Serangoon Avenue 2, Singapore 550315 (SG). ALVAREZ-TINOCO, Antonio, Mario [GB/SG]; 32 Toh Tuck Road #03-01, Singapore 596710 (SG). (74) Agent: DONALDSON & BURKINSHAW; P.O. Box 3667, Singapore 905667 (SG).		(81) Designated States: JP, SG, US, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With international search report.

(54) Title: A FAST FREQUENCY TRANSFORMATION TECHIQUE FOR TRANSFORM AUDIO CODERS**(57) Abstract**

A method for coding digital audio data in which coded Fast Modified Discrete Cosine Transform (FMDCT) coefficients are computed utilising a Fast Fourier Transform (FFT) method. The described method allows a significant reduction in computations as compared to an ordinary DCT coding procedure. Also, pairs of audio channels can be combined to use a single FFT computation, where the selected transform length for the paired channels is the same. In such cases where pairing of identical transform length channels is not possible, a long transform length channel is combined with a short transform length channel and converted in two short transforms. A windowing function is also combined with a pre-processing stage to the transformation, further decreasing computational requirements.

AUDIO ENCODER

CODEUR AUDIO



- 1 ENTREE AUDIO
- 2 BANC DE FILTRES D'ANALYSE
- 3 COEFFICIENTS DE FREQUENCE
- 4 EXTRACTION D'EXPOSANTS
- 5 EXPOSANTS
- 6 ANALYSE PSYCHO-ACOUSTIQUE
- 7 ATTRIBUTION DE BITS
- 8 MANTISSES
- 9 STRATEGIE D'EXPOSANTS
- 10 POINTEURS D'ATTRIBUTION DE BITS
- 11 QUANTIFICATION
- 12 EXPOSANTS CODES
- 13 CODAGE D'EXPOSANTS
- 14 COMPRESSION
- 15 FLUX AUDIO CODE