

## STATEMENT OF CONSIDERATIONS

### REQUEST BY EATON CORPORATION (EATON) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE AWARD NO. DE-EE0005665 W(A) 2012-032

EATON has requested a waiver of domestic and foreign patent rights for all subject inventions arising from its participation under the above-referenced award entitled “Roots Air Management System with Integrated Expander.” The award was made under the Research and Development of Fuel Cells for Stationary and Transportation Applications Funding Opportunity Announcement (DE-FOA-0000360). Ballard Power Systems Inc. (Ballard) and Kettering University (Kettering) are sub-recipients under the award. This waiver only applies to EATON. Ballard will have to petition for a patent waiver if it wants the patent rights to subject inventions arising from its participation. The Bayh-Dole Act applies to Kettering University so a patent waiver is not necessary for its participation.

The goal of the project funded by the award is to combine a number of EATON developed blower technologies together with a roots expander for energy recuperation in order to achieve a cost effective, efficient and mass producible air management system. EATON anticipates their efforts will include developing an expander plastic housing and fully integrated expander and motor intended to reduce cost and part count. Ballard will provide Fuel Cell OEM input into the design and specification of the air management system and integrate EATON’s compressor/expander with the stack. Kettering will provide critical analytical support for the expander design.

The total anticipated cost of the award is \$2,627,041. EATON is obligated to provide a cost share amount of \$525,411 or a cost share percentage of 20%. This waiver is contingent upon EATON maintaining the above cost share percentage.


As indicated in more detail in its petition, EATON has a long successful history in designing and manufacturing precision Roots-type positive displacement superchargers for highly specific automotive applications. It has produced more than 3 million superchargers for various auto manufacturers. More specifically to fuel cells, EATON has utilized its core roots blower technology for PEM fuel cells used by automotive and bus manufacturers since 1997. Over 50 buses in commercial use rely on EATON’s blower technology with PEM fuel cells.

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

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition. According to the petition, EATON is a global component

manufacturer having varying percentages of market share, depending on segment type. Some of the products position EATON as a leader, other products place EATON in the mainstream, and still others position EATON as a follower. Specifically to this technology, EATON's vehicle supercharging boosting market position compared to other boosting technologies is 3%. The acquisition of the subject waiver rights will not materially change or better the position of EATON's Supercharger Division within the market due to the slight market position currently held.

Considering the foregoing, it is believed that granting this waiver will provide EATON with the necessary incentive to invest its resources in commercializing the results of the award 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.

  
Glen R. Drysdale  
Patent Counsel  
Golden Field Office

Date: 11/06/12

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

CONCURRENCE:

APPROVAL:



Sunita Satyapal  
Program Manager  
Fuel Cell Technologies Program

John T. Lucas  
Assistant General Counsel for Technology  
Transfer and Intellectual Property

Date: 12/10/12

Date: 12/17/2012

## **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 DOE that it is not commercially feasible to do so. In the event 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 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 invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in any waived invention is suspended until approved in writing by DOE.