STATEMENT OF CONSIDERATIONS

REQUEST BY THE ALCOA INC. ("ALCOA") FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-EE0006020; W(A) 2015-002

ALCOA has requested a waiver of domestic and foreign patent rights for all inventions that may be or have been conceived or first actually reduced to practice by ALCOA in the course of or under the above referenced cooperative agreement entitled "ICME Guided Development of Advanced Cast Aluminum Alloys for Automotive Engine Applications" ("subject inventions"). ALCOA is a sub-recipient to Ford Motor Company ("Ford") under the cooperative agreement. This waiver only applies to the subject inventions of ALCOA. The subject inventions of Ford are covered by a separated patent waiver (W(A) 2014-020).

The objectives of the cooperative agreement includes developing new, lightweight alloy materials to allow for higher cylinder pressures in high efficiency, light-duty passenger vehicle engines. Alcoa's role under the cooperative agreement is to test new materials, develop materials properties and other information necessary for computer modeling and demonstration, create comprehensive cost models covering the potential production and capital costs associated with using the new materials, and supply ingots with the required specification to enable prototype fabrication.

The period of performance for the cooperative agreement is February 1, 2013 through February 1, 2016.

The total anticipated cost of the cooperative agreement is \$4,632,033. DOE is contributing \$3,242,423. The total anticipated cost contributable to the work to be performed by ALCOA is \$856,926 with ALCOA providing \$342,770 for a cost share of 40%. This waiver is contingent upon ALCOA maintaining, in aggregate, the above cost sharing percentage over the course of the cooperative agreement.

ALCOA is a leader in the aluminum industry with more than 100 years of experience in aluminum smelting and materials processing and fabrication techniques for aluminum, alloys, and advanced materials. ALCOA has a history of and commitment to innovation. It has an extensive collection of patents and patent applications and invests tens of millions of dollars annually in research and development.

ALCOA does not anticipate that the granting of this waiver would place ALCOA in a preferred or dominant position. Manufactures use a wide range of metals and materials in the production of internal combustion engines. The ability to continue to use these metals and materials should not be impacted by the granting of the waiver. However, the waiver will support ALCOA's ability to provide an alternative material to the marketplace and increase competition in an already competitive market.

ALCOA 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, ALCOA has agreed to the attached U.S. Competitiveness provision paragraph (t). In brief, ALCOA has agreed that products embodying a waived subject invention or produced through the use of a waived subject invention will be manufactured substantially in the United Sates unless ALCOA can show to the satisfaction of the DOE that is not commercially feasible to do so.

Considering the foregoing, it is believed that granting a waiver to subject inventions of ALCOA will provide ALCOA with the necessary incentive to invest its resources in commercializing the results of the cooperative agreement in a manner that will make the subject inventions 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.

Dan R. Daydel

Glen R. Drysdale Patent Attorney Golden Field Office

5/21/15 Date:

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 cooperative agreement, where through such modification or extension, the purpose, scope, or cost of the cooperative agreement has been substantially altered.

CONCURRENCE:

APPROVAL:

John Lucas

David Howell Acting Director Vehicle Technologies Office

Date: 7/25/2015

Transfer and Intellectual Property
Date: 9/29/2015

Assistant General Counsel for Technology