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- (71) Applicant (for all designated States except US): CREATIVE TECHNOLOGY LTD. [SG/SG]; 31 International Business Park, Creative Resource 60992 (SG).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): WAKELAND, Carl K. [US/US]; 110 Caliente Drive, Scotts Valley, California 95066 (US).
- (74) Agents: STEFFEY, Charles E. et al.; Schwegman, Lundberg, Woessner & Kluth, P.A., P.O. Box 2938, Minneapolis, Minnesota 55402 (US).
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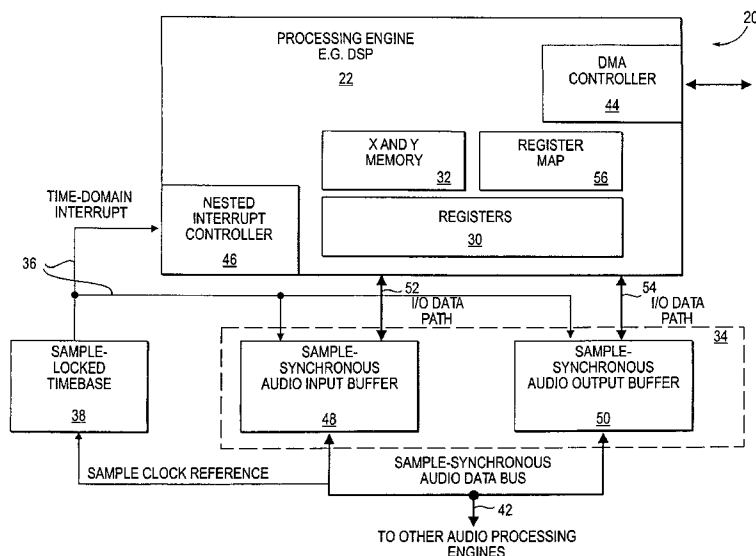
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROCESSING DIGITAL MEDIA STREAMS



(57) Abstract: A method and digital processor to process digital samples is provided. The processor (20) may comprise a time domain processing engine to process a digital sample in the time domain, and a frequency domain processing engine to process a digital sample in the frequency domain. Shared memory (34) is provided in the processor (20) with which time domain and frequency domain processed samples are exchangeable. The time domain processing engine may processes data samples in a sample-by-sample manner and the frequency domain processing engine may processes data samples in a block-based manner. The processing engines may be integrated in a single DSP chip. An interrupt generator is provided that generates an interrupt and an input buffer communicates an input data sample to the processor in response to the interrupt and the output buffer communicates an output data sample to the digital sample bus in response to the interrupt.

WO 2006/002209 A3

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/22014

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC: **G06F 7/00( 2007.01),15/167( 2007.01)**

USPC: 712/35;709/231,232

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 712/35; 709/231,232

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Continuation Sheet

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,012,142 A(DOKIC et al) 4 January 2000 (04.01.2000), column 9, line 15-col. 10, line 64 and figs. 2,3,4.	1-9,11-14,19-28,30-33,38-43,45-47
X	US 6,081,783 A (DIVINE et al) 27 June 2000 (27.06.2000), figs 2,3,13, col. 70, line 4, col. 74, line 34.	1-9,11-14,19-28,30-33,38-43, 45-47
Y	US 6,751,641 A (SWANSON) 15 June 2004 (15.06.2004), figs.1,2,3,4,5, col. 3, line 21-col. 4, line 61.	1,20,39
Y	US 2003/0229490 A1 (ETTER) 11 December 2003 11.12.03, fig. 1, paragraph 0012-paragraph 0016.	1,20,39
Y	US 6,570,912 A (MIRFAKHRAEI) 27 MAY 2003 (27.05.2003),col. 2, line 46-col. 6, line 36.	1,20,39
Y	US 6,492,903 A (RANON) 10 December 2002 (10.12.2002), figs.1,6, column 2, lines 14-58.	1,20,39
A	US 5,572,691 A (KOUDMANI) 5 November 1996 (05.11.1996), figs.1,6 and col. 7 ,line 16-col. 8,line 63.	1-47

Further documents are listed in the continuation of Box C.

See patent family annex.

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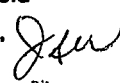
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Authorized officer

Eric Coleman

Telephone No. (703)-305-3900

Jacqueline A. Whitfield  
Special Project Asst.



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Continuation of B. FIELDS SEARCHED Item 3:  
EAST USPAT FILE, USPG-PUB FILE EPO FILE  
SEARCH TERMS: FREQUENCY DOMAIN, TIME DOMAIN, BUS, BUFFER, SAMPLE, DIGITAL SIGNAL PROCESSOR, CHIP,  
COMMON, SHARED, MEMORY, STORAGE,