

Statement of Considerations

REQUEST BY CATERPILLAR INC. FOR AN ADVANCE
WAIVER OF DOMESTIC AND FOREIGN RIGHTS IN
SUBJECT INVENTIONS MADE IN THE COURSE OF OR
UNDER DEPARTMENT OF ENERGY CONTRACT NO. DE-
FC05-97OR22579; DOE WAIVER DOCKET W(A)-97-015
[ORO-659]

Caterpillar, Inc. (Caterpillar) has made a timely request for an advance waiver to worldwide rights in Subject Inventions made in the course of or under Department of Energy (DOE) Contract No. DE-FC05-97OR22579. The scope of the work calls for the development of zirconia toughened mullite (ZTM) cylinder head insert for low emission, high efficiency diesel engines. The work is sponsored by the Office of Transportation Technologies.

The dollar amount of the contract is \$1,079,056 with Caterpillar cost sharing \$544,056, or 50.4% of the contract.

Caterpillar is a world leader in the design, development, and production of diesel engine technology that involves processing, sintering, microstructural analysis, and thermal and mechanical property testing of ceramic materials. It has a history of investing its own resources develop, test, and manufacture ceramics for diesel engine applications. Therefore, Caterpillar's experience and expertise will contribute substantially to development the inventions made under the contract.

Caterpillar is the world's largest manufacturer of earth-moving, materials handling and construction equipment and a world leader in design, development, production and marketing of medium and heavy duty diesel engines, spark ignited gas engines, and industrial gas turbine engines. It produces approximately 113,000 diesel engines a year with power ranges from 42 to 7,300 horsepower. Considering its market position, it has the capability to commercialize engine technology developed under the contract.

Caterpillar has a history of research and development leading to commercialization of direct injected engines for the U.S. market. Since the mid-1980's Caterpillar has invested approximately \$600,000 to \$1,500,000 a year in the development of direct injection alternative fuel technology much of which is to be adapted to the present flexible fuel engine development program. It committing resources previously used in these activities, such as personnel, equipment, and expertise, to develop the materials under this contract.

If the requested waiver is approved the Patent Rights - Waiver clause will be included in the contract. Petitioner has approved the Patent Rights -Waiver clause including

march-in rights, granting of licenses to background patents necessary for practicing subject inventions, retention by the government of a license, and preference for U.S. industry.

In addition, Caterpillar agrees that any product, process or service using any intellectual property arising from the performance of this contract, including that resulting from a Subject Invention shall be manufactured, practiced or provided substantially in the United States, unless Caterpillar can demonstrate that it is not commercially feasible or reasonable to do so. In the event that Caterpillar does not manufacture products embodying waived inventions substantially in the United States, Caterpillar and the DOE shall agree on terms and conditions appropriate to assure the public receives some benefit of DOE's investment or recoupment of a portion of DOE's investment in the waived inventions not substantially manufactured in the United States.

Granting of the waiver should have little effect on competition since there are several technology options, this being one of many previously or yet-to-be developed in the marketplace, therefore there should not be undue market concentration of Caterpillar products.

Grant of the requested waiver should serve as encouragement to other DOE contractors that significant cost sharing will be recognized as an acceptable consideration for granting greater rights in Subject Inventions.

In view of the acceptable level of cost sharing by Caterpillar and the objectives and considerations set forth in 10 CFR 784.4, all of which have been considered, it is recommended that the requested waiver for worldwide rights be granted.



Emily G. Schneider
Patent Attorney

Based on the foregoing Statement of Considerations and the representations in the attached Waiver Petition, it is determined that the interest of the United States and the general public best be served by a waiver of U.S. and foreign patent rights, and therefore, the waiver is granted. This waiver shall not apply to a modification or extension of the cost-shared contract where, through such a modification or extension, the purpose, scope or cost of the contract has been substantially altered.

CONCURRENCE:



Thomas J. Gross
Deputy Assistant Secretary for
Transportation Technologies

Date: 4/16/98

APPROVAL:



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

Date: 4-21-98