20020074749 (03/07/02)



162162



ACTION

Abstract

Receiver and Method for WLAN Burst type Signals

The present invention relates to methods and devices for receiving signals in a Wireless Local Area Network (wireless LAN, or WLAN), particularly in the case that the signals are Orthogonal Frequency Division Multiplexed (OFDM) signals. A frequency tracking apparatus for an OFDM receiver is disclsoed having means for determining the correlation of corresponding samples of two received pilot carrier symbols, one said sample delayed a predetermined duration with respect to the other; means for integrating said correlation over an integration window and means for determining a frequency tracking error from the sum of said integration.

Fig. 4

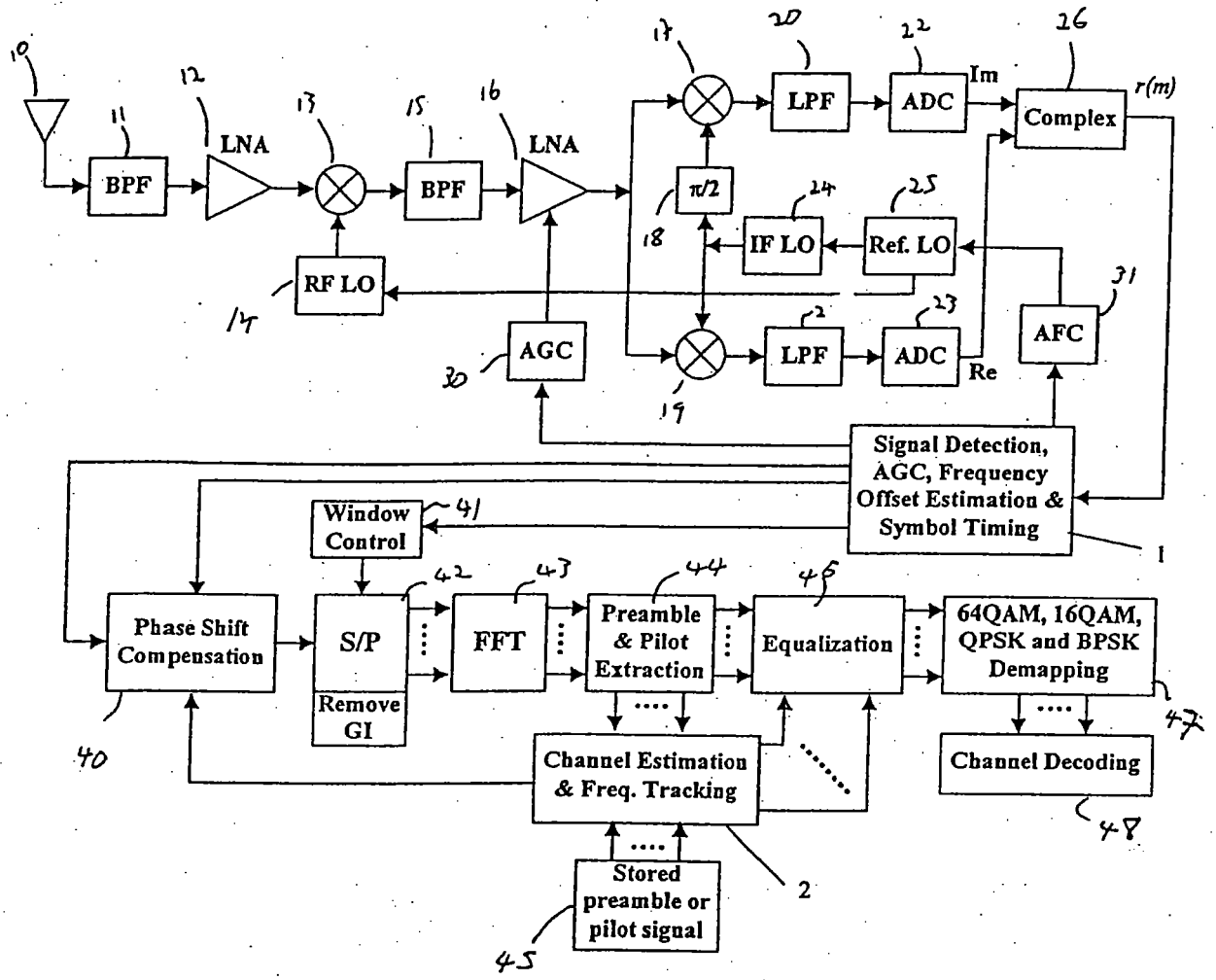

BPF
LNA
BPF
LNA
RF LO
AGC
π/2
LPF
ADC
Im
Complex
r(m)
IF LO
Ref. LO
LPF
ADC
Re
AFC
Signal Detection, AGC, Frequency Offset Estimation & Symbol Timing
Window Control
Phase Shift Compensation
S/P
Remove GI
FFT
Preamble & Pilot Extraction
Equalization
64QAM, 16QAM, QPSK and BPSK Demapping
Channel Estimation & Freq. Tracking
Channel Decoding
Stored preamble or pilot signal

Figure 4