

STATEMENT OF CONSIDERATIONS

REQUEST BY ROLLS-ROYCE FUEL CELL SYSTEMS INC. (RRFCS) FOR WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS IN AN IDENTIFIED INVENTION MADE UNDER A SUB-AWARD OF COOPERATIVE AGREEMENT NO. DE-FC36-04GO14318 BETWEEN CUMMINS POWER GENERATION AND DOE, ENTITLED "PARTIAL OXIDATION PREMIX BURNER"; W(I)-2012-011, CH-1660

The Petitioner, RRFCS has requested a waiver of domestic and foreign patent rights in the following invention and related patents and patent applications.

S-109,984, entitled "Partial Oxidation Premix Burner."

The above-identified invention was made under a sub-award of Cooperative Agreement No. DE-FC36-04GO14318. The purpose of this waiver is to vest Petitioner with clear title to the invention to enable Petitioner to commercialize the technology forming the subject matter of the inventions. It should be noted that while the Patent Waiver Petition submitted by RRFCS is dated May 24, 2007, DOE has no record of receiving the petition until earlier this year.

The overall objective of the cooperative agreement under which the invention arose was to develop a "Diesel Fueled SOFC for Class 7/Class On-Highway Truck Auxiliary Power." The identified invention was developed under a sub-award issued to Petitioner's predecessor SOFCO EFS Holding LLC (SOFCO) for the design and development of the SOFC subsystem comprised of a fuel cell power module with a diesel fuel reformer. The intellectual property generated by SOFCO under the sub-award was subsequently transferred to RRFCS via an Asset Purchase Agreement effective March 30, 2007.

The identified subject invention describes a partial oxidation premix burner with downstream catalytic burnout for use in an integrated fuel cell power system. The benefits of this invention include: increased efficiencies, start-up heat to bring the fuel cell and reformer up to operating temperature, a reduced blanket-gas to protect against oxidation of the anode, and a partially oxidized gas used to start-up the catalytic partial oxidation reformer.

Over the course of the project, the total amount of the sub-award to SOFCO was projected to be approximately \$2.2 million with the SOFCO providing about thirty percent (30%) cost share. The original period of performance was from September 1, 2004 to August 31, 2007; however, in the fall of 2005 the sub-award project was placed on "hold" status due budget issues and was never restarted. Due to the project being put on indefinite hold, only \$474,622 of the \$1,480,470 in DOE funding was actually obligated under the identified sub-award.


RRFCS and its predecessors, have significant experience in the area of fuel cell development including the development of fuel processors for high-temperature fuel cells. Petitioner's development of fuel cell processor technology began in 1994 as an outgrowth of SOFC's solid oxide fuel cell program and has developed over time to cover a wide range of fuels ranging from natural gas to marine diesel. In pursuing the development of reforming technology, the Petitioner and its predecessors developed special expertise in distillate fuel processing which led to an innovative natural gas reformer that does not require the addition of water.

The grant of this waiver will effectively promote the continued commercial utilization of the subject invention since RRFCS and any future licensees/assignees will be able to continue to develop the technology and incorporate it into their commercial portfolios without an adverse patent interest overshadowing their development efforts. Thus, this waiver is necessary for development and commercialization to continue.

The Petitioner has agreed to accept the terms and conditions of the Large-Business Confirmatory License, including the U. S. Government license, march-in and preference for U.S. industry provisions, as set out in 35 U.S.C. 202-204, as well as the U.S. Competitiveness provision. In brief, Petitioner has agreed that products embodying a waived invention or produced through the use of a waived invention will be manufactured substantially 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 Petitioner has further agreed to make the above conditions binding on any assignee or licensee or any entity otherwise acquiring rights in the waived inventions, including subsequent assignees and licensees.* Should the Petitioner or other such entity receiving rights in a waived invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived inventions is suspended until approved in writing by DOE.

Referring to item 10 of the waiver petition, granting this waiver will not have an adverse impact on competition. Several other companies are developing different types of technologies in the area of the subject invention that would not appear to be negatively impacted by identified on subject invention.


Considering the foregoing, it is believed that granting this waiver will allow Petitioner to commercialize of the results of the agreement in a fashion which will make the 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 Part 784, all of which have been considered, it is recommended that the requested waiver be granted.


Karen L. Blouin
Assistant Chief Counsel
Intellectual Property Law Division

Date: October 15, 2018


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

CONCURRENCE:


Sunita Satyapal
Program Manager
Office of Fuel Cell Technologies
Program EE-2H

Date: 11/9/18

APPROVAL:


Brian Lally
Assistant General Counsel for Technology
Transfer and Intellectual Property

Date: 12/5/18