## STATEMENT OF CONSIDERATIONS

REQUEST BY ARKEMA FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE CONTRACT NO. DE-FC26-08NT01576; W(A)-09-028, CH-1493

The Petitioner, Arkema, Inc., was awarded this cooperative agreement for the performance of work entitled, "Application of Developed Atmospheric Pressure Chemical Vapor Deposition (APCVD) Transparent Conducting Oxides and Undercoat Technologies for Economical OLED Lighting." According to its response to question 2, Arkema will develop new undercoat/TCO (transparent conductive oxide) constructions as a low-cost alternative to the current ITO (indium tin oxide) technology used for OLED lighting that will have equivalent or better performance. This waiver is only for inventions of Arkema made under the cooperative agreement.

The total estimated cost of the contract is \$2,626,631 with Arkema providing a 20% costshare or \$525,326. DOE is providing the remaining 80% share of \$2,101,304. The period of performance is from September 30, 2008 through September 2, 2010.

In its response to questions 5 of the attached waiver petition, Arkema has described its technical competence in the field of LED lighting. Arkema is considered a leading expert in chemical precursors, composition of matter, and equipment manufacture for the Fenestration industry. Arkema holds over 50 patents in this field, and 4 specific doped ZnO TCO patent applications were published in 2008 that will serve as the foundation for this project. These patent applications are attached to the waiver petition. Arkema's response demonstrates its technical competency in the field of LED lighting technologies.

In its response to question 10 of the attached waiver petition, Arkema states that there are a multitude of OLED developers for the lighting market, and that multiple technologies are being pursued. Grant of the waiver will enable Arkema to actively pursue all market opportunities on a global basis. Therefore grant of the waiver will have a positive effect on competition and market concentration.

In addition, this project is under the Solid State Lighting Program (SSL) Program, and subject to a Determination of Exceptional Circumstances (EC). The Solid State Lighting Program is to develop advanced solid state lighting technologies that, compared to conventional lighting technologies, are much more energy efficient, longer lasting, and cost-competitive, by targeting a product system efficiency of 50 percent with lighting that accurately reproduces sunlight spectrum. The SSL program has a multi-tier structure. One tier consists of a competitively selected SSL Partnership whose membership includes organizations that have or will have the capacity to manufacture SSL systems, i.e., the entire package from wall plug to illumination. Another tier is the Core Technology Program, which will focus on finding solutions to the more difficult shared technical barriers identified by the SSL partnership. It focuses on the R&D efforts of universities, national laboratories, and other research institutions. There is also a Product Development tier which focuses on developing or improving commercially usable materials, devices or systems. This cooperative agreement is in the Product Development Program. Under the SSL EC, any entity having the right to use or sell any subject invention in the United State and/or any other country must agree that any products embodying the subject invention or produced through the use of the subject invention will be substantially manufacture in the United States.

The subject contract will be modified to add the Patent Rights--Waiver clause in conformance with 10 CFR 784.12, wherein Arkema has agreed to the provisions of 35 U.S.C §§ 202, 203, and 204. This waiver clause will also include a paragraph entitled U.S. Competitiveness, in which Arkema agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, Arkema agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements.

Considering the foregoing, it is believed that granting the waiver will provide the Petitioner with the necessary incentive to invest resources in the commercialization of the results of the agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable time. In addition, it would appear that grant of the above requested waiver would not result in an adverse effect on competition nor result in excessive market concentration. Therefore, 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, as set forth above, be granted.

Mark P. Dvorscak
Deputy Chief Counsel
Office of Intellectual Property Law

Date Acpt 24 2009

Based on the foregoing Statement of Considerations and the representations in the attached waiver petition, it is determined that the United States and the general public will best be served by a waiver of rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of this agreement, where through such modification or extension, the purpose, scope, or cost of the agreement is substantially altered.

CONCURRENCE:

James Brodrick
Office of Energy Efficiency and
Renewable Energy
Office of Building Technology, EE-2J

Date Oction 1, 2009

APPROVAL:

Paul A. Gottlieg
Assistant General Counsel for
Technology Transfer and
Intellectual Property, GC-62

Date 10-2-09

(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.