

STATEMENT OF CONSIDERATIONS

REQUEST BY INEOS USA LLC, OPERATING AS INEOS TECHNOLOGIES, (INEOS) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER A PROPOSED SUB-AWARD OF GRANT NO. DE-FG36-04GO14315 BETWEEN BIOENGINEERING RESOURCES, INC. (BRI) AND DOE; W(A)2008-028

The Petitioner, INEOS, has requested a waiver of domestic and foreign patent rights for all subject inventions arising from its participation under the above referenced award entitled "Thermochemical Conversion of Corn Stover." Petitioner is in the process of acquiring Bioengineering Resources, Inc. (BRI), the original small business grantee. In anticipation of its pending acquisition, Petitioner has proposed to become a sub-awardee under BRI by means of a sub-award agreement (sub-award).

As a result of the pending acquisition of BRI by INEOS, title to subject inventions developed by BRI under its prime award will be transferred to INEOS once the acquisition has been finalized. Since BRI is a small business entity, subject inventions made by BRI under the award are not subject to the U.S. Competitiveness provision. Thus any subject invention made by BRI under the award and subsequently acquired by INEOS will not be subject to U.S. Competitiveness. However, as discussed in detail below, subject inventions made by INEOS under its sub-award will be subject to the attached U.S. Competitiveness provision.

The objective of the original agreement with BRI is performing research and development related to the conversion of corn stover to ethanol. The overall work includes the optimization of process variables and the creation of detailed design and cost projections for the integration of facilities to convert corn stover using the developed technology into existing conventional ethanol plants.

The scope of the work that the Petitioner proposes to perform under the sub-award relates to performing tests and compiling results for various parameters of the gasification and fermentation process, including determining: (1) the optimal stover moisture content, (2) the optimal stover feed rate and gasifier oxygen content, (3) the ability of corn stover to produce fermentable syngas, and (4) the need for carbon bed filtration in the gas clean-up stage. Petitioner's completion of its work under the proposed sub-award would require extensive use of both the assets and employees which Petitioner intends to acquire in the potential transaction.

The total approved budget is \$2,514,716 of which \$525,000, or approximately 20%, is being cost shared by BRI. This waiver is contingent upon maintaining, in aggregate, the above cost sharing percentage over the course of the award.

Petitioner intends to continue and expand upon the work of BRI. BRI has been operating to develop biological processes, particularly gasification and fermentation processes. As a leader in the petrochemical industry, Petitioner has significant experience researching, developing and commercializing chemical technologies and processes. Given its expertise and anticipated acquisition of BRI, it is reasonable to conclude that Petitioner will continue to develop and ultimately commercialize the technology and products which may arise from this award.

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. The Petitioner has also agreed to the attached U.S. Competitiveness Provision, paragraph (t). In brief, Petitioner agrees that any feedstock grown in the United States and processed using any waived invention will be substantially processed in the United States. Thus Petitioner agrees that any feedstock grown in the United States will not be exported outside the United States for the practice of any waived invention unless the 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. Furthermore, the Petitioner also agrees that it will first commercialize the waived inventions in the United States unless the Petitioner can show to the satisfaction of the DOE that it is not commercially feasible to do so. The ability of INEOS to implement in the U.S. products embodying any waived inventions will be accelerated if it has the ability to manufacture products resulting from foreign grown feedstock at its world-wide locations.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition because Petitioner's retention of rights will increase competition among ethanol producers and licensors of ethanol technologies and reduce market concentration. First, the Technology's use of corn stover as a feedstock would directly compete with acid hydrolysis, enzymatic and other processes for converting cellulosic and carbonaceous materials, such as corn stover, to a form that can be fermented or otherwise biologically processed to produce ethanol and other alcohols. If Petitioner receives the requested waiver, any potential subject inventions developed under the sub-award would broaden the range of materials usable as a biofuel feedstock and consequently should incentivize further research, innovation and commercialization within the ethanol and biofuels industry. Second, the ethanol marketplace currently supports many ethanol processes practiced by a multitude of parties for converting a wide variety of feedstock to ethanol. Because Petitioner is not currently an owner or licensee of any technology that would be competitive with the technology to be produced under the sub-award, Petitioner's receipt of a waiver will decrease market concentration.

Considering the foregoing, it is believed that granting this waiver will provide Petitioner with the necessary incentive to invest its resources in commercializing the results of the agreement in a manner that will make the above technology available to the public in the shortest 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.



Brian J. Lally
Assistant Chief Counsel
Intellectual Property Law Division
Chicago Office

Date: June 30, 2008

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 determined above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of the agreement, where through such modification or extension, the purpose, scope, or cost of the agreement has been substantially altered.

CONCURRENCE:



J. A. Beaudry-Losique
Program Manager
Office of Biomass Program
EE-2E

Date: 7/17/08

APPROVAL:



Paul A. Gottlieb
Assistant General Counsel for Technology
Transfer and Intellectual Property

Date: 7-22-08

(t) U. S. Competitiveness

The Petitioner agrees that any feedstock grown in the United States and processed using any waived invention will be substantially processed in the United States. Thus, Petitioner agrees that any feedstock grown in the United States will not be exported outside the United States for the practice of any waived invention unless the Petitioner can show to the satisfaction of the DOE that it is not commercially feasible to do so. The Petitioner also agrees that it will first commercialize the waived inventions in the United States unless the Petitioner can show to the satisfaction of the DOE that it is not commercially feasible to do so. DOE agrees that INEOS has an established and expanding presence in the U.S., and that it is committed to carrying out business in the U.S. The ability of INEOS to implement in the U.S. products embodying any waived inventions will be accelerated if it has the ability to manufacture products resulting from foreign grown feedstock at its world-wide locations. The Petitioner and any licensee, sub-licensee or assignee thereof, agrees that it will not license, sub-license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Petitioner 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.