STATEMENT OF CONSIDERATIONS

Request by Robert Bosch LLC for an Advance Waiver of Domestic and Foreign Invention Rights under DOE Cooperative Agreement No. DE-EE0003533; W(A) 2012-008, CH-1652

The Petitioner, Robert Bosch LLC., (Bosch) was awarded this cooperative agreement for the performance of work entitled "Advanced Combustion Controls-Enabling Systems and Solutions (ACCESS) for High Efficiency Light Duty Vehicles". The goal of the ACCESS project is to develop highly capable and flexible advanced control concepts with enabling system, subsystem and component level solutions for the management of multi-mode combustion events in order to achieve up to 30% fuel economy improvement in a gasoline fueled light-duty vehicle without compromising its performance while meeting future emission standards as outlined in DOE solicitation targets. The waiver will apply to Bosch and its subcontractor AVL Powertrain Engineering.

The total estimated cost of the cooperative agreement is \$24,556,737, with the DOE share being \$11,953,786 or 49%. Cost sharing of the project by Bosch and AVL is thus \$12,602,951 or 51%. The period of performance of the agreement is from September 30, 2010 to September 29, 2014.

In its response to question 5 of the attached waiver petitions1, Bosch and AVL have described their technical competence in the field of the gasoline fueled light duty vehicle technology. Bosch states it has a history of researching advanced combustion for gasoline engines and is currently supplying control systems and components for some technologies that will be further developed within this project. It has engine management systems and subsystems such as electronic control units, fuel injection systems, exhaust systems, and various other sensors and actuators in production and also in development in the United States. Bosch's subcontractor AVL states that it is the world's largest privately owned and independent company for the development of powertrain systems with internal combustion engines as well as instrumentation and test systems. It offers comprehensive services for developing engines, transmissions, batteries, electric motors and software. AVL also states that it has completed 96 gasoline engine development projects, and that it has over 20 issued patents in this area. Bosch and AVL have demonstrated their technical expertise in the area of gasoline fueled light duty vehicle technology.

From its response to question 10, Bosch states that there are a wide variety of similar approaches for system concepts and controls for advanced combustion; obtaining patents on the specific developments under this program will not have a significant anticompetitive effect. It is unlikely that competition will be adversely affected by grant of the waiver.

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

¹ Bosch and AVL each submitted separate petitions. They are being consolidated into this single Statement of Considerations.

(attached hereto). Additionally, Bosch agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements.

In view of the cost sharing and other equities between Bosch and AVL, it is anticipated that the parties will develop an appropriate allocation of patent rights among the participants to facilitate the expeditious development of the technology forming the subject matter of the agreement. Accordingly, DOE will waive title to all subject inventions made by Bosch's employees. and its subcontractors' employees, regardless of tier, except inventions made by subcontractors eligible to retain title pursuant to P.L. 96-517, as amended, or National Laboratories, to Bosch or its subcontractors, as mutually agreed by the parties. Except as otherwise approved in writing by DOE Patent Counsel, a party's acceptance of a subcontract under this agreement, at any tier, shall constitute Bosch's certification that it has provided that party with a copy of this Statement of Considerations and that party's notice to DOE that it accepts the terms and conditions of this advance waiver. Furthermore, a subcontractor has the right to request a waiver from DOE in its own right, rather than having to pass through the contractor to acquire title to subject inventions. Additionally, subcontractors who receive title under this waiver shall notify DOE Patent Counsel in writing of such disposition of patent rights.

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 Deputy Chief Counsel Office of Intellectual Property Law

Date: February 15, 2012

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 and consent to assignment 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:

APPROVAL

Patrick Davis Program Manager Office of Vehicle Technologies Program, EE-2G John T. Lucas Assistant General Counsel for Technology Transfer and Intellectual Property for Technology Transfer and Intellectual Property

Date_ 6/13/12

Date 6/14/2012

(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.