

## STATEMENT OF CONSIDERATIONS

REQUEST BY 3M COMPANY ("3M") FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE GRANT NO. DE-EE0004739; W(A) 2011-035

3M has requested a waiver of domestic and foreign patent rights of the United States of America in all subject inventions arising from its participation under the above referenced grant entitled "Ultra Barrier Topsheet for Flexible Photovoltaics." The grant was awarded under the DE-FOA-0000234 High Impact Supply Chain Research and Development for PV Technologies and Systems Funding Opportunity Announcement. Stanford University and NREL are also performing work under the grant. However, this waiver only applies to inventions of 3M. The inventions of Stanford University are subject to the Bayh-Dole Act and the inventions of NREL are subject to the prime contract between DOE and the contractor operating NREL.

The project funded under the grant is directed to the development and commercialization of a flexible, highly transparent Ultra Barrier Topsheet (UBT) for use in flexible solar modules manufactured from second and third generation photovoltaic technologies in support of DOE's goal to achieve \$1/Watt and to impact the PV supply chain by 2015. The UBT will be manufactured utilizing a proprietary high volume, low cost roll-to-roll process while meeting the necessary technical requirements for use in solar modules. If successful, the UBT will have a dramatic impact on the solar industry both in reducing costs for installation in current markets such as commercial rooftop and residential Building Incorporated Photovoltaics (BIPV) and in increasing the range of applications to more markets such as consumer products and automotive application.

The total anticipated cost of the project is \$9,360,186 with 3M providing 50% cost share or \$4,680,093. This waiver is contingent upon 3M maintaining, in aggregate, a cost sharing percentage of at least 50% during the course of the grant.

The period of performance for the grant is April 1, 2011 through March 31, 2014.


As noted in the waiver petition, 3M is a recognized leader in film manufacturing. 3M has broad experience in the areas of durable materials, and films, optical films, film manufacturing technology, multi-layer film constructions, methods of modifying surface properties and promoting interlayer adhesion, adhesives, and design and manufacturing of micron-scale features on film and other surfaces, and other areas that are germane to the technology areas of the project. Its technical competence in these areas is evident by its numerous patents, patent applications, and other publications in this area. Furthermore, 3M past research and development efforts have resulted in many successful products available in the market today.

According to 3M, it has made multi-million dollar investments in capital equipment for film manufacturing for many commercial applications, established a Renewable Energy Division to focus on industry needs and opportunities, and invested in manufacturing capacity and commercialization efforts to bring film products to the solar energy market.

3M 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, 3M has agreed to the attached U.S. Competitiveness provision, paragraph (t). In brief, 3M 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 3M can show to the satisfaction of the DOE that it is not commercially feasible to do so.

Referring to item 10 of the waiver petition, granting this waiver is anticipated to have a minimal effect on limiting competition. Competitors already sell a variety of films to the manufacturers of solar panels. The waiver will have no impact on the availability of these other films. 3M believes any preferred position that it may achieve would be justified and based on its past and on-going investments, including significant investments outside of this grant, in the technology.

Considering the foregoing (*e.g.*, 3M's technical experience and competence and past and on-going investments in this technology), it is believed that granting this waiver will provide 3M with the necessary incentive to invest its resources in commercializing the results of the grant 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.

  
Glen R. Drysdale  
Patent Attorney  
Golden Field Office


Date: \_\_\_\_\_


5/12/11

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 be best 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 grant, where through such modification or extension, the purpose, scope, or cost of the grant has been substantially altered.

CONCURRENCE:

APPROVAL:

  
Ramamoorthy Ramesh  
Program Manager  
Solar Energy Technologies Program

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

Date: 5-10-12

Date: 5/30/2012

(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.