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(21) International Application Number: PCT/US97/17805 (22) International Filing Date: 3 October 1997 (03.10.97) (30) Priority Data: 08/726,498 7 October 1996 (07.10.96) US (71) Applicant (for all designated States except US): ZENITH ELECTRONICS CORPORATION [US/US]; 1000 Milwaukee Avenue, Glenview, IL 60025-2493 (US). (72) Inventor; and (75) Inventor/Applicant (for US only): KRISHNAMURTHY, Gopalan [US/US]; 580 Paddock Drive, Wheeling, IL 60090 (US). (74) Agent: CHRYSTAL, John, J.; Ladas & Parry, 224 S. Michigan Avenue, Chicago, IL 60604 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: RECEIVER FOR ADJUSTING SYNC LEVELS IN VSB SYSTEMS (57) Abstract A receiver for receiving a cable and terrestrial digital signals of differing VSB modes where the data levels of the various signals have a desired relationship that enables simple data level slicing and error determination. Some of the signals have sync levels that do not conform to the desired relationship and the receiver includes a comb filter for reducing interference when receiving an 8VSB terrestrial signal. The mode of the received signal is determined and a correction factor is applied to the syncs of the signals as needed to reestablish the desired relationship. Operation of the comb filter results in additional levels and a disruption of the desired relationship. For such cases, the comb filtered data levels are modified to make them a subset of the VSB 16 data levels. The modifications are accomplished in feedback paths of the phase tracker after the circuit equalizer and do not affect the data levels passed to the next stage.		