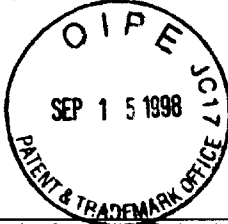


09-21-1998



100833896

**RECORDATION FORM COVER SHEET
PATENTS ONLY**

MRD 9-15-98

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

Submission Type

New

Resubmission (Non-Recordation)
Document ID#

Correction of PTO Error
Reel # Frame #

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Conveyance Type

Assignment Security Agreement

License Change of Name

Merger Other

U.S. Government
(For Use ONLY by U.S. Government Agencies)

Departmental File Secret File

Conveying Party(ies)

Mark if additional names of conveying parties attached

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Second Party

Execution Date
Month Day Year

Name (line 1)

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Receiving Party

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If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

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PATENT
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Name

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Pages Enter the total number of pages of the attached conveyance document including any attachments. #

Application Number(s) or Patent Number(s) Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)			Patent Number(s)		
<input type="text" value="08611868"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor. Month Day Year

Patent Cooperation Treaty (PCT)

Enter PCT application number PCT PCT

only if a U.S. Application Number has not been assigned. PCT PCT PCT

Number of Properties Enter the total number of properties involved. #

Fee Amount Fee Amount for Properties Listed (37 CFR 3.41): \$

Method of Payment: Enclosed Deposit Account

Deposit Account (Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number: #

Authorization to charge additional fees: Yes No

Statement and Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Sharon Kennedy *Sharon Kennedy* SEP 15 1999
Name of Person Signing Signature Date

SN 08/611,868

CONFIRMATORY LICENSE

(Large Business - Identified Waiver)

Title : **High Pressure Ceramic Heat Exchanger**
Inventor(s) : **Bruce D. Harkins and Michael E. Ward**
Serial No. : **08/611,868** Filing Date (U.S.): **March 06, 1996**
Contractor : **Solar Turbines, Inc.** DOE Case No.: **S-89,044**
DOE Contract No.: **DE-FC02-88ID12799** Identified Waiver No: **W(I)90-022**
Foreign Applications filed in or intended to be filed at Contractor's expense in (countries):

A waiver of Government rights in the above-identified Subject Invention having been granted by the U.S. Department of Energy (DOE) to the Contractor, the effective date of said waiver is July 2, 1997.

Accordingly, this document is confirmatory of the paid-up license required to be granted to the Government under 41 CFR 9-9.109-6 in the Subject Invention, patent application and any resulting patent as well as any continuation, divisional, reissue, supplemental or continuation-in-part thereof, and of all other rights reserved to the Government under 41 CFR 9-9.109-6, said license and other rights including the following:

(1) Government License and Inspection Rights

With respect to any Subject Invention in which title has been waived to the Contractor, the Federal Government retains a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the Subject Invention throughout the world;

The Government is hereby granted the irrevocable power to inspect and make copies of the above-identified patent application.

(2) Conveyance Terms and Conditions - Domestic

(a) Subject to the minimum rights reserved to the Contractor in paragraph (8) herein, the Contractor agrees to convey to the Government, upon request, the entire domestic right, title, and interest in the above-identified invention when the Contractor:

- (i) decides not to continue prosecution of the patent application filed on the above-identified invention;
- (ii) at any time, no longer desires to retain title in the above-identified invention;
or
- (iii) fails to have a United States patent application filed on the invention in accordance with the terms and conditions of paragraph (4) herein.

(b) Conveyances requested pursuant to the above subparagraphs (2)(a)(i-iii) shall be made by delivering to the DOE Patent Counsel duly executed instruments and such other papers as are deemed necessary to vest in the Government the entire right, title, and interest in the invention to enable the Government to apply for and prosecute patent applications covering the invention in this country, or otherwise establish its ownership of the invention.

(3) Conveyance Terms and Conditions - Foreign

(a) Subject to the minimum rights reserved to the Contractor in paragraph (8) herein, the Contractor agrees to convey to the Government, upon request, the entire right, title, and interest in the above-identified invention in any foreign country if the Contractor:

- (i) does not elect pursuant to paragraph (5) herein to retain such rights in the foreign country; or
- (ii) fails to have a patent application filed in the foreign country on said invention in accordance with paragraph (5) herein, or decides not to continue prosecution or not to pay any maintenance fees covering such invention. To avoid forfeiture of the patent application or patent, the Contractor shall, not less than sixty (60) days before the expiration period for any action required by the foreign Patent Office, notify the DOE Patent Counsel of such failure or decision, and deliver to the DOE Patent Counsel the executed instruments necessary for the conveyance specified in this paragraph.

