## STATEMENT OF CONSIDERATIONS

## REQUEST BY THE JOHN DEERE PRODUCT ENGINEERING CENTER FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE CONTRACT NO. DE-FC26-05NT42416; W(A)-05-050, CH-1335

The Petitioner, John Deere Product Engineering Center (Deere) was awarded a cooperative agreement for the performance of work entitled, "Heavy-Duty Stoichiometric Compression Ignition Engine with Improved Fuel Economy over Alternative Technologies for Meeting 2010 On-Highway Emission Standards." The purpose of the cooperative agreement is the design, testing, and evolution needed to demonstrate the technical and commercial viability of a stoichiometric diesel engine. This waiver is only for inventions of Deere made under the cooperative agreement.

The total estimated cost of the contract is $4,808,864 with the DOE providing $2,404,432 or 50%, and Deere cost sharing the remaining $2,404,432 or 50%. The period of performance is from August 10, 2005 through December 31, 2009.

In its response to questions 5 and 6 of the attached waiver petition, Deere has described its technical competence in the field of heavy duty diesel engines. Deere is the dominant manufacturer of agricultural equipment on a worldwide basis and an important producer of construction and lawn care products, manufacturing several hundred thousand engines each year and drive line components. Deere has been a leader in developing engines meeting Tier 1, Tier 2, and Tier 3 off-highway emission standards. The proposed stoichiometric diesel engine is intended to be used to meet final Tier 4 emissions going into effect in 2014. Deere began evaluating technology to meet Tier 4 levels in 2000, and the stoichiometric engine is just an extension of that research. Because of this experience, Deere will be able to commercialize the technology developed under this cooperative agreement. Deere's response demonstrates its technical competency in the field of heavy duty diesel engines.

In its response to question 10 of the attached waiver petition, Deere states that the basic technology of low temperature combustion systems to meet future emission standards is not new. All manufacturers can adapt a version of it once the concept becomes viable. Deere states that the total market size is modest, and excessive competition stifles rather than promotes development. Acquisition of the waiver will not materially change or better the position of Deere as a leader in this field, but will benefit other participants in the market as well. 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 Deere 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 Deere agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, Deere 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 Dec. 12, 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:

[redacted]
John Fairbanks
Office of the FreedomCAR and Vehicle Technologies, Office of Energy Efficiency and Renewable Energy, EE-2G

Date 01/11/06

APPROVAL:

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

Date 1-13-06

(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)-05-050 (CH-1335)**

| REQUESTOR | CONTRACT SCOPE OF WORK | RATIONALE FOR DECISION | DISPOSITION |
|---|---|---|---|
| John Deere Product Engineering Center under DOE contract No. DE-FC26-05NT42416 | Heavy-Duty Stoichiometric Compression Ignition Engine with Improved Fuel Economy over Alternative Technologies for Meeting 2010 On-Highway Emission Standards | 50% cost sharing | |