

## STATEMENT OF CONSIDERATIONS

REQUEST BY CATERPILLAR, INC. FOR AN ADVANCE WAIVER OF  
DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE COOPERATIVE  
AGREEMENT NO. DE-FC26-01NT41054 W(A)-01-021, CH-1068

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The Petitioner, Caterpillar, Inc. (Caterpillar), will perform work under this cooperative agreement entitled, "Advanced Abrasion Resistant Materials for Mining". The objective of this project is to develop advanced processes for abrasion resistant metal matrix composites and thermal spray coatings for components used primarily in mining applications and other earth moving machines. Caterpillar will team with various sub-contractors to develop commercially viable hybrid-pressure casting process for steel metal-matrix composites as well as improved thermally processed spray coatings for such components. This waiver only applies to Caterpillar.

The total estimated cost of the cooperative agreement is \$1,133,320. Caterpillar will cost share 50.5% or \$572,798. The DOE share of 49.5% is \$560,522. The period of performance is from February 7, 2001 through February 6, 2003.

In its response to question 4 of the attached waiver petition, Caterpillar has shown significant technical competence in developing advanced materials and material related processes for earth moving machine applications as well as advanced materials and processes for diesel and natural gas engines. Caterpillar is technically competent in thin film coatings, ceramics, metal matrix composites, high temperature steels, powdered metallurgy, and in advanced manufacturing techniques including heat treatment, casting, combustion technology fuel system technology, air systems technology, exhaust gas after treatment technology engine component technologies, and engine electronic controls technology. This competency is demonstrated in the over 2000 United States patents owned by Caterpillar or its subsidiaries, more than 200 of which are related to Caterpillar's materials and manufacturing technologies.

Caterpillar explains in response to question 9 that grant of the waiver is unlikely to further enhance Caterpillar's dominant position in the domestic earth moving market or infringe on any domestic heavy equipment manufacturer's ability to produce competitive products in the long run. This is only one of several technology development projects being pursued by Caterpillar, and there are presently several large, global, and very competitive manufacturers serving the domestic heavy equipment market. Due to this large number of competing companies whose various technology development programs are serving to keep the balance of competition relatively stable, grant of the waiver will not place Caterpillar in a preferred position.

The Petitioner has agreed to the standard provisions with respect to invention waivers with the substitution of the march in rights, U.S. manufacturing preference and U.S. government license provided in 35 U.S.C. 202-204. Additionally, Caterpillar has accepted standard background patent and data provisions of paragraphs (k) of the Patent Rights-Waiver clause B, to assure commercialization of the technology.

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 Caterpillar agrees to substantial U. S. manufacture of the subject inventions. Additionally, Caterpillar agrees not to transfer the 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 their 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  
Assistant Chief Counsel  
Office of Intellectual Property Law

Date July 16, 2002

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.

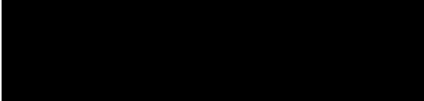
CONCURRENCE:



Arlene Anderson  
Office of Industrial Technologies  
EE-22/FORS

Date Sept 9, 2002

APPROVAL:



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

Date 11-7-02