

## STATEMENT OF CONSIDERATIONS

### REQUEST BY FORD MOTOR COMPANY RESEARCH LABORATORY FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC28-01NT41103; W(A)-01-016, CH-1084

The Petitioner, Ford Motor Company Research Laboratory, was awarded this cooperative agreement for the performance of work entitled Development of Innovative Emission Control Systems for Advanced Compression-Ignition (CID) Transportation Engines. Ford was awarded this cooperative agreement in response to a solicitation received as part of the Department of Energy's Ultra Clean Transportation Fuels Program. The purpose of the cooperative agreement is to demonstrate an exhaust emission control system that provides high efficiency particulate matter (PM) and NO<sub>x</sub> reduction. The high efficiency will be obtained through the use of a particulate filter and the most advanced NO<sub>x</sub> control available. Very low sulfur diesel fuel will be used to enable low PM emissions, reduce the fuel economy penalty associated with the emission control system, and increase the long-term durability of the system. The emission control system developed will address federal NO<sub>x</sub> and PM emission standards for 2007. The end result will allow vehicles with CID engines to be Tier II emissions certified with a minimum fuel economy penalty at a minimum cost to the consumer. The project team includes Ford as the prime contractor, (emission control technology developer and CID engine manufacturer), ExxonMobil (fuel and catalyst technology developer), and FEV Engine Technology (outside research facility). Ford is seeking a waiver of title for inventions developed in the course of this cooperative agreement by itself and its subcontractor FEV. Attached is an e-mail from FEV indicating its concurrence and acceptance in the disposition of inventions in this manner. ExxonMobil is expected to submit a separate waiver petition on its own behalf.

The total estimated cost of the cooperative agreement is \$13,478,100, with the DOE share being \$8,760,765. Cost sharing of the project for Ford is \$4,717,335 or thirty-five (35%). It is anticipated that the length of this subcontract will be four years beginning in about January 2001. To date, a cooperative agreement has not yet been executed and no work has been performed.

In its response to questions 5 and 6 of the attached waiver petition, Ford has described its technical competence in the technological field of this cooperative agreement. Specifically, Ford devotes about fifty percent of research in its Scientific Research Laboratories toward environmental issues addressing the effects of man-made greenhouse gases such as CO<sub>2</sub>. These concerns have led to Ford's development of fuel efficient vehicles with CID engines that emit less CO<sub>2</sub> per mile than current gasoline vehicles. Ford has been in the forefront of diesel exhaust emission control since the early 1980s and has developed several diesel engines that have gained consumer popularity. A representative list of patents relevant to this technology is listed in Attachment 1 to the waiver petition.

Ford has been a participant in other government programs relevant to improving the efficiency of vehicles, and in its response to question 7, it has briefly described these programs. Ford has also invested over nine (9) million dollars in this technological area. Ford's past governmental participation and its financial investment demonstrate its commitment to further development and improvement of CID engines.

From its response to question 10, Ford indicates that grant of the waiver should not affect competition since the DOE is funding competitors of Ford. Additionally, the amount of the government funding is small relative to the total amount needed to develop a new diesel engine and vehicle. Because of the relatively small amount of government funding and the fact that DOE is funding Ford competitors, it is unlikely that competition will be adversely affected.

The subject cooperative agreement will be modified to add the Patent Rights—Waiver clause in conformance with 10 CFR 784.12. This waiver clause will also include a paragraph entitled U.S. Competitiveness, in which Ford agrees to substantial U. S. manufacture of subject inventions (attached

hereto). Additionally, Ford agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements. The petitioner has further agreed to modification of the data clause of the subject cooperative agreement (48 C.F.R. 952.227-14) by adding paragraph (k), Alternative VI, concerning contractor licensing of data.

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.

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

Date July 3, 2001

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:

Kenneth C. Howden,  
Program Manager  
Office of Advanced Automotive  
Technologies, EE-32

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Date JANUARY 29, 2002

APPROVAL:

Paul A. Gottlieb  
Assistant General Counsel  
for Technology Transfer and  
Intellectual Property

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Date JAN 30 2002

(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)-01-016 (CH-1064)

REQUESTOR

Ford Motor Company  
Research Laboratory

CONTRACT SCOPE OF WORK

Ultra Clean Fuel Transportation  
Program

RATIONALE FOR DECISION

35% cost share

DISPOSITION

Granted