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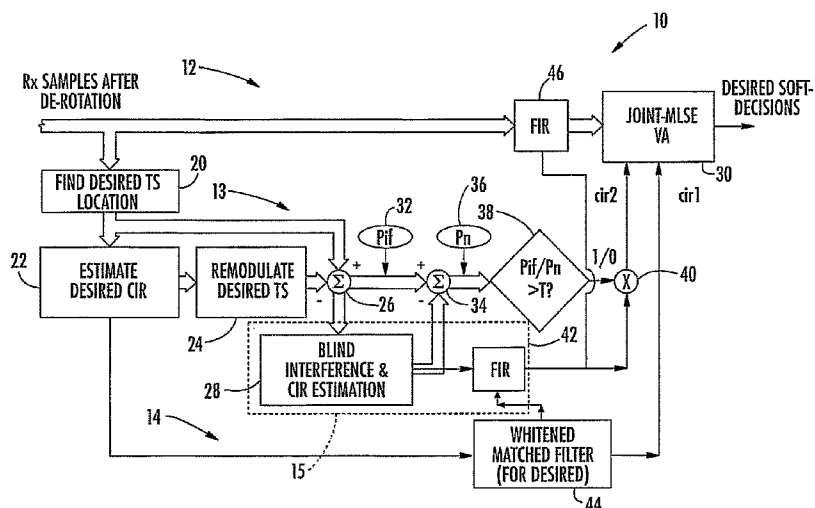
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(54) Title: WIRELESS COMMUNICATIONS DEVICE INCLUDING A JOINT DEMODULATION FILTER FOR CO-CHANNEL INTERFERENCE REDUCTION AND RELATED METHODS



(S7) Abstract: A wireless communications device may include a housing and a wireless transmitter and a wireless receiver carried by the housing. The wireless receiver may include a joint demodulation filter for reducing co-channel interference between a desired signal and a co-channel interfering signal which may include an input receiving samples of the desired signal and the co-channel interfering signal, a Viterbi decoder, and a first signal path between the input and the Viterbi decoder comprising a first filter. The joint demodulation filter may further include a second signal path between the input and the Viterbi decoder and comprising a linear finite impulse response (FIR) modeler for generating a channel impulse response estimate for the co-channel interfering signal. Additionally, a third signal path may be between the input and the Viterbi decoder and include a whitened matched filter for generating a channel impulse response estimate for the desired signal.