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## Distributed Load Monopole Antenna Systems

INVENTOR • Robert Vincent

### ABSTRACT

This invention is a distributed-load monopole (DLM) antenna which is 70 percent smaller than conventional designs, with comparable sensitivity and increased bandwidth. The antenna uses a helix and a load coil to shrink the size of a normal quarter-wave monopole.

### APPLICATION

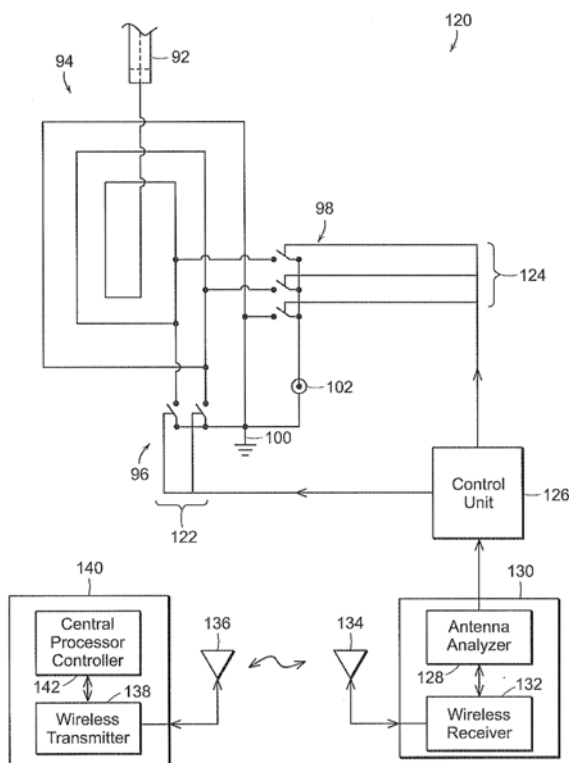
- Telecommunications – Wireless telephones & networks, mobile handset & satellite antennas
- Defense – Radar, missile telemetry, handheld radio antennas
- Consumer electronics – RFID tag and readers, portable devices
- Healthcare – sensor antennas, vital data monitoring

### FEATURES & BENEFITS

This antenna design cancels out normal inductive loading, and achieves equivalent performance with antennas 30 to 70 percent shorter than an ideal quarter-wave design.

Powerful increase in amount of current that moves through the antenna with excellent radiation and heat profile. Large frequency currents are transformed into radiation through the antenna.

Ability to rapidly change antenna resonance to desired frequencies while maintaining constant bandwidth.



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- License URI inventions to industry partners
- Form new ventures
- Commercialize inventions
- Connect industry partners to University technology, facilities and people

### CONTACT TO DISCUSS LICENSING OPTIONS

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### PATENT STATUS

US #7782264

### AVAILABILITY

Technology is available for licensing.