

**PATENT ASSIGNMENT**

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	EXECUTIVE ORDER 9424, CONFIRMATORY LICENCE
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Massachusetts Institute of Technology	09/24/2004
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	National Science Foundation
<b>Street Address:</b>	4201 Wilson Blvd.
<b>Internal Address:</b>	rm 1265
<b>City:</b>	Arlington
<b>State/Country:</b>	VIRGINIA
<b>Postal Code:</b>	22230
<b>PROPERTY NUMBERS Total: 2</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	10917209
Application Number:	10916869
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<b>Total Attachments: 2</b> source=5#page1.tif source=5#page2.tif	

LICENSE TO THE UNITED STATES GOVERNMENT

WHEREAS, Shoji Akiyama, Felix Jan Grawert, Franz X. Kaertner and Kazumi Wada have invented "Process for Fabrication of Semiconductor/Dielectric High Reflectors and Application Thereof" and filed a patent application there on in the United States, entitled "Optical Device Comprising Crystalline Semiconductor Layer and Reflective Element" and bearing Serial Number 10/917,209 and filing date August 12, 2004; and

WHEREAS, invention was made in the course of research supported by the National Science Foundation under N.S.F. Grant Number ECS-0119452; and

WHEREAS, the United States Government is entitled to certain rights in and to said invention and application by reason of the terms relating to such support; and

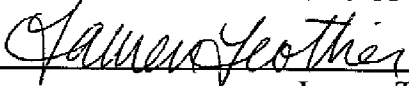
WHEREAS, the Massachusetts Institute of Technology, hereinafter called the "Licensor" has acquired by assignment from the inventors the entire right, title and interest of the inventors to such invention;

NOW, THEREFORE:

1. The Licensor, in consideration of the premised and other good and valuable consideration, hereby grants and conveys to the United States Government a non-exclusive, non-transferable, paid-up license to make, use and sell the invention throughout the world by or on behalf of the Government of the United States and states and domestic municipal governments under the aforesaid patent application and any and all divisions or continuations, and in any and all patents or reissues which may be granted thereon during the full term or terms thereof.
2. The Licensor covenants and warrants that he has the right to grant the foregoing license, and that any assignment or license which he may make of the invention or the said patent application or patents thereon, shall expressly be make subject to this license.
3. The Licensor agrees that the Government shall not be estopped at any time to contest the enforceability, validity, scope of or title to any patent or patent application herein licensed.
4. This License shall not limit the rights reserved to the Government under the contract(s), grant(s), or other arrangement(s) under which said invention was made.

Signed this 23<sup>rd</sup> day of September, 2004.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY



Lauren Trottier  
Patent Compliance Administrator  
Technology Licensing Office

77 Massachusetts Avenue, Room NE25-230, Cambridge, MA 02139

Accepted for the benefit of the Government this \_\_\_\_\_

\_\_\_\_\_ Patent Paralegal

LICENSE TO THE UNITED STATES GOVERNMENT

WHEREAS, Shoji Akiyama, Felix Jan Grawert, Franz X. Kaertner and Kazumi Wada have invented "Optical Device Consisting of Crystalline Semiconductor Layer and High-Index Contrast and Reflective Element" and filed a patent application there on in the United States, entitled "Optical Device Comprising Crystalline Semiconductor Layer and Reflective Element" and bearing Serial Number 10/916,869 and filing date August 12, 2004; and

WHEREAS, invention was made in the course of research supported by the National Science Foundation under N.S.F. Grant Number ECS-0119452; and

WHEREAS, the United States Government is entitled to certain rights in and to said invention and application by reason of the terms relating to such support; and

WHEREAS, the Massachusetts Institute of Technology, hereinafter called the "Licensor" has acquired by assignment from the inventors the entire right, title and interest of the inventors to such invention;

NOW, THEREFORE:

1. The Licensor, in consideration of the premised and other good and valuable consideration, hereby grants and conveys to the United States Government a non-exclusive, non-transferable, paid-up license to make, use and sell the invention throughout the world by or on behalf of the Government of the United States and states and domestic municipal governments under the aforesaid patent application and any and all divisions or continuations, and in any and all patents or reissues which may be granted thereon during the full term or terms thereof.

2. The Licensor covenants and warrants that he has the right to grant the foregoing license, and that any assignment or license which he may make of the invention or the said patent application or patents thereon, shall expressly be make subject to this license.

3. The Licensor agrees that the Government shall not be estopped at any time to contest the enforceability, validity, scope of or title to any patent or patent application herein licensed.

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