

“WiTricity” delivers wireless power

Researchers at MIT have successfully tested a system for transferring electricity to remote devices without wires, potentially allowing portable electronic gadgets to be recharged without a proliferation of power cords

Transmitter

Copper coil connected to power supply

1 Electrical current creates primary magnetic field around transmitter coil

2 “Tails” of magnetic field induce electrical current to flow through receiver coil

3 Electrical current in coil powers bulb

Receiver

Copper coil

Current

1-10 MHz frequency

Energy exchange even through obstacles

Primary Magnetic Field

Secondary Field

Magnetically coupled resonance: Natural magnetic frequency of receiver must be “in tune” with frequency at which transmitter emits electromagnetic energy – similar to how an opera star can break a glass that happens to resonate at the same frequency as her voice.

People and other objects not resonating at same frequency remain unaffected

Source: Science

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