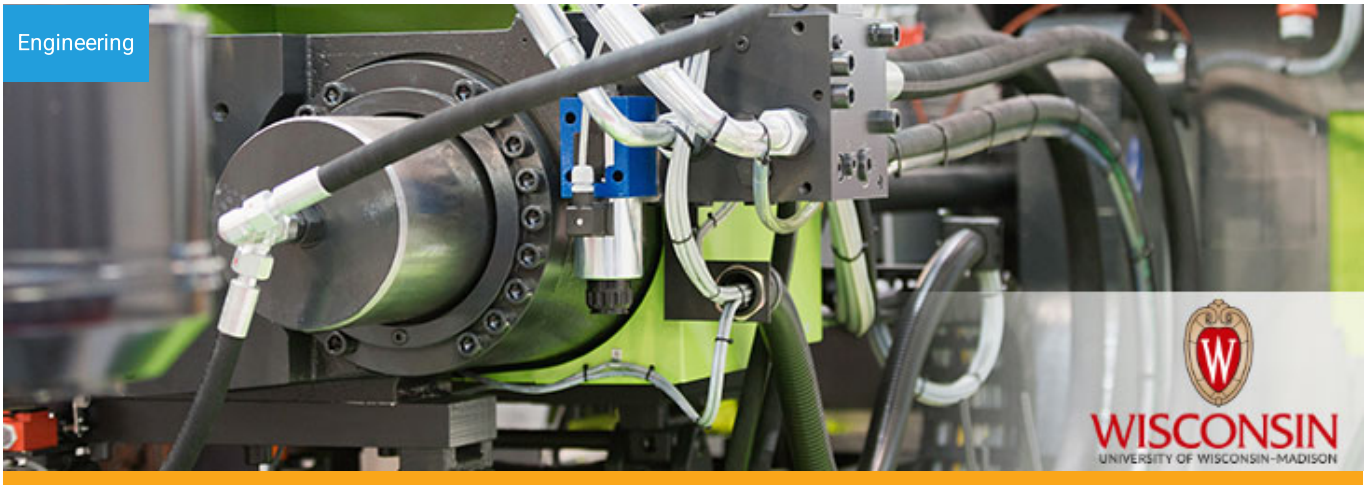
Engineering



AERIAL STATION POWER TETHER WITH UNIPOLAR CURRENT FLOW

View U.S. Patent No. 11,909,187 in PDF format.

WARF: P210406US01

Inventors: Daniel Ludois

The Invention

A UW researcher has developed a new power tether for aerial devices, such as balloons or drones, that uses as few as one conductor, providing a ground return by capacitive coupling between the aerial device and a ground plane at a base station. Using high-frequency, high-voltage power allows significant power transfer through the low capacitance between the aerial station and the ground minimizing the necessary current flow.

Applications

New tethered wire system. Apps such as tethered drones, tethered aerial platforms including aerial wind turbines or solar panels.

Key Benefits

Lighter wire allowing for longer tether wires, and increased efficiency.

Additional Information

For More Information About the Inventors

- Daniel Ludois

Tech Fields

- Engineering : Power electronics & control systems

For current licensing status, please contact Michael Carey at mcarey@warf.org or 608-960-9867