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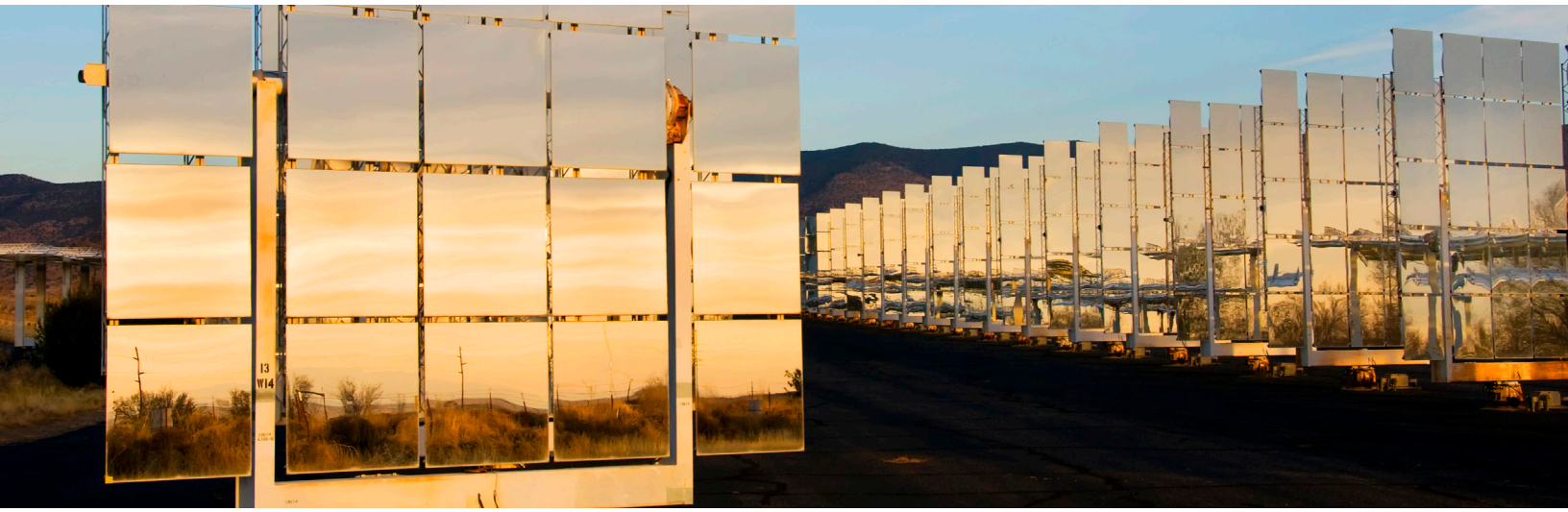
ALTERNATING CURRENT PHOTOVOLTAIC BUILDING BLOCK

U.S. Patent#6,750,391
Technology Readiness Level:4
Key elements of the technology have been proven to work as expected in the laboratory environment

TECHNOLOGY DESCRIPTION

This technology provides a fully integrated and self-containing alternating current (AC) photovoltaic (PV) Building Block device and method that allows photovoltaic applications to become true plug-and-play devices. The Building Block combines, contains, and integrates almost all of the electrical and mechanical elements of a PV system while eliminating the traditional DC voltage concerns of today's PV systems. The building block consists of an innovative module and method by which AC PV power is generated in the form of direct current (DC). Furthermore, the DC will be converted to AC and power will be exported through one or more power conversion and transfer units attached to the module. The Building Block can be used as a PV power source that has only AC power out and can be used alone or in an array.



TECHNOLOGICAL BENEFITS

- Compatible with all known PV module technologies
- Eliminates DC voltage concerns by placing elements inside structure
- Environmentally & structurally sound
- Unique plug-and-play technology

POTENTIAL APPLICATIONS

- Solar energy generation
- Energy storage
- Power sources
- Satellites

CONTACT US

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