

**ABSTRACT OF THE DISCLOSURE**

A system that incorporates the subject disclosure may include, for example, a method for coupling a primary antenna to an auxiliary antenna portion with a current-controlled switch. The method further includes generating a unidirectional direct current or a first bias voltage having a first polarity to cause the current-controlled switch to substantially form a conduction channel between the primary antenna and the auxiliary antenna portion. While the conduction channel is present, a first resonance frequency range of the primary antenna is frequency shifted to a second resonance frequency range. The method can also include removing the unidirectional direct current or generating a second bias voltage having a second polarity to cause the current-controlled switch to form an open circuit between the primary antenna and the auxiliary antenna portion. While the open circuit is present, the first resonance frequency range of the primary antenna is restored. Other embodiments are disclosed.