FOPM PTO-1619A Expires 06/30/99 OMB 0651-0027

11-14-2003

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**PATENT** 

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DOE Docket No.: S-98,113

## **CONFIRMATORY LICENSE**

Application for: Shallow Melt Apparatus for Semicontinuous Czochralski Crystal Growth

Inventor(s):

Tihu Wang and Theodore F. Ciszek

Serial No.:

PCT/US01/46211

Filing Date: Contract No.:

November 1, 2001 DE-AC36-99GO10337

Contractor:

Midwest Research Institute

The invention identified above is a "Subject Invention" under the above-numbered contract. A copy of the provisions of the above-numbered contract governing patent rights in the Subject Invention at the time the invention was made has been submitted to the U.S. Department of Energy.

The Contractor hereby confirms that under the provisions of the above-numbered contract governing patent rights, it has granted to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States the subject invention throughout the world. This license applies to the invention in the above-identified patent application and any and all divisions or continuations thereof and any resulting patent or reissue patent which may be granted thereon.

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The Contractor hereby grants the Government an irrevocable power to inspect and make copies of the above-identified application.

Signed this 20th day of October, 2003.

Paul J. White

Senior Counsel

National Renewable Energy Laboratory 1617 Cole Blvd. Golden, CO 80401

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