

## STATEMENT OF CONSIDERATIONS

REQUEST BY THE BOEING COMPANY (BOEING) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE PROPOSAL NO. DE-PS36-06GO17052; W(A)-07-012

The Petitioner, Boeing, has requested a waiver of domestic and foreign patent rights for all subject inventions arising from its participation under the above referenced cooperative agreement entitled "Solar America Initiative (SAI), Technology Pathways Partnerships Phase I, Topic Area 1 - Systems Class Applications High Efficiency Concentrating Photovoltaic Power System." Boeing's partners are Array Technology, LPI Precision Optics, PV Powered, Inc., and Southern California Electric, none of which are subject to this waiver because they are all small businesses or nonprofits.

The objective of the agreement is to develop a high-concentration photovoltaic solar power system as part of DOE's Solar America Initiative Technology Pathways Partnerships program. The efficiency of the solar cells will be increased, along with a reduction in cost of production and an increase in cell production capacity. The costs of the solar cells will be driven down through a combination of improved wafer utilization and a variety of manufacturing efficiencies, and their efficiency further increased beyond the present state of the art. A non-imaging optical design will provide high concentration and uniform cell illumination in a compact design form, to drive down cost of both materials and labor. The systems, including the inverter, will be developed for improved reliability and cost. Petitioner intends to enter full-scale production of the resulting solar power system upon the conclusion of this agreement.

The total anticipated cost of the agreement is \$45,314,582, with Petitioner and its partners providing 56 % cost share, totaling \$25,359,073<sup>1</sup>. Petitioner is providing \$19,180,408 of that cost share, and its partners are providing the remaining \$6,178,665. This waiver is contingent upon the Petitioner maintaining, in aggregate, the above cost sharing percentage over the course of the agreement.

Petitioner has been in the solar power business for decades. Its companies include Spectrolab, which has been a leading supplier of space photovoltaic power systems since the 1950's, and McDonnell Douglas, which has been a leader of solar concentration systems, including its Solar I and Solar II large scale heliostat concentrator systems. Petitioner also holds numerous patents and publications related to solar technology. Petitioner has invested at least \$75 million over the past ten years in the area of solar technology. Petitioner and its partners are investing over \$25 million in this agreement, and have invested approximately \$12 million over the past three years on directly related technology.

Petitioner 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

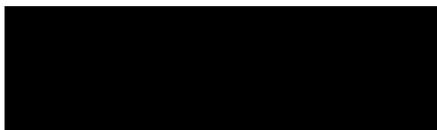
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<sup>1</sup>These figures are slightly different from those stated in the petition because the petition was based on cost estimates. The figures stated herein are based on the final agreement.

35 U.S.C. 202-204. Further, Petitioner has agreed to the U.S. competitiveness provisions as attached to this Statement. In brief, Petitioner has agreed that products embodying intellectual property developed under this agreement shall be substantially manufactured in the United States, and that Petitioner 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 because it will not substantially change Petitioner's position in the marketplace. The marketplace comprises at least a dozen serious competitors in the field of high concentration PV systems and dozens more in closely competing technologies, such as flat panel, thin film, and solar thermal systems. Therefore, granting this waiver will not result in diminished competition; rather, it will enhance competition by enabling Petitioner to enter this competitive space.

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

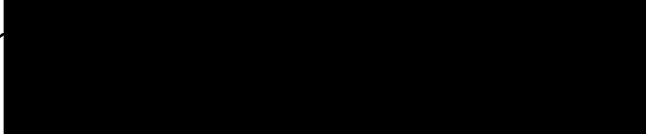


Julia Cook Moody  
Patent Attorney  
Golden Field Office

Date: 1/9/08

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 patents rights of the scope determined above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of the agreement, where through such modification or extension, the purpose, scope, or cost of the agreement has been substantially altered.

CONCURRENCE:



Thomas P. Kimbis,  
Acting Program Manager  
Solar Energy Technology  
EE-2A

Date: 1-23-08

APPROVAL:



Paul A. Gottlieb  
Assistant General Counsel for  
Technology Transfer and  
Intellectual Property

Date: 2-08-08

## 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.