

STATEMENT OF CONSIDERATIONS

REQUEST FOR ADVANCE WAIVER OF PATENT RIGHTS BY AIR PRODUCTS & CHEMICALS, UNDER DOE COOPERATIVE AGREEMENT NO. DE-FG36-05GO85026; W(A)-06-005, CH-1361

The Petitioner, Air Products and Chemicals Inc. (Air) has requested a waiver of: (a) domestic and foreign patent rights for all subject inventions conceived solely by Air and (b) Air's undivided interest, based on its employees contributions, to joint domestic and foreign patent rights for all subject inventions conceived, arising under the above referenced cooperative agreement.

The objective of Air's cooperative agreement is to deploy hydrogen fuel stations and H₂-ICE vehicles at multiple locations in California. These fueling stations will supply hydrogen from a variety of production sources including one station supplied via a hydrogen pipeline in a highly visible area of urban Los Angeles. Existing stations will be upgraded with high-pressure fueling at 700 Bar and to accommodate liquid dispensing for OEM LH2 vehicle platforms. A liquid/gaseous hydrogen delivery concept for supplying hydrogen fueling stations will also be evaluated. A data collection system will be deployed at the refueling sites known as enterprise Remote Access Monitoring (eRam).

The total anticipated cost of the cooperative agreement is \$8,880,000 including Air's contribution of \$4,440,000, or fifty percent (50%) of the total cost of the work under the cooperative agreement. This waiver is contingent upon Air maintaining, in aggregate, the above cost sharing percentage over the course of the agreement. In addition to cost sharing, Air is providing further support for this project in the form of scientific equipment and infrastructure.

Referring to items 5-9 of the waiver petition, Air is a leading technology company that provides commercial products throughout the world. Air has been an industry leader in fostering the hydrogen economy and has in-depth experience in hydrogen production supply, compression, storage, dispensers and system and process integration.

Headquartered in Allentown, PA, Air has annual revenues in excess of \$8 billion, operations in 30 countries, and more than 20,000 employees worldwide. Air was the first to produce liquid hydrogen fuel on a large scale in conjunction with the U.S. Air Force and NASA space programs in the 1950s, and is still the sole provider of hydrogen energy for America's Space Shuttle missions.

At this time a number of hydrogen technologies are in commercial or pre-commercial stages. New technologies generated under this cooperative agreement will offer alternatives to the existing commercial technologies, fostering greater competition.

Therefore, the grant of this waiver should effectively promote the continued development and commercial utilization of the subject inventions since Air will be able to develop these technologies and incorporate them into its commercial portfolio without an adverse patent interest overshadowing its development efforts. Thus, the waiver is necessary for development to proceed given the size and nature of the investment necessary to commercialize hydrogen distribution and storage inventions.

Air has agreed that this waiver will be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, set out in 35 U.S.C. 202-204. Further, Petitioner has agreed to the attached U.S. Competitiveness provision (paragraph (t)). In brief, Petitioner has agreed that products embodying a waived invention or produced through the use of a waived invention will be manufactured substantially in the United States unless the Petitioner can show to the satisfaction of the DOE that it is not commercially feasible to do so. Air has further agreed to make the above conditions binding on any assignee or licensee or any entity otherwise acquiring rights in the waived inventions, including subsequent assignees and licensees. Should Air or other such entity receiving rights in a 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 inventions is suspended until approved in writing by DOE.

Referring to item 10 of the waiver petition, granting this waiver will not have an adverse impact on competition. If anything, the technology forming the subject matter of the collaboration can be expected to provide a new entrant into the market.

Considering the foregoing, it is believed that granting this waiver will provide Air 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.


Mark F. LaMarre
Acting Assistant Chief Counsel
Intellectual Property Law Division

Date: 7/31/2006


Mike J. Dobbs
Patent Attorney
Intellectual Property Law Division

Date: 7/27/2006

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:

[REDACTED]
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Energy Efficiency and Renewable
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Date: 9/29/06

APPROVAL:

[REDACTED]
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Date: 10/4/06

(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.