



162162

200 3018918

13/02/03

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
7 March 2002 (07.03.2002)

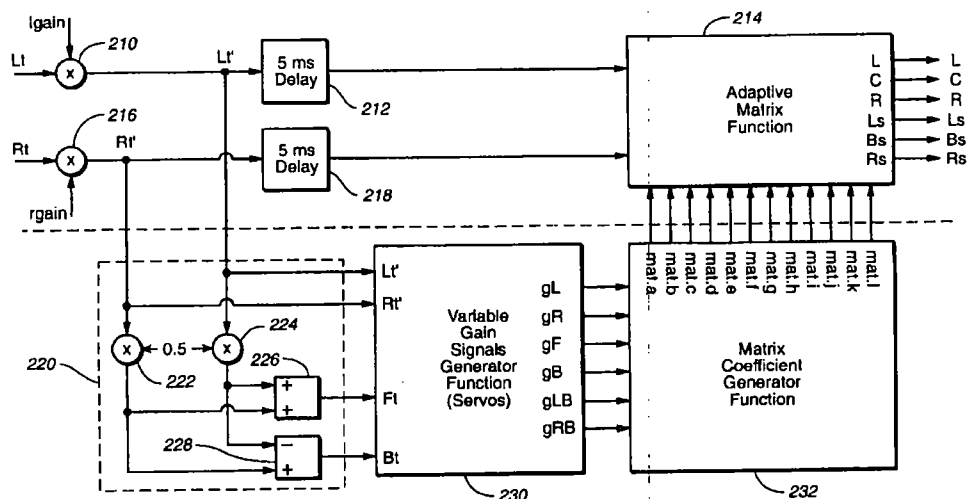
PCT

(10) International Publication Number
WO 02/019768 A3

- (51) International Patent Classification⁷: H04S 3/02 (74) Agents: GALLAGHER, Thomas, A. et al.; Gallagher & Lathrop, 601 California Street, Suite 1111, San Francisco, CA 94108-2805 (US).
- (21) International Application Number: PCT/US01/27006
- (22) International Filing Date: 30 August 2001 (30.08.2001) (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, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/229,712 31 August 2000 (31.08.2000) US
- (71) Applicant (*for all designated States except US*): DOLBY LABORATORIES LICENSING CORPORATION [US/US]; 100 Potrero Avenue, San Francisco, CA 94103 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): FOSGATE, James, W. [US/US]; 4750 E 1200S, P.O. Box 564, Heber City, UT 84032 (US). VERNON, Stephen, D. [US/US]; 100 Potrero Avenue, San Francisco, CA 94103 (US). ANDERSEN, Robert, L. [US/US]; 100 Potrero Avenue, San Francisco, CA 94103 (US).
- (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).
- Declarations under Rule 4.17:
— of inventorship (Rule 4.17(iv)) for US only
— of inventorship (Rule 4.17(iv)) for US only
— of inventorship (Rule 4.17(iv)) for US only

[Continued on next page]

(54) Title: METHOD FOR APPARATUS FOR AUDIO MATRIX DECODING



(57) Abstract: A method derives at least three audio signals, each associated with a direction, from two input audio signals. In response to the two input signals, a passive matrix generates a plurality of passive matrix audio signals, including two pairs of passive matrix audio signals, a first pair of passive amtrix audio signals represent directions lying on a first axis and a second pair of passive matrix audio signals represent directions lying on a second axis, the first and second axes being substantially at ninety degrees to ach other. The pairs of passive matrix audio signals are processed to derive a plurality of matrix coefficients therefrom. The e processing includes deriving a pair of intermediate signals and urging each pair of intermediate signals toward equality in response to a respective error signal. At least three ouput signals are produced by matrix multiplying the two input signals by the matrix coefficients.

WO 02/019768 A3



ACTION

Published:

— *with international search report*

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.

(88) Date of publication of the international search report:

25 September 2003