STATEMENT OF CONSIDERATIONS

ADVANCE WAIVER OF PATENT RIGHTS TO PPG INDUSTRIES, INC. UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC36-04GO14044 FOR "ADVANCED THERMOELECTRIC MATERIALS FOR EFFICIENT WASTE HEAT RECOVERY" CH-1367, W(A)-06-014

PPG Industries Inc. (PPG) has petitioned for an advance waiver of domestic and foreign patent rights to inventions conceived or first actually reduced to practice under DOE Cooperative Agreement No. DE-FC36-04GO14044. This advance waiver is intended to apply to all subject inventions of PPG's employees' and those of its subcontractors, regardless of tier, except subcontractors eligible to obtain title pursuant to P.L. 96-517, as amended, and National Laboratories.

As brought out in its waiver petition, PPG is guiding Pacific Northwest National Laboratory's (PNNL) collection of data on an oxyfuel-fired glass furnace waste heat stream to facilitate modeling and generator development and will test the generator provided by PNNL in an oxyfuel-fired glass furnace.

As indicated in its response to Question 3 in its waiver petition, the total value of this agreement is expected to be about \$3,645,996, with PPG's cost share of \$1,695,996 approximately 47% of the total cost. The performance period for this agreement is expected to be three years.

In response to Question 7 of the waiver petition, PPG has invested \$250,000 in-kind resources to date in the work to be preformed under this contract.

As brought out in Question 5, PPG has developed oxyfuel-fired glass furnace technology and successfully operates two of the three such furnaces existing in North America. PPG holds many patents in the areas of glass manufacturing, waste heat recovery, oxyfuel-fired glass furnace technology, and waste heat recovery regeneration for air-fired glass furnaces.

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 PPG'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.

This advance waiver of the Government's rights in inventions is subject to the usual advance patent waiver terms. Those terms include the usual 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 a U.S. Competitiveness clause, (paragraph t), which requires that 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 any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Contractor or other such entity receiving rights in any waived inventions 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.

The grant of this waiver is not expected to have any adverse effects on competition or market concentration. In response to Question 10, granting of this waiver will provide PPG with the incentive to promote the development and commercialization of inventions made under this contract.

Considering the foregoing, and in view of the statutory objectives to be attained and the factors to be considered, it has been determined that this advance waiver of patent rights will best

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serve the interest of the United States and the general public. Subject to PPG providing at least 47% cost sharing, in aggregate over the term of this agreement, and subsequent phases of the agreement, it is recommended that the waiver be granted.

Joy Alwan Patent Attorney Intellectual Property Law Division

Date: 18 JA207

Based on the foregoing Statement of Considerations, it is determined that the interest of the United States and the general public will be best served by a waiver of patent rights and foreign rights as set forth therein, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of this cooperative agreement, where through such modification or extension, the purpose, scope or cost of the cooperative agreement is substantially altered.

CONICHIDDENICE. Douglas E. Kagempt

Program Manager Office of Industrial Technologies

Date:

APPROVAL:

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

Date: 2-1

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