



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G06F 7/38, 7/52, 15/00, 15/76, 15/78, 15/80		A1	(11) International Publication Number: WO 97/23821
(21) International Application Number: PCT/US96/20603		(43) International Publication Date: 3 July 1997 (03.07.97)	
(22) International Filing Date: 24 December 1996 (24.12.96)		(74) Agents: TAYLOR, Edwin, H. et al.; Blakely, Sokoloff, Taylor & Zafman, L.L.P., 7th floor, 12400 Wilshire Boulevard, Los Angeles, CA 90025-1026 (US).	
(30) Priority Data: 08/578,829 26 December 1995 (26.12.95) US		(81) Designated States: AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).	
(71) Applicant (for all designated States except US): INTEL CORPORATION [US/US]; 2200 Mission College Boulevard, Santa Clara, CA 95052 (US).			
(72) Inventors; and			
(73) Inventors/Applicants (for US only): DULONG, Carole [FR/US]; 18983 Harleigh Drive, Saratoga, CA 95070 (US). MENNEBER, Larry, M. [US/US]; P.O. Box 587, Boulder Creek, CA 95006 (US). PELEG, Alexander, D. [IL/IL]; Hannah Street, 38, Haifa (IL). BUI, Tuan, H. [US/US]; 14267 South 12th Place, Phoenix, AZ 85048 (US). KOWASHI, Eiichi [JP/JP]; 2-8-10 Kubodai, Ryugasaki-shi, Ibaraki-ken 301 (JP). MITTAL, Millind [US/US]; 1149 Hillside Boulevard, South San Francisco, CA 94080 (US). EITAN, Benny [IL/IL]; Stephen Wise, 25, Haifa (IL). FISHER, Stephen, A. [US/US]; 11108 Riverline Court, Rancho Cordova, CA 95670 (US). MAYTAL, Benny [IL/IL]; Hamelaha, 71, New Industrial Zone, Natanya (IL).			

Published

With international search report.

(54) Title: A SYSTEM FOR SIGNAL PROCESSING USING MULTIPLY-ADD OPERATIONS

(57) Abstract

A computer system (100) which includes a multimedia input device (121-129) which generates an audio or video input signal and a processor (109) coupled to the multimedia input device (121-129). The system further includes a storage device (107) coupled to the processor (109) and having stored therein a signal processing routine for multiplying and accumulating input values representative of the audio or video input signal. The signal processing routine, when executed by the processor, causes the processor (109) to perform several steps. These steps include performing a packed multiply-add on a first set of values packed into a first source and a second set of values packed into a second source, each representing input signals to generate a packed intermediate result.

