

## STATEMENT OF CONSIDERATIONS

REQUEST BY AMOCO TECHNOLOGY COMPANY FOR AN ADVANCE  
WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE  
COOPERATIVE AGREEMENT NO. DE-FC36-94GO10041; W(A)-95-  
007; CH-0853

The Petitioner, Amoco Technology Company, has requested a waiver of domestic and foreign patent rights for all subject inventions arising from its participation under the above referenced cooperative agreement entitled "Preparation for Commercial Demonstration of Biomass to Ethanol Conversion Technology."

The objective of the cooperative agreement is to complete the development of a commercially viable process to produce renewable fuel ethanol from cellulosic biomass. If successful, the program will lead to the construction of a large scale ethanol production demonstration facility in the United States and ultimately to the creation of a major alternative fuels industry. The proposed work includes: developing the technology needed to make the unique combination of steps in the ethanol process workable for corn fiber feedstock; developing engineering data at pilot plant scale to support process design and optimization; and preparing to produce enough by-product animal feed from corn fiber to properly evaluate its commercial value.

The total approved budget of the cooperative agreement is \$1.76 million. Of the total budget amount, DOE share is \$733,019, with the Petitioner providing the rest of the funding, for approximately 58% cost sharing. This waiver is contingent upon the Petitioner maintaining the above cost sharing percentages during the course of the agreement.

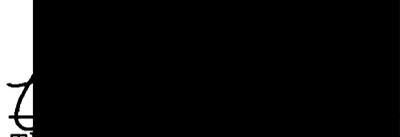
As noted in its waiver petition, Petitioner has significant expertise and experience in the field of biomass to ethanol conversion technology. Petitioner's biomass to ethanol program is headquartered in Naperville, Illinois and has had an annual budget of several million dollars for a number of years. In this regard, Petitioner has built and operated a pilot plant for processing biomass into ethanol in Ottawa, Ontario and has conducted a number of economic evaluations of the process. Further, cooperative research with NREL and Purdue University has added significantly to the Petitioner's knowledge base in this

technology. Considering Petitioner's technical expertise and significant investment in this technology, including sizable cost sharing in this cooperative agreement, it is reasonable to conclude that Petitioner will continue to develop and ultimately commercialize the technology and products which may arise from this cooperative agreement.

Referring also to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition. Currently, research and development in the biomass to ethanol technology is being conducted in numerous laboratories across the country. Accordingly, it can be expected that success of this cooperative agreement would stimulate further activity in this technology. Further, any success in this technology would create further competition for the fuels industry in general.

Petitioner has agreed that this waiver shall be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, comparable to those set out in 35 U.S.C. 202-204. Additionally, Petitioner has agreed to the attached U.S. Competitiveness provisions and to background patent and data provisions which allow the DOE to maintain its interest in the technology. In brief, Petitioner has agreed that products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless Petitioner can show to the satisfaction of the DOE that it is not commercially feasible to do so, and that Petitioner will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements.

Considering the foregoing, it is believed that granting this waiver will provide Petitioner with the necessary incentive to invest its resources in the commercialization of the results of the cooperative agreement in a fashion which will make the above technology available to the public in the shortest practicable time. Therefore, upon evaluation of the waiver petition and in view of the objectives and considerations set forth in 10 CFR Part 784, all of which have been considered, it is recommended that the requested waiver be granted.

  
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Thomas G. Anderson  
Assistant Chief Counsel  
Intellectual Property Law  
Division

Date: 11/25/96

  
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Daniel D. Park  
Patent Attorney  
Intellectual Property Law  
Division

Date: 11/25/96

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the United States and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of the cooperative agreement, where through such modification or extension, the purpose, scope or cost of the cooperative agreement has been substantially altered.

CONCURRENCE:

  
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John E. Ferrell  
Director  
Office of Fuels Development  
EE-31 FORS

Date: 2/12/97

APPROVAL:

  
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Paul Gottlieb  
Assistant General Counsel  
for Technology Transfer and  
Intellectual Property

Date: 2-13-97

(c) (3) (ix) 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 that 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)-95-007

REQUESTOR

Amoco Technology  
Company

CONTRACT SCOPE OF WORK

Biomass to Ethanol  
Conversion Technology

RATIONALE FOR DECISION

58% cost sharing

DISPOSITION