STATEMENT OF CONSIDERATIONS

REQUEST FOR ADVANCE WAIVER OF PATENT RIGHTS BY THE BOEING COMPANY, UNDER DOE AWARD NO. DE-FG36-08GO18135; W(A)-09-011, CH-1478

The Petitioner, The Boeing Company (Boeing), has requested a waiver of domestic and certain foreign patent rights for all subject inventions that may be conceived or first actually reduced to practice under the above-identified agreement, and subcontracts thereof. The agreement is entitled "Induction Consolidation/Molding of Thermoplastic Composites Using Smart Susceptors" This waiver shall not impact the rights of those parties subject to Public Law 96-517, as amended, nor shall it grant any rights in inventions made by employees of the National Laboratories.

The objective of Boeing's award is to explore and define the technical/economic viability of induction consolidation/molding of thermoplastic composites using smart susceptors as a sustainable manufacturing platform. Boeing will quantify the current carbon footprint and recycling characteristics for existing materials and compare these values to the candidate for reinforced thermoplastic materials.

The total anticipated cost of the award is \$6,136,586 including Boeing's contribution of \$2,062,224, or about thirty-three percent (33%) of the total cost of the work under the award. This waiver is contingent upon Boeing maintaining, in aggregate, the above cost sharing percentage over the course of the agreement.

Referring to items 4-9 of the waiver petition, Boeing is a leading technology company that provides commercial products throughout the world. Boeing has already invested well in excess of \$100M in the most recent years in the development and implementation of composite technology. Boeing plans to contribute approximately \$647,458 of funding directly to this project beyond the projected financial contributions. Boeing already has large scale composite lay-down machines and high-rate production capabilities, offering immediate commercialization into present-day production programs. Boeing has thousands of issued patents and patent applications of which over a thousand patents issued in recent years directed to composites and related technologies. Boeing has used and continues to use composites in various products such as the Boeing 787 Aircraft, which has booked record orders, as well as Boeing's 737, 767, and 747 Aircrafts. Additionally, Boeing has developed a number of composite Sea Launch components in its partnership with Sea Launch Company, LLC. Therefore, the grant of this waiver should effectively promote the continued development and commercial utilization of the subject inventions since Boeing will be able to develop these technologies and incorporate them into its commercial portfolio without an adverse patent interest overshadowing its development efforts. Thus, the waiver is necessary for development to proceed given the size and nature of the investment necessary to research and design a suitable manufacturing platform.

Boeing has agreed that this waiver will be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, set out in 35 U.S.C. 202-204. Further, Boeing has agreed to the attached U.S. Competitiveness provision (paragraph (t)). In brief, Boeing 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 Boeing can show to the satisfaction of the DOE that it is not commercially feasible to do so. Boeing 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 Boeing 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.

As set out in the attached waiver petition, Boeing has also requested a waiver of patent rights in the subject inventions of its lower tier subcontractors, provided that they agree to the same terms and conditions by which Boeing will be granted the advance waiver. It is believed that this approach will facilitate timely commercialization of the technology by furthering the establishment of business and technical relationships between the parties and providing a mechanism for obtaining meaningful cost sharing between the parties. This waiver contemplates that the parties will allocate title or other rights to inventions among themselves as they deem appropriate during the course of their association consistent with the terms of this waiver. Accordingly, title will be waived directly to a subcontractor upon mutual agreement of Boeing and the subcontractor. However, this waiver will only apply to such subcontractor(s) who provide a letter to the DOE acknowledging their right to ask for a waiver and agreeing to the terms of this waiver.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition. Presently, while there are manufactures of composites in various industries, there are no high-rate composites producers that have adopted the contemplated technological advances likely to result under this award. If anything, the technology forming the subject matter of the collaboration may stimulate competition and will enhance the development of composites and their manufacture.

Considering the foregoing, it is believed that granting this waiver will provide Boeing with the necessary incentive to invest its resources in the commercialization 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 784, all of which have been considered, it is recommended that the requested waiver be granted.

Brian J. Lally	Michael J. Dobbs
Assistant Chief Counsel	Patent Attorney
Intellectual Property Law Division	Intellectual Property Law Division
Date:	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 described above, and therefore the waiver is granted. This waiver will not apply to any modification of extension of the award, where through such modification or extension, the purpose, scope or cost of the award has been substantially altered.

Program Manager
Office of the Industrial Technology
Program
EE-2F

Date: 12/15/0

Paul A. Gottliep
Assistant General Counsel for Technology

Transfer and Intellectual Property, GC-62

Date

WAIVER ACTION - ABSTRACT W(A)-09-011

REQUESTOR

The Boeing Company

CONTRACT SCOPE

Explore and define the technical and economic viability of new composites as a sustainable manufacturing platform

RATIONALE FOR DECISION

Boeing has contributed research expertise and significant capital for the development of cost-effective photovoltaic cells and the grant of this waiver will encourage further development and commercialization.

(t) 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 the DOE that it is not commercially feasible to do so. In the event the 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 agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the 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 the DOE.