

## STATEMENT OF CONSIDERATIONS

ADVANCE WAIVER OF PATENT RIGHTS TO GENERAL ELECTRIC COMPANY (GE) UNDER DOE PRIME CONTRACT NO. DE-FC26-06NT42959 FOR "HARSH ENVIRONMENT ELECTRONICS PACKAGING FOR DOWN-HOLE GAS AND OIL EXPLORATION"; CH-140; W(A)-07-020

General Electric (GE), through its GE Global Research Center, has petitioned for an advanced waiver of domestic and foreign patent rights to inventions conceived or first actually reduced to practice under DOE Contract No. DE-FC26-06NT42959. This advanced waiver is intended to apply to all subject inventions of GE's employees and those of its subcontractors, regardless of tier, except subcontractors eligible to obtain title pursuant to P. L. 96-517 as amended, and National Laboratories.

As brought out in its waiver petition, GE will develop electronics packaging technologies in order to enable downhole drilling applications at temperatures greater than 400 °F and to depths greater than 20,000 feet.

In response to question 3, the total dollar amount of the contract is \$479,992 for Phase I with GE's portion \$95,998 for a cost share of 20% over this and subsequent phases of the agreement.

GE has over 20 years of experience in electronics and electronics packaging using flex substrates. GE has over 125 patents in this area and at least a ten million dollar capital investment. GE is also a manufacturer of downhole well drilling equipment. And GE is the manufacturer of pressure sensors including those used in the gas and oil industries.

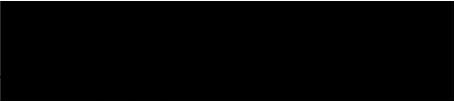
In response to question 8, this waiver will enable GE to utilize the technology developed under this contract both within the United States as well as globally. As the technology is novel, the waiver is critical to ensure successful commercialization.

This advance waiver of the Government's rights in inventions is subject to the usual advance patent waiver conditions. Those terms include the usual Government license, march-in rights, and preference for U.S. industry provisions set out in 35 U.S.C. 202-204. The advance

patent waiver also includes a U.S. Competitiveness clause, (paragraph t), which requires that products embodying any waived invention or produced through the use of any waived invention be manufactured substantially in the United States unless the participant can show to the satisfaction of DOE that it is not commercially feasible to do so. The Contractor further agrees to make the above condition binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Contractor or other such entity receiving rights in any waived inventions 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 DOE.

The grant of this waiver is not expected to have any adverse effects on competition or market concentration. In response to Question 5, the market is highly competitive. Major corporations such as Honeywell and Quartzdyne are actively researching high temperature electronics and packaging for their sensors. Granting of this waiver will provide GE with the incentive to promote the development and commercialization of inventions made under this contract.

Considering the foregoing, and in view of the statutory objectives to be attained and the factors to be considered, it has been determined that this advance waiver of patent rights will best serve the interests of the United States and the general public. Subject to GE providing at least 20% cost sharing, in aggregate over the term of this, and subsequent phases of the agreement, it is recommended that the waiver be granted.

  
Acting Assistant Chief Counsel  
Intellectual Property Law Division

Date: 27 Nov 07

Based on the foregoing Statement of Considerations, it is determined that the interest of the United States and the general public will be best served by a waiver of the United States and foreign rights as set forth therein, and therefore the waiver is granted. This waiver will not apply to any modification or extension of the contract, where through such modification or extension, the purpose, scope or cost of the contract has been substantially altered.

CONCURRENCE:



Guido DeHoratiis  
Director  
Office of Oil and Gas  
Resource Conservation  
3E-28/FORS

Date: 11/28/07

APPROVAL:



Paul A. Gottlieb  
Assistant General Counsel for Technology  
Transfer and Intellectual Property, GC-62

Date: 11-30-07