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(71) Applicant (for all designated States except US): **IBIQUITY DIGITAL CORPORATION** [US/US]; 8865 Stanford Boulevard, Suite 202, Columbia, MD 21045 (US).

(72) Inventor: **KROEGER, Brian, William**; 12813 Amberwoods Way, Sykesville, MD 21784 (US).

(74) Agent: **LENART, Robert, P.**; Pietragallo, Bosick & Gordon, One Oxford Centre, 38th Floor, 301 Grand Street, Pittsburgh, PA 15219 (US).

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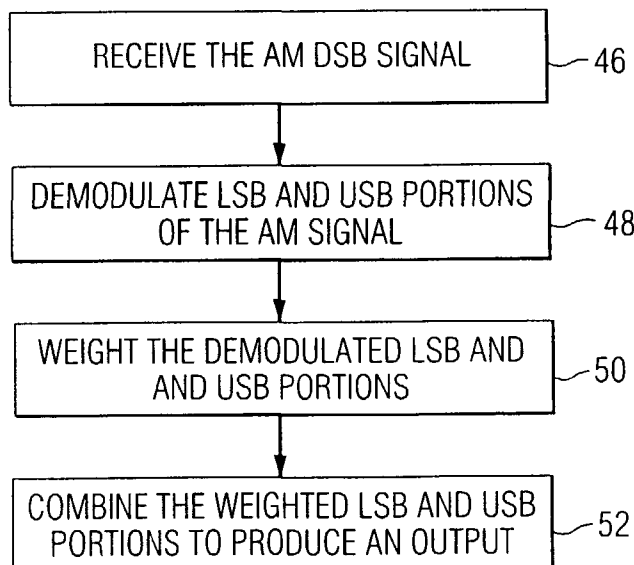
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Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations 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, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (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 patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

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(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.



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

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.

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