STATEMENT OF CONSIDERATIONS

REQUEST BY OSRAM OPTO SEMICONDUCTORS, INC. FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC26-04NT41947; W(A)-04-021, CH-1190

The Petitioner, Osram Opto Semiconductors (Osram), was awarded this cooperative agreement for the performance of work entitled, "Polymer OLED White Light Development Program." In this program, Osram will develop, fabricate, and fully characterize a 12-inch square OLED (Organic Light Emitting Diode) white light prototype. The prototype will be based on use of multiple discrete 3-inch square white light devices fabricated on glass substrates. A broadband light-emitting co-polymer for the generation of white light, from either a single large area emitting film, or from a relatively small number of segmented emitting films will be used. An alternate approach will use a larger array of color tri-stripes, or tri-segments, of red, green and blue polymer emitters combined with a light diffuser to produce a white light. By the third year of the program, Osram expects to produce a color balanced OLED white light with luminous efficacy of 20lm/W at 800 cd/m², and achieve an operating life of 3,000 hours (to half luminance).

The total estimated cost of the cooperative agreement is \$9,301,700 with the DOE share being \$4,650,000 or 50%, while the remaining cost share of 50%, will be provided by Osram. The period of performance is from February 1, 2004 through January 31, 2007.

In its response to questions 5 and 6 of the attached waiver petition, Osram has described its technical competence in the field of organic light emitting diodes. Osram maintains the complete infrastructure for the development and manufacturing of polymer based monochrome passive-matrix OLED flat panel displays. The company is vertically integrated to take OLED display and lighting technology from early development through product development to high volume manufacturing. Osram states that is possesses a strong intellectual property and patent position in the polymer OLED technology, with over 80 patents and patent applications on file with the US Patent Office. Two of these issued patents are attached to the waiver petition. Osram's response demonstrates its technical competency in the field of polymer OLED technology.

In its response to question 10 of the attached waiver petition, Osram states that grant of the waiver will have a negligible effect on competition and market concentration. The development of polymer-based OLEDs for solid-state lighting applications is being aggressively pursued by a large number of companies, including the largest general lighting companies in the world: Philips and General Electric. Thus grant of the waiver should have a positive effect on competition and market concentration.

The subject cooperative agreement will be modified to add the Patent Rights--Waiver clause in conformance with 10 CFR 784.12, wherein Osram 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 Osram agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, Osram 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

Assistant Chief Counsel

Intellectual Property Law Division

Date: 0t 5 2004

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:

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December 8, 2004

Energy

APPROVAL:

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(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.