

STATEMENT OF CONSIDERATIONS

REQUEST BY HONEYWELL FOR AN ADVANCE WAIVER OF
DOMESTIC AND FOREIGN PATENT RIGHTS UNDER
SUBCONTRACT WITH THE UNIVERSITY OF DELAWARE UNDER
DOE COOPERATIVE AGREEMENT NO. DE-FC07-00ID13882; W(A)-
00-031; CH-1047

The Petitioner, Honeywell, has requested a waiver of domestic and foreign patent rights for all subject inventions arising from its participation under the above referenced cooperative agreement entitled "Model-Based Approach to Soft-Sensing and Diagnosis Control of a Continuous Digester."

The objective of the Petitioner's subcontract is to develop a model based sensing and control system for continuous pulp digesters. During the subcontract, Petitioner will install a PlantScape system and Pulpstar sensor at its mill to develop mill data, which will ultimately host the model-based sensing and control software application during field tests. Petitioner will also develop PlantScape software application for model-based sensing and implement multivariable control system for the software application. During the mill trials, Petitioner will test the performance of the model-based sensor and control system on a pulp digester.

The total anticipated cost of the subcontract is \$391K, with the Petitioner providing \$100K, in in-kind contribution and cash, for about twenty five percent (25%) cost sharing. This waiver is contingent upon the Petitioner maintaining, in aggregate, the above cost sharing percentage over the course of the agreement.

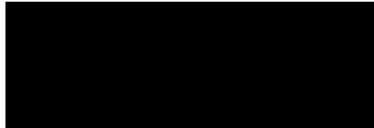
As noted in its waiver petition, Petitioner's investment in the research, development and production of its PlantScape hybrid process control and the Robust Multivariable Predictive Control Technology (RMPCT) is well over \$68 million. Although Petitioner does not have an established market for a model-based approach to soft-sensing and diagnostics for control in the continuous pulp digester, it expects to be able to leverage its experience and know-how to develop controller technology in this field. Petitioner anticipates that additional investment of up to \$2 million will be required to bring a product-ready, integrated, field-tested technology to market. Considering Petitioner's technical expertise, established market position, and significant investment in this technology including sizable cost sharing in this subcontract, it is reasonable to conclude that Petitioner will continue to develop and ultimately commercialize the technology and products which may arise from this subcontract.

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. Further, Petitioner has agreed to the U.S. competitiveness provisions as attached to this Statement. In brief, Petitioner has agreed that products embodying intellectual property developed under this agreement shall be substantially manufactured in the United States, and that Petitioner will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Additionally, Petitioner has agreed to contractor data licensing provisions as attached herein.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition. The model-based approach to soft-sensing and diagnostics for control in the continuous pulp digester, as proposed by the Petitioner, is only one of many competing technologies that can be used by the *continuous pulp industry*. The success of this subcontract can be expected to stimulate further investment and competition in this technology.

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 subcontract in a fashion which will make the above 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.



Daniel D. Park
Assistant Chief Counsel
Office of Intellectual Property Law

Date: 4/13/01

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 shall not apply to any modification or extension of the subcontract, where through such modification or extension, the purpose, scope or cost of the subcontract has been substantially altered.

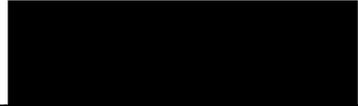
CONCURRENCE:



Marsha Quinn
Director, Office of Industrial
Cross-cut Technologies
EE-20

Date: 4/30/01

APPROVAL:



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

Date: 5-2-01

(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.

Rights in Data - General (JUN 1987), is amended by adding paragraph (k) as follows:

(k) Contractor Licensing. Except as may be otherwise specified in this contract as data not subject to this paragraph, the contractor agrees that upon written application by DOE, it will grant to the Government and responsible third parties, for purposes of practicing a subject of this contract, a nonexclusive license in any limited rights data or restricted rights software on terms and conditions reasonable under the circumstances including appropriate provisions for confidentiality; provided, however, the contractor shall not be obliged to license any such data if the contractor demonstrates to the satisfaction of the Secretary of Energy or designee that:

(1) Such data are not essential to the manufacture or practice of hardware designed or fabricated, or processes developed, under this contract;

(2) Such data, in the form of results obtained by their use, have a commercially competitive alternate available or readily introducible from one or more other sources;

(3) Such data, in the form of results obtained by their use, are being supplied by the contractor or its licensees in sufficient quantity and at reasonable prices to satisfy market needs, or the contractor or its licensees have taken effective steps or within a reasonable time are expected to take effective steps to so supply such data in the form of results obtained by their use; or

(4) Such data, in the form of results obtained by their use, can be furnished by another firm skilled in the art of manufacturing items or performing processes of the same general type and character necessary to achieve the contract results.

WAIVER ACTION - ABSTRACT
W(A)-00-031

REQUESTOR

CONTRACT SCOPE OF
WORK

RATIONALE FOR DECISION

Honeywell

Development of a model
based sensing and control
system for continuous pulp
digesters

25% cost sharing