(b) Conveyances requested pursuant to the above subparagraphs (3)(a)(i) and (3)(a)(ii) shall be made by delivering to the DOE Patent Counsel duly executed instruments and such other papers as are deemed necessary to vest in the Government the entire right, title, and interest in the invention to enable the Government to apply for and prosecute patent applications covering the invention in a foreign country, or otherwise establish its ownership of the invention.

(4) Filing of Patent Application - Domestic

(a) The Contractor shall have a domestic patent application for the above-identified Subject Invention filed within six (6) months after the effective date of this waiver. The Contractor shall promptly notify the DOE Patent Counsel of any decision not to file such an application.

(b) For the above-identified invention for which a patent application has been filed by the Contractor, the Contractor shall:

- (i) within two (2) months after the filing or within two (2) months after submission of an invention disclosure pursuant to the requirements of the above contract if the patent application previously has been filed,

deliver to the DOE Patent Counsel a copy of the application as filed including the filing date and serial number;

- (ii) include the following statement in the second paragraph of the specification of the application and any patents issued on the identified invention, "The Government has rights in this invention pursuant to Contract No. DE-FC02-88ID12799 awarded by the U. S. Department of Energy";
- (iii) provide the DOE Patent Counsel with a copy of any patent issued on the application within two (2) months after such patent issues; and
- (iv) not less than thirty (30) days before the expiration of the response period for any action required by the Patent and Trademark Office, notify the DOE Patent Counsel of any decision not to continue prosecution of the application and deliver to the DOE Patent Counsel executed instruments granting the Government a power of attorney.

(c) If the Contractor at any time prior to the filing of the application elects not to retain the rights waived for the above-identified invention, the Contractor shall inform the DOE Patent Counsel promptly in writing of the date and identity of any sale, or placing on sale, public use, or public disclosure of the invention which may constitute a statutory bar under 35 U.S.C. 102, which was authorized by or known to the Contractor or any contemplated action of this nature.

(5) Filing of Patent Applications - Foreign

(a) With respect to the rights waived for the above-identified invention in a foreign country, the Contractor shall have a patent application filed on the invention in that country in accordance with applicable statutes and regulations and within one of the following periods:

- (i) eight (8) months from the date of a corresponding United States application filed by the Contractor, or if such an application is not filed, six (6) months from the date the invention is submitted as a disclosure pursuant to the requirements of the above contract;
- (ii) six (6) months from the date a license is granted by the Commissioner of Patents and Trademarks to file foreign applications where such filing has been prohibited by security reasons; or
- (iii) such longer period as may be approved by the DOE Patent Counsel.

(b) The Contractor shall notify the DOE Patent Counsel promptly of each foreign application filed and upon written request shall furnish an English version of the application without additional compensation.

(6) Other Terms and Conditions of Waived Rights

(a) Reporting on Utilization of Subject Inventions

The Contractor agrees to submit on request periodic reports no more frequently than annually on the utilization of the Subject Invention on efforts at obtaining such utilization that are being made by the Contractor or its licensees or assignees. Such reports shall include information regarding the status of development, data or first commercial sale or use, gross royalties received by the Contractor, and such other data and information as DOE may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by DOE in connection with a march-in proceeding undertaken by DOE in accordance with paragraph (b) of this clause. To the extent data or information supplied under this section is considered by the Contractor, its licensee or assignee to be privileged and confidential and is so marked, DOE agrees that, to the extent permitted by 35 USC 202 (c)(5), it will not disclose such information to persons outside the Government.

(b) March-in-Rights

The Contractor agrees that with respect to the Subject Invention in which it has acquired title, DOE has the right in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of DOE, to require the Contractor, an assignee or exclusive licensee of the subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if the Contractor, assignee, or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if DOE determines that;

(1) Such action is necessary because the Contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the Subject Invention in such field of use;

(2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Contractor, assignee, or their licensees;

(3) Such action is necessary to meet requirements for public use specified by federal regulations and such requirements are not reasonably satisfied by the Contractor, assignee, or licensees.

(4) Such action is necessary because the agreement required by paragraph (c) of this clause has not been obtained or waived or because a licensee of the exclusive right to use or sell the Subject Invention in the United States is in breach of such agreement.

(c) Preference for United States Industry

Notwithstanding any other provision of this clause, the Contractor agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell the Subject Invention in the United States unless such person agrees that any products embodying the Subject Invention or produced through

(9) Reservation of Government Rights

It is understood and agreed that this license does not preclude the Government from asserting rights under the provisions of said contract or of any other agreement between the Government and the Contractor, or any other rights of the Government with respect to the above-identified invention.

Signed this 30 day of July, 1997

(SEAL)

SOLAR TURBINES Contractor)

By M. Ward

2200 Pacific Highway
(Business Address)

S.D. CA 92186