

## STATEMENT OF CONSIDERATIONS

### REQUEST BY GENERAL MOTORS CORPORATION FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC26-05NT42415, W(A)-05-046, CH-1328

The Petitioner, General Motors Corporation (GM) was awarded this cooperative agreement for the performance of work entitled, "Development of High Efficiency Clean Combustion Engine Designs for Spark Ignition and Compression Ignition Internal Combustion Engines." The purpose of the cooperative agreement is the improvement of the efficiency of the internal combustion engine and the development of other alternative propulsion technologies useful to the automotive market. More specifically, GM will work to further develop the homogeneous charge compression-ignition (HCCI) combustion engine. This engine combines many of the benefits of both gasoline and diesel engines. GM explains that the gasoline and diesel approaches to HCCI operation each have their own advantages, challenges, and constraints. The development of both gasoline and diesel solutions is preferred and this cooperative agreement includes both gasoline and diesel elements. The project team includes GM and Sturman Industries. As indicated on page one of the waiver petition, Sturman is small business and will be eligible to retain title to its invention under Bayh-Dole (P.L. 96-517). Thus, this waiver is only for inventions of GM made under this cooperative agreement.

The total estimated cost of the cooperative agreement is \$12.84 million with GM and DOE each cost sharing 50% or \$6.42 million. The period of performance is fifty-two months from July 1, 2005.

In its response to question 5 of the attached waiver petition, GM has described its technical competence in the field of automotive technologies. The largest automotive company in the world, it designs, manufactures, assembles and sells cars and trucks, including automotive powertrain systems and components. It has a long history of industry leadership in the development of environmentally friendly automotive innovations. It states that its catalytic converter is recognized as the most effective piece of emission-control hardware ever developed to reduce hydrocarbons and carbon monoxide. GM scientists and engineers have been awarded over 960 patents related to automotive engine technology since 1991. A listing of these patents is included as Attachment A to the waiver petition. GM's response demonstrates its technical competency in the field of automotive technologies.

In its response to questions 9 and 10 of the attached waiver petition, GM states that it has a long history of making available to other automotive manufacturers the environmentally friendly products that GM has developed, such as the catalytic converter. In addition, GM states that the subject of this project must also compete against numerous other technologies being considered for use in automotive propulsion in pursuit of greater energy efficiency. These technologies include more highly efficient and clean burning diesel engines, hybrid propulsion, displacement on demand gasoline engines, fuel cells, and hydrogen combustion. Competitive pressures in a robust automotive market with numerous automotive manufacturers amid a wealth of competing technologies will necessarily mitigate any significant anti-competitive effect that might possibly be created if this waiver petition is granted. Therefore grant of the waiver will have a positive effect on competition and market concentration.

The subject contract will be modified to add the Patent Rights--Waiver clause in conformance with 10 CFR 784.12, wherein GM has agreed to the provisions of 35 U.S.C §§ 202, 203, and 204. This waiver clause will also include a paragraph entitled U.S. Competitiveness, in which GM agrees to substantial U.S. manufacture of subject inventions (attached hereto).

Additionally, GM agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements.

Considering the foregoing, it is believed that granting the waiver will provide the Petitioner with the necessary incentive to invest resources in the commercialization of the results of the agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable time. In addition, it would appear that grant of the above requested waiver would not result in an adverse effect on competition nor result in excessive market concentration. Therefore, 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, as set forth above, be granted.



Mark P. Dvorscak  
Assistant Chief Counsel  
Office of Intellectual Property Law

Date Oct. 13, 2005

Based on the foregoing Statement of Considerations and the representations in the attached waiver petition, it is determined that the United States and the general public will best be served by a waiver of rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of this agreement, where through such modification or extension, the purpose, scope, or cost of the agreement is substantially altered.

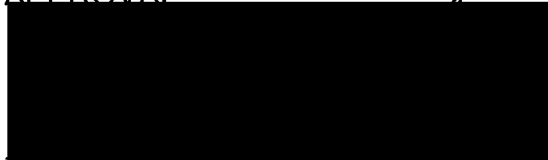
CONCURRENCE:



Edward J. Wall  
Program Director  
Freedom Car & Vehicle  
Technologies,

Date: 2/21/06

APPROVAL:



Paul A. Gottlieb  
Assistant General Counsel  
for Technology Transfer  
and Intellectual Property

Date: 2-21-06

(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.

# ***WAIVER ACTION - ABSTRACT***

**W(A)-05-046 (CH-1328)**

<u>REQUESTOR</u>	<u>CONTRACT SCOPE OF WORK</u>	<u>RATIONALE FOR DECISION</u>	<u>DISPOSITION</u>
General Motors Corporation under DOE Cooperative Cooperative Agreement No. DE-FC26-05NT42415	Development of High Efficiency Clean Combustion Engine Designs for Spark Ignition and Compression Ignition Internal Combustion Engines	50% cost sharing	