

## STATEMENT OF CONSIDERATIONS

REQUEST BY VELOCYS, INC. FOR AN ADVANCE WAIVER OF PATENT RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC36-04GO14154 ENTITLED "OLEFINS BY HIGH-INTENSITY OXIDATION (OHIO)"; W(A)-04-037; CH-1204

As set out in the attached waiver petition and in subsequent discussions with DOE Patent Counsel, Velocys, Inc. (Velocys) 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 pursuant to P.L. 96-517, as amended, and National Laboratories. Velocys is leading a teaming arrangement with the Dow Chemical Company (Dow) to develop an ethylene production process based on oxyhydrogenation of ethane. Dow is a large business subcontractor under the agreement.

Referring to item 2 of Velocys's waiver petition, the work under this agreement is being done under DOE's "Chemical Industries of the Future" program. To accomplish the objectives of this agreement, the parties expect to use microchannel process technology currently being commercialized by Velocys in several chemical processing applications which are adapted for use in ethylene production.

The work under the agreement is expected to take place over a period of about three years at a total cost of \$3,379,914. Velocys is obligated to cost share \$1,129,914, or 33 percent of the total cost of the project.

In view of the cost sharing and other equities between Velocys 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 Velocys'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, or National Laboratories, to Velocys 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 Velocys'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. 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 Velocys waiver petition, Velocys is a technical leader in the field of microchannel process technology forming the basis for the development contemplated by this agreement. Similarly, the Dow Chemical Company, Velocys team member leads the industry in ethylene production. This, coupled with Velocys's cost sharing, clearly demonstrates the likelihood that Velocys 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. 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, 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 process technologies in the relevant ethylene process markets.

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  
Intellectual Property Law Division

Date: 10/25/04

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:

  
Douglas E. Kaempf, (Acting) Director  
Office of Industrial Technology  
Program, EE-2F

Date: 11/8/04

APPROVAL:

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

Date: 11/09/04

(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(A)-04-037

(CH-1204)

REQUESTOR

CONTRACT SCOPE OF WORK

RATIONALE FOR DECISION

DISPOSITION

VOLOCYS, INC.

OLEFINS BY HIGH-INTENSITY  
OXIDATION

33% cost sharing