STATEMENT OF CONSIDERATIONS

REQUEST BY A. O. SMITH CORPORATION FOR AN ADVANCE WAIVER OF PATENT RIGHTS TO INVENTIONS MADE UNDER SUBCONTRACT QZ001 UNDER COOPERATIVE AGREEMENT DE-EE0003985; W(A)-2010-066 ; CH-1588

A O Smith Corporation (Smith) requests an advance waiver of domestic and foreign patent rights for all subject inventions made under its subcontract under the referenced cooperative agreement between The Department of Energy and Stone Mountain Technologies entitled, "Development and Validation of a Gas Fired Residential Heat Pump Water Heater". The purpose of the cooperative agreement is to develop a gas-fired residential heat pump water heater (GHPWH) with a primary fuel efficiency 2.4 times higher than conventional gas storage water heaters, and 2.1 times higher than electric heat pump water heaters. The end result of of the project is a gas-fired absorption heat pump residential water heater with an approximate 3 kW (10,000 Btu/hr) heating capacity, combined with a conventional residential water storage tank (60-80 gallons) to provide a first hour rating of at leat 50, with an installed cost of less than \$1,800. This waiver is for inventions made by A. O. Smith's employees only; Stone Mountain Technologies is a small business eligible to retain title to its employee's inventions pursuant to P.L. 96-517, as amended.

The work under this agreement is expected to take place between July 30, 2010 and June 29, 2012. The total amount of A.O. Smith's subcontract is \$1,800,508, with A. O. Smith providing \$414,117 in cost share or 23%. DOE is providing the remaining \$1,383,391 or 77%.

With respect to its technical competency in the field of water heaters, Smith states that it is the largest manufacturer and marketer of water heaters in the United States. Smith states it has a Corporate Technology Center in Milwaukee, Wisconsin, with 35 engineers looking at advanced technology. In addition, it has recently brought renewable technology to the market in the form of heat pump water heaters and solar thermal water heaters. Smith states it has a total of 145 patents in the water heating area, and has attached two patents from its most efficient atmospheric water heater (U.S. Patents 7,515,22, "Water Heater with Pressurized Combustion", and 7,032,543, "Water Heater with Pressurized Combustion"). Smith has demonstrated its technical competency in the field of water heaters.

Smith states that grant of the waiver will not place it in a preferred or dominant position in this field because there are many alternative technologies available. It cites as examples electric heat pump water heaters, high efficiency gas storage and tankless water heaters, solar water heaters, combination water heaters using supplemental solar heating, and combination tank-tankless water heaters. In addition, Smith states that grant of the waiver will result in patents, which will promote competition through the constant improvement of products through the full, enabling disclosures of the patents. Grant of the waiver will not place Smith in a dominant position and should have a positive effect on competition and market concentration.

This advance waiver of the Government's rights in inventions is subject to the usual advance patent waiver licensing provisions, and the 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 the attached U.S. Competitiveness clause (paragraph t) which requires 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, licensee or other entity acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Contractor or other such entity receiving rights in any 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 invention is suspended until approved in writing by DOE. In addition, the contractor agrees to submit copies of issued U.S. Patents resulting from waived inventions, and to submit annual reports on the utilization of a waived subject invention or on efforts at obtaining such utilization that are being made by the Contractor or any of its licensees or assignees.

Considering the foregoing, it is believed that granting 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 Part 784, all of which have been considered, it is recommended that the requested waiver be granted.

Mark P. Dvorscak Deputy Chief Counsel Intellectual Property Law Division

Date: December 6, 2010

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the United States 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 or extension of the cooperative agreement, where through such modification or extension, the purpose, scope or cost of the cooperative agreement has been substantially altered.

CONCURRENCE:	APPROVAL:
Program Manager Office of Building Technologies Program, EE-2J	Acting Assistant General Counsel for Technology Transfer and Intellectual Counsel
Date	Date

(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.