

ABSTRACT:

Receiver for receiving high-frequency signals.

Manually tunable analog receivers comprising automatic frequency control are known, as are electronically tunable receivers in which the tuning function is provided mainly by a phase-locked loop synthesizer. Manually tunable analog receivers have the drawback that the AFC exhibits hysteresis and that in the event of fading
5 pulling to an adjacent station may occur, whereas the receiver with electronic tuning has the drawbacks that tuning is comparatively slow and also inaccurate because of the tuning in discrete steps by a microprocessor. In accordance with the invention there is provided a receiver (1) which combines the advantages of analog manual tuning with the advantages and possibilities of a receiver with electronic tuning. To this end, the
10 receiver (1) in accordance with the invention comprises two cooperating frequency loops (L1, L2), one loop (L1) being an AFC loop whereas the other loop (L2) comprises a frequency counter (13) for measuring the frequency (f_0) of a tuning oscillator (6) which can be controlled by both loops. The cooperation between the loops (L1, L2) is provided by a simple control circuit (16) which acts on control signals to be supplied by
15 both loops (L1, L2): an in-lock signal (in-l) and an in-window signal (in-w). Preferably, when the desired tuning is achieved, the power to a tuning section (12) of the receiver (1), forming part of the frequency loop (L2), is interrupted.

Fig. 1.

This Sheet Has Been Replaced

