

## STATEMENT OF CONSIDERATIONS

### REQUEST BY ROBERT BOSCH LLC, FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC26-07NT43274, W(A)-10-048, CH-1575

The Petitioner, Robert Bosch LLC (Bosch) was awarded this cooperative agreement for the performance of work entitled, "Optimally Controlled Flexible Fuel Powertrain System". According to the attached Statement of Project Objectives, the objective of the project is to develop a true Flex Fuel Vehicle that is capable of running on any blend of ethanol from 0 to 85% with minimal or no penalty in usable vehicle range. A gasoline-optimized high-technology engine will be considered and the minimum hardware modifications will be defined for the engine block, fueling system and air path. Combined with a novel engine control strategy, control software, and calibration this will result in a highly efficient and clean FFV concept. This waiver is only for inventions of Bosch made under this cooperative agreement.

The total estimated cost of the cooperative agreement is \$3,948,994 with Bosch providing \$2,099,459 or 53% cost-share. DOE is providing the remaining 47% cost share or \$1,849,535. The period of performance is from August 1, 2007 through September 30, 2010.

In its response to questions 5 and 6 of the attached waiver petition, Bosch has described its technical competence in the field of automotive engine management technologies. Bosch states that it has been a complete engine management systems supplier to General Motors V6 and 4 cylinder engine families since 2005. It as engine management systems and sub-systems such as electronic control units, gasoline direct injection systems, and various other sensors and actuators in production and also in development in the U.S. This systems expertise is the basis for further development of this technology within the scope of this project. Bosch further states that automotive technology is its largest business sector in North America, with sales of approximately \$6.2 billion in 2007. Bosch's response demonstrates its technical competency in the field of automotive engine management technologies.

In its response to question 10 of the attached waiver petition, Bosch states that there are several competing technologies that are commercially available for fuel composition recognition. In addition, the proposed technology has limited application (requires direct injection system, in-cylinder pressure sensor, etc.), such that Bosch does not expect to be dominant in the field if the waiver is granted. Therefore grant of the waiver should 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 Bosch 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 Bosch agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, Bosch 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.

[Redacted]

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

Date: October 8, 2010

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:

[Redacted]

Patrick Davis, EE-2G  
Acting Program Manager  
Office of Vehicle Technologies

Date: 11/8/10

APPROVAL:

[Redacted]

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

Date: 11/8/2010

(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.