

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 September 2004 (10.09.2004)

PCT

(10) International Publication Number
WO 2004/077667 A2

(51) International Patent Classification⁷: **H03J**
(21) International Application Number:
PCT/US2004/002549
(22) International Filing Date: 29 January 2004 (29.01.2004)
(25) Filing Language: English
(26) Publication Language: English
(30) Priority Data:
10/373,484 24 February 2003 (24.02.2003) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, 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, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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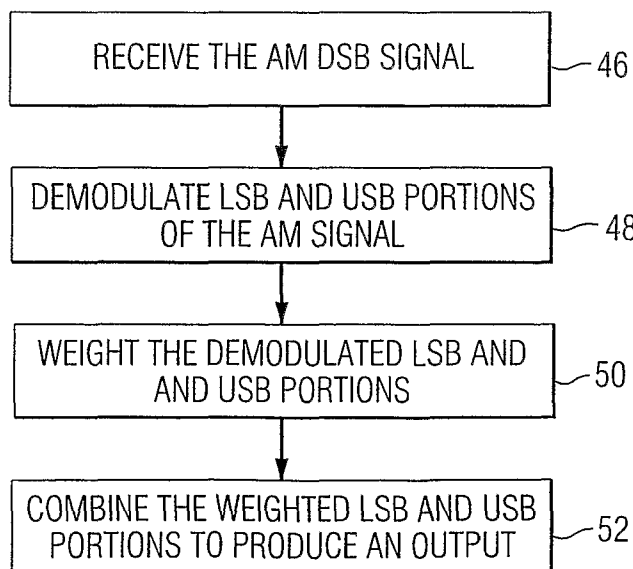
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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

Published:

- without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: COHERENT AM DEMODULATOR USING A WEIGHTED LSB/USB SUM FOR INTERFERENCE MITIGATION



(57) Abstract: A method of processing an AM radio signal comprises the step of receiving an AM radio signal including an upper sideband portion and a lower sideband portion, demodulating the upper sideband portion and the lower sideband portion to produce a demodulated upper sideband signal and a demodulated lower sideband signal, weighting the demodulated upper sideband signal and the demodulated lower sideband signal in response to noise power to produce a weighted demodulated upper sideband signal and a weighted demodulated lower sideband signal, and combining the weighted demodulated upper sideband signal and the weighted demodulated lower sideband signal to produce an output signal. Demodulators which process AM radio signals in accordance with the method, and receivers incorporating the demodulators, are also included.

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