

STATEMENT OF CONSIDERATIONS

REQUEST BY THE SANYO ELECTRIC COMPANY, LTD. (SANYO) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE AGREEMENT NO. DE-FC36-07GO17050; W(A)-08-013

The Petitioner, Sanyo, has requested a waiver of domestic and foreign patent rights for all subject inventions arising from its and Greenray's participation under the above referenced cooperative agreement entitled "Development of an AC Module System," which is part of DOE's Solar American Initiative (SAI). Sanyo is a subrecipient of Greenray. Also, Greenray is a small business entity with patent rights under the Bayh-Dole statute and is not subject to this waiver. The Department of Energy does not have authority to grant Greenray's patent rights to Sanyo.

The objective of the agreement is to develop AC module systems as part of DOE's Solar America Initiative Technology Pathways Partnerships program. At the heart of the AC module system is a grid-tied micro-inverter with the potential to achieve a 30-year lifetime, optimally sized to operate with Petitioner's high-powered, ultra-high-efficiency photovoltaic module. The micro-inverter will have a small physical size, allowing it to be factory integrated into the frame of the module. Custom quick-connectors allow users to plug AC modules together quickly and safely, creating systems of any size. The AC module will have a custom frame that mates with a simplified mounting system for residential applications. Each AC module system will have wireless communication capability to report its performance to a central display for the homeowner.

The total anticipated cost of the agreement is \$5,043,503, with Greenray's 40 % cost share of \$2,049,420. Petitioner will not be receiving DOE funds, but will be contributing cost share toward the project totalling \$430,000¹. This waiver is contingent upon the Petitioner maintaining the above cost sharing over the course of the agreement.

Petitioner manufactures Heterojunction with Intrinsic Thin layer (HIT) photovoltaic modules that will be the platform for the AC module. Petitioner is one of the world's leading manufacturers of wafers, solar cells, PV modules, and inverters, with a present capacity of approximately 150 MW per year. The production volume is ramping up over the next few years to achieve an annual output of 600 MW. Petitioner has a strong R&D competence in PV with a solar R&D division that has generated several patents and research papers related to inverters. This technical excellence has resulted in HIT solar cells with superior temperature attributes and environmentally friendly fabrication processes.

For this agreement, Petitioner will provide cost share in the amount of \$430,000 in the form of services and modules for development of AC modules. Petitioner will provide Greenray with 20 HIT PV modules in a phased manner for developing and evaluating AC module

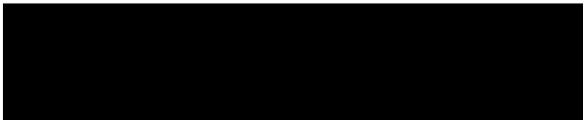
¹The figures herein are based on the final agreement, and differ slightly from those in the waiver petition, which were based on pre-award estimates.

prototypes. Petitioner will also perform tests on reliability, environmental conditions, grid connections, and other tests deemed necessary.

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 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 the current PV market has many different players and new companies are entering the market, as well. Greenray and Sanyo are not the only companies working to provide packaged systems to the marketplace and reduce system costs. However, their approach may be somewhat different from their competitors. Developing an AC module system is one approach to meet this objective and is not expected to place them in a dominant position in the field.

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.

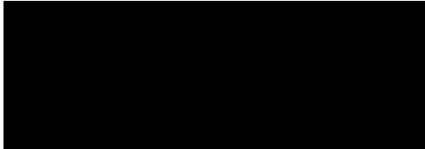


Julia Cook Moody
Patent Attorney
Golden Field Office

Date: 7 Aug 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 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 agreement, where through such modification or extension, the purpose, scope, or cost of the agreement has been substantially altered.

CONCURRENCE:



John Lushetsky, Program Manager
Solar Energy Technology
EE-2A

Date: 8-18-08

APPROVAL:



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

Date: 8-26-08

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.