## STATEMENT OF CONSIDERATIONS

REQUEST BY CATERPILLAR, INC. FOR AN ADVANCE WAIVER OF PATENT RIGHTS TO INVENTIONS MADE UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC26-05NT42423; W(A)-05-052; CH-1339

As set out in the attached waiver petition and in subsequent discussions with DOE Patent Counsel, Caterpillar, Inc. (Caterpillar) has requested an advance waiver of domestic and foreign patent rights for all subject inventions made under the above subject cooperative agreement. The waiver will apply to inventions made by Caterpillar employees and its subcontractors' employees, regardless of tier, except inventions made by subcontractors eligible to retain title to inventions pursuant to P.L. 96-517, as amended, and National Laboratories.

Referring to item 2 of Caterpillar's petition, the purpose of this agreement is to develop a new air management and exhaust energy recovery system that will demonstrate a 10% improvement in thermal efficiency over the base engine (e.g. 40% brake efficiency to 44%) with no emission increase. The resulting system will be compatible with the low emissions technology and advanced powertrain technology being developed for 2010. The goal will be to demonstrate the efficiency gain with complete engine system prototypes by 2009.

The work under this agreement is expected to take place from August 1, 2005 through December 31, 2009 at a total cost of \$7,876,455. Caterpillar will be obligated to cost share \$3,938,225, or 50% of the total cost of the project. DOE is providing the remaining cost share of 50%.

In view of the cost sharing and other equities between Caterpillar and its subcontractors, 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 Caterpillar 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 Caterpillar 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 Caterpillar'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. Additionally, subcontractors who receive title under this waiver shall notify DOE Patent Counsel in writing of such disposition of patent rights.

Referring to items 5-8 in Caterpillar's waiver petition, Caterpillar states it is the world's largest manufacturer of construction equipment, and the leading manufacturer of class 3-8 on-highway truck engines and is committed to continuous engine efficiency improvement and emissions reduction. Caterpillar performs overall systems integration for all Caterpillar construction machines and as the leading engine supplier for class 3-8 trucks, Caterpillar often participates closely on system integration issues with many truck OEMs. Caterpillar is the world's largest manufacturer of earth-moving, materials handling, construction and mining equipment and is a world leader in the design, development, production, and marketing of medium and heavy duty diesel engines, gas engines, and industrial gas turbine engines. Its technical competence in this area is evidenced by over 2,000 patents owned by Caterpillar or its subsidiaries. Caterpillar is the world's largest manufacturer of heavy-duty diesel engines (5 to 20,000 hp), natural gas engines (40 to 5,000 hp), and industrial gas turbine engines up to 20,000 hp. This, coupled with Caterpillar's cost sharing, clearly demonstrates the likelihood that Caterpillar will continue development and commercialization of the results of this agreement.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition as there are a variety of competing technologies in the domestic electric accessories market.

This advance waiver of the Government's rights in inventions is subject to the usual advance patent waiver licensing provisions, and the government license, march-in rights, and preference for U.S. industry provisions set out in 35 U.S.C. 202-204. The advance patent waiver also includes the attached U.S. Competitiveness clause (paragraph t) which requires products embodying any waived invention or produced through the use of any waived invention be manufactured substantially in the United States unless the participant can show to the satisfaction of DOE that it is not commercially feasible to do so. The contractor further agrees to make the above condition binding on any assignee, licensee or other entity 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 the waived invention is suspended until approved in writing by DOE.

Considering the foregoing, it is believed that granting this waiver will provide Petitioner with the necessary incentive to invest its resources in the commercialization of the results of the agreement in a fashion which will make the technology available to the public in the shortest practicable time. Therefore, upon evaluation of the waiver petition and in view of the objectives and considerations set forth in 10 CFR Part 784, all of which have been considered, it is recommended that the requested waiver be granted.

Mark P. Dvorscak Assistant Chief Counsel Intellectual Property Law Division

Date: May 12006

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

## CONCURRENCE:

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Program Manager
FreedomCAR and Vehicle Technologies
Energy Efficiency and Renewable Energy

Date: 10/3/96

APPROVAL:

Paul A. Gottlieb
Assistant General Counsel
for Technology Transfer and
Intellectual Property, GC-62

Date: 10 4 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.