STATEMENT OF CONSIDERATIONS

REQUEST BY GENERAL MOTORS CORPORATION (GM) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE AGREEMENT NO. DE-FG36-07GO17018; W(A)-2008-014

The Petitioner, GM, has requested a waiver of domestic and foreign patent rights for all subject inventions arising from its participation under the above referenced grant entitled "Visualization of Fuel Cell Water Transport and Performance Characterization Under Freezing and Non-Freezing Conditions." The Petitioner is a subawardee of the Rochester Institute of Technology, which is not subject to this waiver request. Michigan Technological University is also a subawardee and is not subject to this waiver request.

The objective of the grant is to develop materials, hardware designs, and operating parameters to optimize water management within a hydrogen fuel cell, under freezing and non-freezing conditions. The work to be conducted by GM will focus on the application of advanced diagnostic methods, including current distribution and neutron imaging, to visualize liquid water in operating fuel cells, in concert with freeze-thaw fuel cell operation.

The total anticipated cost of the grant is $3,487,390 over three years, with DOE contributing a total of $2,683,750. The total cost share is $803,640, or 23% of total project costs; with Petitioner's cost share being $530,814, or 15% of total project costs; Rochester's cost share being $177,896, or 5% of total project costs; and MTU's cost share being $94,930, less than 3% of total project costs. Petitioner's total subaward is $793,563, with a DOE contribution of $262,749 and Petitioner's cost share of $530,814, or 67% of the subaward. This waiver is contingent upon the Petitioner maintaining the above cost sharing percentage over the course of the agreement.

Petitioner is the world's largest automotive company. Petitioner initiated a significant fuel cell research and development effort in 1997, and now employs over 600 engineers and scientists in this activity. Petitioner has also established itself as an acknowledged leader in technology related to fuel cell stack design, materials, and operating strategies for improved management of liquid water that is a product of the electrochemical fuel cell reaction. Petitioner currently employs 16 M.S. and Ph.D. level scientists and engineers related to liquid water management who are dedicated to experimental and theoretical research, both fundamental and applied, in this technology area. This advanced work has resulted in a number of patents, pending patents, and technical publications.

Petitioner will provide over $500,000 in contributions to this project. Petitioner will also draw upon and utilize significant background intellectual property that has been developed at private expense under this effort. Petitioner has invested nearly $5 million on water management diagnostic tool development alone since 2002. The efforts being undertaken in this agreement will supplement their privately funded work, much of which will continue outside of the project as privately funded research.

Granting this patent waiver is the most expedient way to promote the development and commercialization of subject inventions developed under this agreement. Petitioner's market penetration and depth of product offering as an automotive manufacturer places it in a unique position to be able to use the energy-efficient technologies developed under this award into its own manufacturing processes, and to license these inventions to others. Granting the waiver will provide a valuable incentive to Petitioner to commercialize its subject inventions and will further DOE's goal to implement energy-efficient manufacturing processes to the widest extent possible.

Petitioner has agreed that this waiver shall be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, comparable to those set out in 35 U.S.C. 202-204. Further, Petitioner has agreed to the U.S. competitiveness provisions as attached to this Statement. In brief, Petitioner has agreed that products embodying intellectual property developed under this grant shall be substantially manufactured in the United States, and that Petitioner will not license, assign, or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition because all automotive and fuel cell system manufacturers, including Ford, Chrysler, Ballard, Plug Power, UTC Power, and others all have significant patent positions in this field, often with technologies that compete with Petitioner's fuel cell stack technology. Also, referring to item 2, Ms. Nancy Garland is the DOE Program Manager not Mr. Terry Payne.

Considering the foregoing, it is believed that granting this waiver will provide Petitioner with the necessary incentive to invest its resources in commercializing the results of the agreement in a manner that will make the above technology 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]

Julia Cook Moody
Patent Attorney
Golden Field Office

Date: Jun 18, 2008

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 grant, where through such modification or extension, the purpose, scope, or cost of the grant has been substantially altered.

CONCURRENCE:	APPROVAL:
[redacted]	[redacted]
JoAnn Milliken, Program Manager Hydrogen, Fuel Cells & Infrastructure Technologies EE-2H	Paul A. Gottlieb Assistant General Counsel for Technology Transfer and Intellectual Property
Date: 6/25/08	Date: 6-26-08

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.