(A1)

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

G00002

(43) International Publication Date
11 July 2002 (11.07.2002)

PCT

(10) International Publication Number
WO 02/054350 A3

(51) International Patent Classification[7]: H04N 7/26, G06T 9/00

(21) International Application Number: PCT/US01/50533

(22) International Filing Date:
27 December 2001 (27.12.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/754,684 3 January 2001 (03.01.2001) US

(71) Applicant (*for all designated States except US*): **INTEL CORPORATION** [US/US]; 2200 Mission College Boulevard, Santa Clara, CA 95052 (US).

(72) Inventor; and
(75) Inventor/Applicant (*for US only*): **ACHARYA, Tinku** [IN/US]; 4840 West Erie Street, Chandler, AZ 85226 (US).

(74) Agents: **MALLIE, Michael, J.** et al.; Blakely Sokoloff Taylor & Zafman, 7th floor, 12400 Wilshire Boulevard, Los Angeles, CA 90025 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

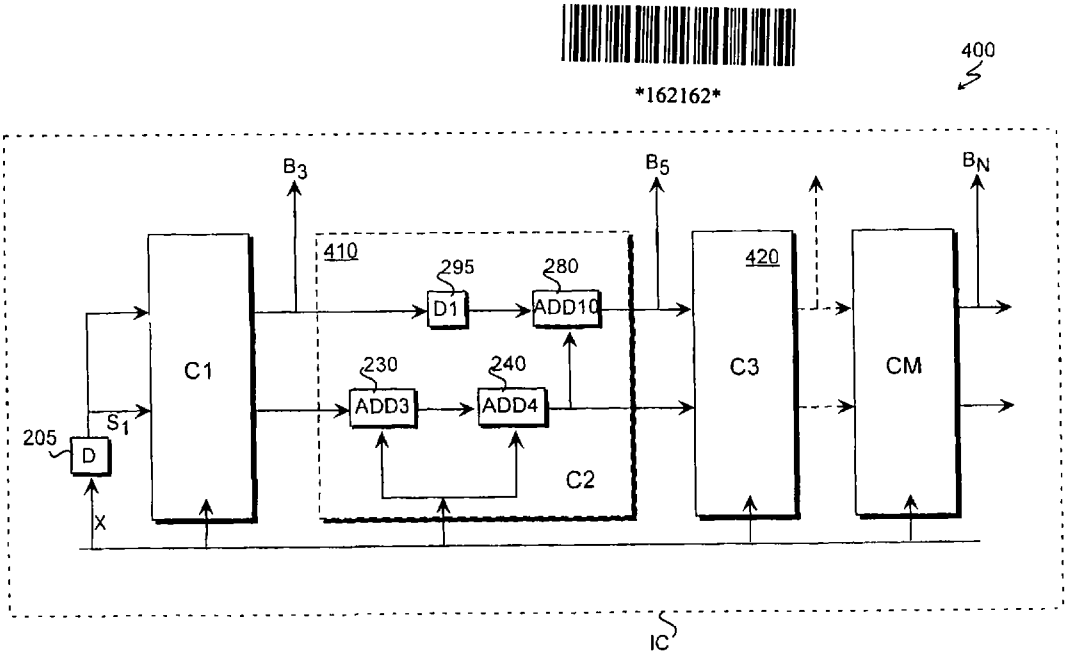
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
- - *with international search report*

(88) Date of publication of the international search report:
23 January 2003

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: MULTIPLIERLESS PYRAMID FILTER



(57) Abstract: A multiplierless pyramid filter is described comprising a sequence of scalable cascaded units, each of said units comprising a delay unit and three the adders, said delay unit the adders being coupled to produce a higher order pyramidally filtered output signal sample stream and state variable sample stream from an input signal sample stream and a lower order pyramidally filtered output signal sample stream and state variable signal stream.

WO 02/054350 A3