

A MULTI-CHANNEL DIGITAL TRANSMITTER AND RECEIVER

Abstract of the Disclosure

5 An apparatus is provided for use in a multi-channel digital transmitter and receiver. A filtering process is accomplished by conditioning portions of a digitized signal during digital signal processing by integrating, taking the difference of, and multiplying portions of the digitized signal. The filtering process may be used in
10 conjunction with a receiving process to generate a digitized channel signal (166, 168, 170, 172) by conditioning (132, 134, 136, 138) the digitized signal (128) and subsequently Fourier transforming (148) the conditioned portions of the digitized signal. Alternatively, the filtering process may be used in conjunction with a transmitting process by
15 inverse Fourier transforming (324) a plurality of digitized information signals (300, 302, 304, 306) to be transmitted to generating a composite digitized signal (352) and subsequently conditioning the composite digitized signal (358).

(FIGs. 1 and 4 accompany this abstract)