STATEMENT OF CONSIDERATIONS

REQUEST BY FORD MOTOR COMPANY (FORD) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER PACIFIC NORTHWEST NATIONAL LABORATORY (PNNL) SUBCONTRACT NO. 184884; W(A) 2012-022

FORD has requested a waiver of domestic and foreign patent rights of the United States of America in all subject inventions arising from its work under subcontract number 184884 to the prime contract DE-AC05-76RL01830, the contract between DOE and the Battelle Memorial Institute, as the contractor of PNNL. The subcontract is entitled "Synergistically Enhanced Materials and Design Parameters for Reducing the Cost of Hydrogen Storage Tanks."

The subcontract is part of an award to PNNL under the Research and Development for Hydrogen Storage Funding Opportunity Announcement (DE-FOA-0000421) sponsored by DOE's Fuel Cell Technologies Program. This FOA is focused on developing inexpensive storage vessels for compressed hydrogen gas, which is considered critical to the widespread commercialization of hydrogen fuel cells in early market and light-duty vehicle applications.

In support of the FOA's goal, the objective of the project funded in part by the subcontract is to develop enhanced materials and manufacturing methods to reduce the cost of hydrogen storage tanks. Specifically, the project aims to reduce carbon fiber (CF) usage and associated tank cost through a series of combined material and design synergistic approaches whose total contribution is estimated to be nearly 37% in overall cost savings. The project team includes the following partners and responsibilities: (i) enhanced operating conditions to improve energy density/pressure ratios, led by FORD; (ii) load translational efficiency improvements by CF surface modification, led by Toray, (iii) resin matrix modifications and alternatives, led by PNNL and AOC; and (iv) alternate fiber placement and materials, led by Lincoln Composites.

According to the waiver request, "[o]ver the last several decades, Ford has invested more than $100 million in the research and development of Alternative Fuel Vehicle technology. Ford Motor Company is a leader in the development and testing of advanced propulsion technology. From the Electric Ranger to the P2000 research vehicles to the Focus FCV, a hybridized fuel cell vehicle that produces no toxic emissions and attains a level of fuel efficiency exceeding any modem internal combustion engine, Ford Motor Company has been on the cutting-edge of vehicle technology designed to lower emissions and improve performance. Ford Motor Company produces the widest variety of alternative-fueled vehicles of any manufacturer. To date, Ford has put more than 1 million alternative fuel vehicles on the road worldwide." Specific to this project, FORD has been working with hydrogen technology since the early 1990s and has extensive experience researching novel structural composites for automotive applications, a laboratory dedicated to fuel cells and several patent and patent applications covering fuel cell and hydrogen storage technology. In view of the foregoing, it is reasonable to conclude that FORD has the technical capability to be successful under this project and to fm1her develop and eventually commercialize any waived subject invention beyond the period of the project.

FORD does not anticipate that the granting of this waiver would place FORD in a preferred or dominant position. This conclusion is based on the other vehicle OEMs (Original Equipment Manufacturers), in addition to FORD, who are actively pursuing research in this area. FORD intends to commercialize the subject inventions to the extent practical, either through its own production or through licensing. In the event that FORD commercializes the subject inventions through its own production, it believes it would be only one of several competitors in the field. If FORD does commercialize the subject inventions through licensing, it would likely do it on a non-exclusive basis in accordance with its past practices.

The total anticipated cost of the subcontract is $300,000 including DOE funds and cost share. FORD is committed to contributing $60,000 as cost share for a cost share percentage of 20%. The waiver shall be contingent upon FORD maintaining, in aggregate, at least 20% cost share over the course of the subcontract.

The waiver shall also be subject to the usual Government license, march-in rights, preference for U.S. industry, set out in 35 U.S.C. 202-204, and to the U.S. competitiveness clause, as attached to this Statement. The U.S. competitiveness clause requires that products embodying any waived subject invention or produced through the use of any waived subject invention be manufactured substantially in the United States. FORD will not license, assign, or otherwise transfer any of the waived subject inventions to any entity unless that entity agrees to the requirements of the U.S. competitiveness clause.

Considering the foregoing, it is believed that granting this waiver will provide FORD with the necessary incentive to invest its resources in commercializing the results of the subcontract in a manner that will make the subject inventions available to the public in the shortest 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.

[redacted]

Glen R. Drysdale
Patent Attorney
Golden Field Office

Date: 8/22/2012

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 determined above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of the subcontract, where through such modification or extension, the purpose, scope, or cost of the subcontract has been substantially altered.

CONCURRENCE:

[redacted]

Sunita Satyapal
Program Manager
Fuel Cell Technologies Program

Date: 10/16/12

APPROVAL:

John T. Lucas
Assistant General Counsel for Technology
Transfer and Intellectual Property

Date: 10/17/12

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 DOE that it is not commercially feasible to do so. In the event 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 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 invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in any waived invention is suspended until approved in writing by DOE.