

## STATEMENT OF CONSIDERATIONS

REQUEST BY PRAXAIR, INC. FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE CONTRACT NO. DE-FC36-01GO11004 ENTITLED "LOW COST HYDROGEN PRODUCTION PLATFORM" W(A)-01-039; CH-1084

As set out in the attached waiver petition and in subsequent discussions with DOE Patent Counsel, Praxair, Inc. (Praxair) 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.

Referring to item 2 of Praxair's petition, the purpose of this agreement is to develop and demonstrate a small-scale hydrogen production system based on steam methane reforming (SMR). The central focus of the three phase program contemplated by the agreement is to develop manufacturing approaches that will allow the hydrogen production systems to be factory built in moderate to large production runs to significantly reduce the unit capital costs. Among other uses, the program contemplates the use of small standardized plants for on-site production of hydrogen used in fuel cells in various transportation applications.

The work under this agreement is expected to take place over a period of about one year at a total cost of \$342,322. Praxair is obligated to cost share \$113,124, or about 33 percent of the total cost of the project. In view of the cost sharing and other equities between Praxair 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 Praxair's 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, to Praxair 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 Praxair's 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.

Referring to items 5-9 of Praxair's waiver petition, Praxair and its predecessor companies have been leading suppliers of industrial gases and gas systems throughout the world. As noted in its petition, Praxair was a pioneer and has continually been heavily involved in the development of hydrogen production, purification, and distribution technologies. This, coupled with Praxair's cost sharing, clearly demonstrates the likelihood that Praxair 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 usual advance patent waiver and background data licensing provisions and the government license, march-in rights, and preference for U.S. industry provisions set out in 35 U.S.C. 202-204. The advance patent waiver also includes the attached 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, or 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. If anything, the technology forming the subject matter of this agreement can be expected to expand already crowded market.

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 Part 784, all of which have been considered, it is recommended that the requested waiver be granted.



Thomas G. Anderson  
Assistant Chief Counsel  
Office of Intellectual Property Law

Date: 12/6/01

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 contract, where through such modification or extension, the purpose, scope or cost of the contract has been substantially altered.

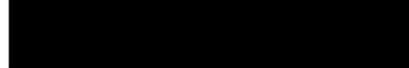
CONCURRENCE:



James G. Daley, Director  
Office of Hydrogen and Superconductivity  
Technologies, EE-15

Date: 3/20/02

APPROVAL:



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

Date: 3-22-02

## U.S. COMPETITIVENESS CLAUSE

### (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(C)-01-039 (CH-1084)**

**REQUESTOR**

Praxair, Inc.

**CONTRACT SCOPE OF WORK**

Low Cost Hydrogen Production  
Platform

**RATIONALE FOR DECISION**

33% cost sharing

**DISPOSITION**