STATEMENT OF CONSIDERATIONS

REQUEST FOR ADVANCE WAIVER OF PATENT RIGHTS BY GENERAL ELECTRIC COMPANY, UNDER DOE AWARD NO. DE-FE0024006; W(A)-2014-023, CH-1718

Petitioner, the General Electric Company (GE), has requested a waiver of: (a) domestic and foreign patent rights for all subject inventions conceived solely by GE and (b) GE's undivided interest, based on its employee's contributions, to joint domestic and foreign patent rights for all subject inventions conceived, arising under the above referenced award.

The objective of Petitioner's award is to develop cooled high-temperature Ceramic Matrix Composite nozzles as a turbo-machinery component. The aim of the research is to increase turbine efficiency in combined cycle applications.

The total anticipated cost of the award is \$985,469.00 including the Petitioner's contribution of \$295,641.00, or about thirty percent (30%) of the total cost of the work under the award. This waiver is contingent upon Petitioner maintaining, in aggregate, the above cost sharing percentage over the course of the award. The period of performance is from 1 October 2014 to 31 March 2016.

Referring to items 5-9 of the waiver petition, Petitioner has experience in the design of complex commercial energy systems including heavy-duty gas turbines. Further, Petitioner has invested in material analysis and analytical modeling to improve the performance of hot gas path materials for use in gas turbines. Petitioner has developed heavy-duty gas turbines to final products with approximately 7,000 currently in service worldwide. The turbines have demonstrated both long operation times and high efficiency.

Petitioner has agreed that this waiver will be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, set out in 35 U.S.C. 202-204. Further, Petitioner has agreed to the attached U.S. Competitiveness provision (paragraph (t). The contractor agrees to the attached revised paragraph (h) to submit annual reports every 12 months (or such longer period as may be specified by the Patent Counsel) from the date of the contract on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by Petitioner and any of its licensee or assignees. Petitioner agrees to submit the annual reports for (10) ten years following the completion of the project period or until the patent is allowed to lapse or expire, whichever comes first. If sold or transferred this reporting obligation will pass on to the buyer or transferee for completion of the ten year period of time.

Petitioner has agreed that products embodying a waived invention or produced through the use of a waived invention will be manufactured substantially in the United States unless the Petitioner can show to the satisfaction of the DOE that it is not commercially feasible to do so. Petitioner has further agreed to make the above conditions binding on any assignee or licensee or any entity otherwise acquiring rights in the waived inventions, including subsequent assignees and licensees. Should Petitioner or other such entity receiving rights in a waived invention

undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived inventions is suspended until approved in writing by DOE.

Referring to item 10 of the waiver petition, granting this waiver will not have an adverse impact on competition. Numerous companies market and develop competitive gas-turbines for the power generation market. Granting the Petition will not hinder competition in the field.

Considering the foregoing, it is believed that grant this waiver will provide Petitioner with the necessary incentive to invest its resources in the commercialization of the results of the agreement in a fashion which will make the technology available to the public in the shortest practicable time. Therefore, upon evaluation of the waiver petition and in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver be granted.

Jacob A. Heafner
Patent Attorney
Intellectual Property Law Division

Date:

Brian J. Lally

Deputy Chief Counsel

Intellectual Property Division

Data

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the U.S. and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted. This waiver will not apply to any modification of extension of the award, where through such modification or extension, the purpose, scope or cost of the award has been substantially altered.

CONCURRENCE:	APPROVAL:
Angelos Kokkinos	Brian Vally
Director	Assistant General Counsel for Technology
Office of Advanced Fossil Technology Systems Fossil Energy	
Date: 3/23/17	Date: 444

WAIVER ACTION - ABSTRACT

W(A)-2014-023

REQUESTOR

The General Electric Company

CONTRACT SCOPE

Develop cooled high-temperature Ceramic Matrix Composite nozzles as a turbomachinery components.

RATIONALE FOR DECISION

General Electric has experience in the design of complex commercial energy systems including heavy-duty gas turbines and will continue to invest in material analysis and analytical modeling to improve the performance of hot gas path materials for use in gas turbines.

(h) Reporting on utilization of subject inventions, General Electric Corporation

The Contractor agrees to submit annual reports every 12 months (or such longer period as may be specified by the Patent Counsel) from the date of the contract on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Contractor and any of its licensee or assignees. Such reports may include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and such other data and information as DOE may reasonably specify. However, DOE agrees to permit periodic discussions with the Contractor, on the possibility of alternative report contents or reporting schedules which the DOE deems sufficient to provide the necessary information on utilization of the subject inventions. The Contractor also agrees to provide additional reports as may be request by DOE in connection with any march-in proceedings undertaken by DOE in accordance with paragraph (i) of this clause. To the extent data or information supplied under this paragraph 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 law, it shall not disclose such information to persons outside the Government. The Contractor agrees to submit the annual reports for (10) ten years following the completion of the project period or until the patent is allowed to lapse or expire, whichever comes first. If sold or transferred this reporting obligation will pass on to the buyer or transferee for completion of the ten year period of time.

(t) U. S. Competitiveness

The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.