

Statement of Considerations

**REQUEST BY UNITED TECHNOLOGIES CORPORATION, PRATT & WHITNEY MILITARY ENGINES, FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN RIGHTS IN SUBJECT INVENTIONS MADE IN THE COURSE OF OR UNDER UT-BATTELLE, LLC SUBCONTRACT NO. 400010288 UNDER PRIME CONTRACT NO. DE-AC05-00OR22725; DEPARTMENT OF ENERGY (DOE) WAIVER DOCKET W(A)2010-051 [ORO-800]**

United Technologies, Pratt & Whitney Military Engines (Petitioner) has made a timely request for an advance waiver to worldwide rights in Subject Inventions made in the course of or under UT-Battelle, LLC Subcontract No. 400010288 entitled, and "Bulk Amorphous Aluminum Program" under UT-Battelle Prime Contract No. DE-AC05-00OR22725. The scope of work involves the production of engine components using a conventional powder metallurgy approach. The work is sponsored by the Defense Advanced Research Projects Agency (DARPA).

The dollar amount of the subcontract, including fee, is \$998,579 with Petitioner cost sharing 0% of the estimated work. The period of performance is approximately 12 months. Although Petitioner is not contributing cost share to this effort (one consideration for the grant on an advanced waiver), this research and development project is being funded by DARPA with one objective of the work to assist the Petitioner in bringing this technology from the laboratory to production ready status for both commercial and military applications. Thus, it is expected that the participation of the Petitioner will expedite the attainment of the purposes of DARPA's program in this area.

In addition, Petitioner's experience and expertise will contribute substantially to the development of the inventions made under the subcontract. Petitioner is one of the leading aircraft engine manufacturers in the United States (U.S.) and has a materials research and development center, the Materials & Processes Engineering (MPE) laboratory. Over the last ten years, the MPE has conducted research under two previous DARPA funded Structural Amorphous Metals (SAM) programs and has unique capabilities required for the success of the proposed program including: extensive knowledge on the chemistry and processing requirements for SAM aluminum alloys, achieving optimal material properties, engine component manufacturing, jet engine systems, and engine component test facilities.

Petitioner has made a significant investment of private funding which will directly assist and further promote development of the work to be performed under the subcontract. Petitioner has made a direct investment of over \$5 million to date to develop SAM aluminum alloys and components. Furthermore, the SAM technology currently is not sufficiently developed for commercial use and thus, even if the current subcontract effort were successful, the technology would still require significant further development prior to commercialization.

Petitioner has agreed to accept the attached DOE waiver terms and conditions if the requested waiver is granted. Specifically, Petitioner agrees to abide by the conditions set forth at 35 U.S.C. §202-204 relating to the Government license, march-in rights, preference for U.S. industry, as well as U.S. Competitiveness.

Petitioner 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 Petitioner 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. Petitioner 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 Petitioner 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 the waived invention is suspended until approved in writing by DOE.

Granting of the waiver should have little effect on competition since there are several technology options, this being one of many previously or yet-to-be developed in the marketplace. Moreover, SAM technology will require significant additional development prior to commercial introduction. Thus, there should not be undue market concentration of Petitioner products.

In view of the objectives and considerations set forth in 10 CFR 784.4, all of which have been considered, it is recommended that the requested waiver for worldwide patent rights in Subject Inventions be granted.



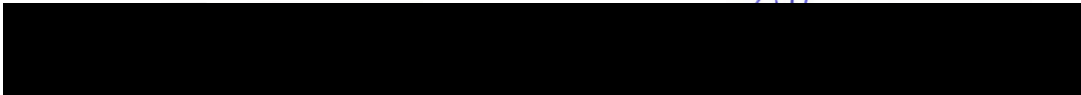
Emily G. Schneider  
Assistant Chief Counsel for  
Intellectual Property

Date 7/19/2011

Based on the foregoing Statement of Considerations and the representations in the attached Waiver Petition, it is determined that the interest of the U.S. and the general public will best be served by a waiver of U.S. and foreign patent rights, and therefore, the waiver is granted. This waiver shall not apply to a modification or extension of the subcontract where, through such a modification or extension, the purpose, scope or cost of the subcontract has been substantially altered.

CONCURRENCE:

APPROVAL:



Leo Christodouros  
Office of Advance Manufacturing  
Office of Energy Efficiency &  
Renewable Energy

4/18/2012  
Date

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

4/19/2012  
Date