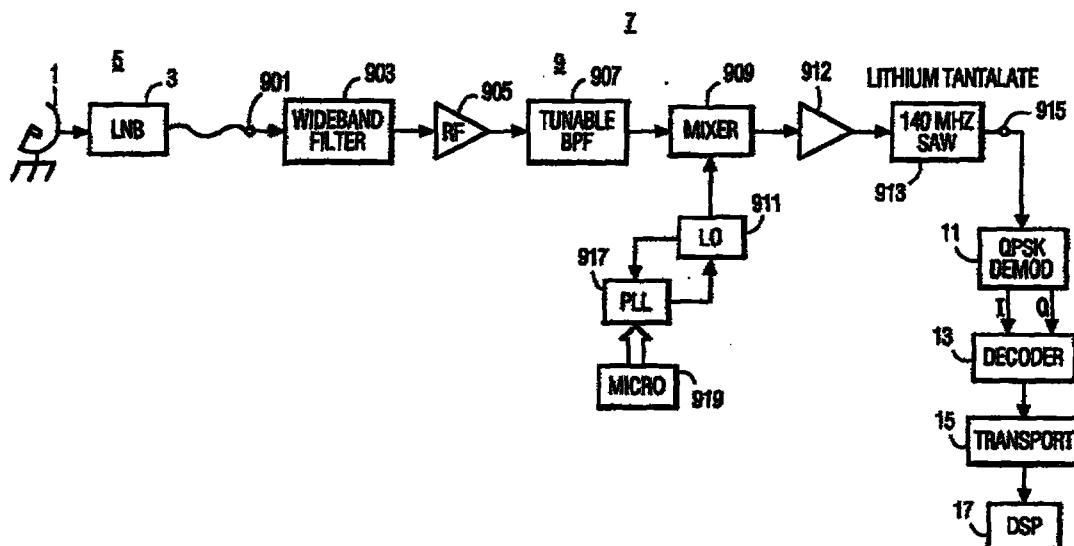


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(54) Title: SAW FILTER FOR A TUNER OF A DIGITAL SATELLITE RECEIVER



(57) Abstract

A tuner (9) of a digital satellite television receiver comprises a single conversion stage which produces an IF signal at a low enough frequency to permit a SAW filter (913) to be used to perform symbol shaping as well as the normal IF filtering function. The local oscillator (911) is controlled by a phase locked loop tuning control IC normally used to control the local oscillator (911) of a conventional broadcast or cable television receiver. In an exemplary embodiment for tuning RF signals provided by a block converter (3) in the 950 to 1450 MHz frequency range, the IF has a center frequency of 140 MHz. A lithium tantalate SAW filter (913) is used in order to minimize shift of the IF center frequency with temperature and to provide the required relative IF bandwidth (i.e., the width of the IF passband divided by the IF center frequency).

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