

STATEMENT OF CONSIDERATIONS

Request by Caterpillar Inc for an Advance Waiver of Domestic and Foreign Invention Rights under DOE Contract No. DE-EE0005980, W(A) 2013-015, CH-1680

The Petitioner, Caterpillar, Inc (Caterpillar) was awarded the subject cooperative agreement with DOE for the performance of work entitled, "Development of Advanced High Strength Cast Alloys for Heavy Duty Engines". The program is directed to develop new, high-strength ferrous alloys to allow for higher cylinder pressures to improve performance and efficiency of heavy-duty diesel engines. The goals for the new alloys are to provide at least 25% improvement in component strength relative to A842 (Compacted Graphite Iron) with a cost penalty not to exceed 120% of the cost to manufacture a similar component with A48 gray iron. To achieve these objectives, the project team will utilize an Integrated Computational Materials Engineering (CME) approach, led by QuesTek, to apply mechanistic materials models within a systems engineering framework to computationally engineer new material compositions and manufacturing processes. Other subcontractors include the Metal Casting Laboratory at the University of Alabama-Birmingham, and the Advanced Photon Source at Argonne National Laboratory. This waiver will apply to Caterpillar and its subcontractor inventions, except inventions made by subcontractors eligible to retain title pursuant to P.L. 96-517, as amended, or National Laboratories.

The work under this agreement is expected to take place from October 1, 2012 through September 30, 2016. The total amount of the contract is \$5,079,045, with Caterpillar cost-sharing 31% or \$1,601,915. DOE is thus providing the remaining 69% or \$3,477,130.

In its response to question 5 of the attached waiver petition Caterpillar has provided relevant technologic background for the field of machinery and power systems. It has been designing and manufacturing engines for more than 50 years. Over the past decade, Caterpillar has engaged in significant research and development on engine technologies for increasing power, improving the fuel efficiency, and meeting the various emission requirements. It made a significant achievement with its release of the ACERT engine technology including both material and design related improvements. Caterpillar states it has also developed significant expertise in integrated simulation to support the development of materials, processes, and products. A select list of publications, patents, and patent applications are provided as an exhibit to the petition. Caterpillar has demonstrated its technical competency in the field of machinery and power systems.

In its response to question 10 of the attached waiver petition, Caterpillar states that any improvements made under this projects will not be significant enough to allow it to achieve a dominant position against other machine or power systems manufacturers. Many of its competitors continue to develop competitive materials along with making improvements to their other engine components that are not implicated by this program. There is no evidence that grant of this waiver will have an adverse impact on competition.

The subject contract will be modified to add the Patent Rights--Waiver clause in conformance with 10 CFR 784.12, wherein Caterpillar 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 Caterpillar agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, Caterpillar 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 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'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 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. 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.

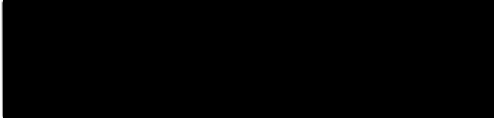
Mark P. Dvorscak
Deputy Chief Counsel
Office of Intellectual Property Law
Date: June 14, 2013
Amended: 9/6/13 *en*

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, 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:


Patrick Davis, EE-2G
Program Manager
Office of Vehicle Technologies
Program
Date: 11/14/13

APPROVAL:


John J. Lucas, GC-62
Assistant General Counsel
for Technology Transfer and
Intellectual Property
Date: 11/14/13

(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.