



(51) International Patent Classification:

G10L 19/008 (2013.01) G10L 19/24 (2013.01)
H04S 5/00 (2006.01)

(21) International Application Number:

PCT/US2021/061671

(22) International Filing Date:

02 December 2021 (02.12.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/120,365	02 December 2020 (02.12.2020)	US
63/171,404	06 April 2021 (06.04.2021)	US
63/228,732	03 August 2021 (03.08.2021)	US

(71) Applicants: DOLBY LABORATORIES LICENSING

CORPORATION [US/US]; 1275 Market Street, San Francisco, California 94103 (US). DOLBY INTERNATIONAL AB [SE/NL]; Apollo Building, 3E Herikerbergweg 1-35, 1101 CN Amsterdam Zuidooost (NL).

(72) Inventors: MUNDT, Harald; c/o Dolby Laboratories,

Inc., 1275 Market Street, San Francisco, California 94103 (US). MCGRATH, David S.; c/o Dolby Laboratories, Inc., 1275 Market Street, San Francisco, California 94103 (US). TYAGI, Rishabh; c/o Dolby Laboratories, Inc., 1275 Market Street, San Francisco, California 94103 (US).

(74) Agent: MA, Xin et al.; Dolby Laboratories, INC., Intellectual

Property Group, 1275 Market Street, San Francisco, California 94103 (US).

(81) Designated States (unless otherwise indicated, for every

kind of national protection available): AE, AG, AL, AM,

(54) Title: IMMERSIVE VOICE AND AUDIO SERVICES (IVAS) WITH ADAPTIVE DOWNMIX STRATEGIES

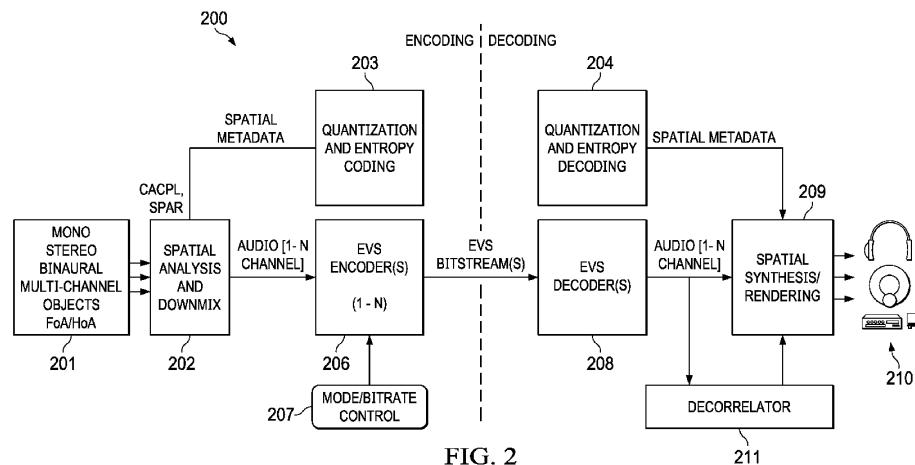


FIG. 2

(57) **Abstract:** Disclosed is an audio signal encoding/decoding method that uses an encoding downmix strategy applied at an encoder that is different than a decoding re-mix/upmix strategy applied at a decoder. Based on the type of downmix coding scheme, the method comprises: computing input downmixing gains to be applied to the input audio signal to construct a primary downmix channel; determining downmix scaling gains to scale the primary downmix channel; generating prediction gains based on the input audio signal, the input downmixing gains and the downmix scaling gains; determining residual channel(s) from the side channels by using the primary downmix channel and the prediction gains to generate side channel predictions and subtracting the side channel predictions from the side channels; determining decorrelation gains based on energy in the residual channels; encoding the primary downmix channel, the residual channel(s), the prediction gains and the decorrelation gains; and sending the bitstream to a decoder.

[Continued on next page]

AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
 - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))
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