

IN THE CLAIMS

Each claim of the application is set forth below with a parenthetical notation immediately following the claim number indicating the claim status. The Examiner's entry of the claim amendments under Section 1.121 is respectfully requested.

1. – 16. (cancel)

17. (original) An antenna system operative with a communications device for receiving a radio frequency signal, wherein the communications device produces a control signal representing a frequency of a received signal, the antenna system comprising:

an antenna structure for receiving the radio frequency signal, the antenna structure comprising tunable elements for controlling a resonant frequency of the antenna structure;

a conductive element connected to the antenna structure;

a resonant frequency controller; and

a signal separator connected to the conductive element, the signal separator responsive to the radio frequency signal through the conductive element, the signal separator responsive to the control signal, the signal separator supplying the radio frequency signal to a receiving element of the communications device and supplying the control signal to the resonant frequency controller for controlling the tunable elements.

18. (original) The antenna system of claim 17 wherein the control signal comprises a pulse width modulated control signal, and wherein the resonant frequency controller further comprises an integrating element for producing a DC signal representative of the pulse width modulated control signal, the DC signal for controlling the tunable elements.

19. (original) The antenna system of claim 18 wherein the integrating element comprises a low pass filter or an integrator.

20. (original) The antenna of claim 18 wherein the resonant frequency controller further comprises a filter responsive to the DC signal for producing a filtered DC signal for controlling the tunable elements.

21. (original) The antenna system of claim 17 wherein the signal separator comprises a parallel configuration of a high pass filter and a low pass filter, the high pass filter receiving the radio frequency signals and supplying same to the receiving circuits, the low pass filter receiving the control signal and supplying same to the resonant frequency controller for controlling the tunable elements.

22. (original) The antenna system of claim 17 wherein the signal separator supplies the radio frequency signal to the receiving element of the communications device through a coaxial cable and the control signal is supplied to the signal separator through the coaxial cable.

23. (original) An antenna system operative with a communications device for receiving a radio frequency signal, wherein the communications device produces a control signal representing a frequency of a received signal, the antenna system comprising:

- an antenna structure for receiving the radio frequency signal, the antenna structure comprising tunable elements for controlling a resonant frequency of the antenna structure;

- a first conductive element connected to the antenna structure;

- a resonant frequency controller;

- a second conductive element; and

- a signal separator receiving the radio frequency signal through the first conductive element, the signal separator receiving the control signal through the second conductive element and supplying the radio frequency signal to a receiving element of the communications device through the second conductive element, the signal separator supplying the control signal to the resonant frequency controller for controlling the tunable elements.

24. (original) The antenna system of claim 23 wherein the antenna structure comprises an inverted F antenna, a dipole antenna, a monopole antenna or a meanderline antenna.

25. (original) The antenna system of claim 23 wherein the control signal comprises a pulse width modulated control signal.

26. (original) The antenna system of claim 25 wherein the signal separator converts the pulse width modulated control signal to a DC control signal supplied to the resonant frequency controller for controlling the tunable elements.

27. – 31. (cancel)

32. (original) A communications device comprising:

a receiving element for providing a control signal representative of a frequency of a desired radio frequency signal and for processing radio frequency signals;

an antenna structure for receiving radio frequency signals, the antenna structure comprising tunable elements for controlling a resonant frequency of the antenna structure;

a first conductive element connected to the antenna structure;

a resonant frequency controller;

a second conductive element; and

a signal separator receiving the radio frequency signals through the first conductive element, the signal separator receiving the control signal through the second conductive element and supplying the radio frequency signals to the receiving element through the second conductive element, the signal separator supplying the control signal to the resonant frequency controller for controlling the tunable elements to receive the desired radio frequency signal.

33. (original) The communications device of claim 32 wherein the antenna structure comprises an inverted F antenna, a dipole antenna, a monopole antenna or a meanderline antenna.

34. (original) The communications device of claim 32 wherein the control signal comprises a pulse width modulated control signal, and wherein the signal separator converts the pulse width modulated control signal to a DC control signal

supplied to the resonant frequency controller for controlling the tunable elements to receive the desired radio frequency signal.