

## STATEMENT OF CONSIDERATIONS

REQUEST BY AIR PRODUCTS AND CHEMICALS, INC. FOR AN ADVANCE WAIVER OF PATENT RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC36-02AL67613 ENTITLED "DEVELOPMENT OF A TURNKEY COMMERCIAL HYDROGEN FUELING STATION"; W(A)-05-001; CH-1253

As set out in the attached waiver petition and in subsequent discussions with DOE Patent Counsel, Air Products and Chemicals, Inc. (Air Products) has requested an advance waiver of domestic and foreign patent rights for all subject inventions made under the above-identified cooperative agreement by its employees and its subcontractors' employees, regardless of tier, except inventions made by subcontractors eligible to retain title to inventions pursuant to P.L. 96-517, as amended, and National Laboratories.

This waiver petition was originally submitted to the Albuquerque Field Office in 2002 and assigned DOE Waiver No. W(A)-02-017. However, due to an apparent administrative oversight by Air Products, the waiver request was subsequently removed from consideration due to Air Products' failure to respond to the inquiries of DOE Patent Counsel in the Albuquerque Field Office, subject to Air Products having the right to resubmit its waiver petition. Administration of this agreement was later transferred to the Golden Field Office, whereupon Air Products resubmitted its waiver petition consistent with DOE's waiver requirements. The resubmitted waiver petition was in turned assigned DOE Waiver No. W(A)-05-001 identified above.

Referring to item 2 of Air Products' waiver petition, the purpose of this agreement encompasses the development of a hydrogen fueling station for fuel cell vehicles. The major tasks under the agreement include developing effective means for reforming natural gas to produce a reformat stream, purifying the hydrogen-rich reformat to high purity hydrogen, and to store, meter and dispense hydrogen into fuel cell vehicles.

The work under this agreement is expected to take place over a period of three years at a total cost of \$8,035,000. Air Products is obligated to cost share \$3,455,000, or about 43 percent of the total cost of the project.

In view of the cost sharing and other equities between Air Products and its subcontractors, it is anticipated that the parties will develop an appropriate allocation of patent rights among the participants to facilitate the expeditious development of the technology forming the subject matter of the agreement. Accordingly, DOE will waive title to all subject inventions made by Air Products' employees and its subcontractors' employees, regardless of tier, except inventions made by subcontractors eligible to retain title pursuant to P.L. 96-517, as amended, or National Laboratories, to Air Products or its subcontractors, as mutually agreed by the parties. Except as otherwise approved in writing by DOE Patent Counsel, a party's acceptance of a subcontract under this agreement, at any tier, shall constitute Air Products' certification that it has provided that party with a copy of this Statement of Considerations and that party's notice to DOE that it accepts the terms and conditions of this advance waiver. Additionally, subcontractors who receive title under this waiver shall notify DOE Patent Counsel in writing of such disposition of patent rights.

Referring to items 5-9 of Air Products' waiver petition, Air Products is a worldwide technology leader in gas processing applications. This, coupled with Air Products' cost sharing, clearly demonstrates the likelihood that Air Products will continue development and commercialization of the results of this agreement.

This advance waiver of the Government's rights in inventions is subject to the provisions of the attached advance patent waiver clause, and the government license, march-in rights, and preference for U.S. industry provisions set out in 35 U.S.C. 202-204. Additionally, consistent with DOE's current assistance regulations, Air Products has not been required to agree to license its background patents and data as previously required by DOE. The advance patent waiver also includes a U.S. Competitiveness clause (paragraph t) which requires products embodying any waived invention or produced through the use of any waived invention be manufactured substantially in the United States unless the participant can show to the satisfaction of DOE that it is not commercially feasible to do so. The contractor further agrees to make the above condition binding on any assignee, licensee or other entity acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Contractor or other such entity receiving rights in any waived 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 DOE.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition as there are a variety of competing processes for producing hydrogen, fuel stations, and fuel cell power plants.


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 agreement in a fashion which will make the 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 784, all of which have been considered, it is recommended that the requested waiver be granted.

  
Thomas G. Anderson  
Assistant Chief Counsel  
Intellectual Property Law Division

Date: 1-11-05

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 will 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:**

  
Steven G. Chalk, Director  
Office of Hydrogen, Fuel Cells and  
Infrastructure Technologies Program  
EE-2H

Date: 7/25/05

**APPROVAL:**

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

Date: AUG 1 2005