

Converter Control Using Reduced Link Capacitor

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The Invention

A controller selects a first switch vector based on a current, voltage, or power of a multi-phase load or power source. The first switch vector identifies a first state for each of a plurality of half-bridges of a converter as on or as off during a first interval. A second switch vector is selected based on the current, voltage, or power of the multi-phase load or power source. The second switch vector identifies a second state for each of the half-bridges as on or as off during a second interval. The first interval is computed based on the selected first switch vector. The second interval is computed based on the selected second switch vector. Each of the plurality of half-bridges is controlled as on or as off during the first interval based on the selected first switch vector and during the second interval based on the selected second switch vector.

Additional Information

For More Information About the Inventors

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Tech Fields

• Engineering: Power electronics & control systems

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