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500758579			REEL: 022131 FRAME: 0277		
Total Attachments: 3 source=2009-01-21-C	IT-5015-JointAssi	gnment#page1.tif	PATENT		
NAME OF SUBMITTER:		Vicky Markantonis			
ATTORNEY DOCKET NUMBER:		CIT-5015 (3032980)			
Correspondence will be sent via US Mail when the fax attempt is unsuccessful.Phone:508-475-6620Email:vmarkant@hblaw.comCorrespondent Name:Joseph B. MilsteinAddress Line 1:300 South State StreetAddress Line 4:Syracuse, NEW YORK 13202-2078					
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RECEIVING PARTY [ite of Technology			
		01/13/2009			
Michael J. Hochberg Axel Scherer			01/09/2009		
Tom Baehr-Jones			01/09/2009		
		Name	Execution Date		
CONVEYING PARTY	DATA				
NATURE OF CONVE	YANCE:	ASSIGNMENT	ASSIGNMENT		
SUBMISSION TYPE:		NEW ASSIGNMENT	NEW ASSIGNMENT		

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JOINT ASSIGNMENT

WE, Tom Baehr-Jones, Michael J. Hochberg, and Axel Scherer, believe that we are the inventors of the subject matter disclosed in the application for patent (hereinafter "the invention or inventions") identified herein as

SINGLE PHOTON ABSORPTION ALL-OPTICAL MODULATOR IN SILICON

and further identified by Attorney Docket Number: **CIT-5015 (3032980)** which application for patent was filed on **October 14, 2008**, and has been assigned **Serial No. 12/251,032** by the United States Patent and Trademark Office.

For valuable consideration given to the undersigned, the receipt and sufficiency of which is hereby acknowledged, the undersigned agrees to assign, and hereby does assign, transfer and set over to the California Institute of Technology, a corporation incorporated in the State of California, and having a principal place of business at 1200 East California Boulevard, M/C 201-85, Pasadena, CA 91125, (hereinafter designated as the Assignee), his or her entire right, title and interest in the invention or inventions as represented by the application for patent identified herein (the 'application") in the United States, its territories, dependencies and possessions, his or her entire right, title, and interest in the application, and his or her entire right, title and interest in the invention or inventions as regards all other national jurisdictions and international entities that have the power to grant patents, wherever situated, including without limitation all applications for patent which claim priority to and/or the benefit of the subject matter disclosed in the application for patent identified herein, including any provisional application, utility application, design application, and/or plant application, as well as any continuation application, divisional application, continuation-in-part application, reissue application, reexamination application, patent interference proceeding, foreign national application and/or any application filed or to be filed under a patent treaty such as the International Convention for Protection of Industrial Property and/or the Patent Cooperation Treaty, and any Letters Patent which may be granted therefor in any jurisdiction.

In addition to the above assignment, each of the undersigned agrees to execute all papers necessary in connection with the application and any continuing applications, divisional applications, or continuations-in-part thereof, and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

Each of the undersigned agrees to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

Each of the undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

Each of the undersigned agrees to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

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Joint Assignment Attorney Docket No. CIT-5015

Each of the undersigned hereby authorizes and requests the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed and will not execute, any agreement in conflict herewith.

Each of the undersigned hereby grants to any duly empowered legal representative, including all patent practitioners associated with Customer Number 72,742 the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office or with the rules of any other national or international Patent Office for recordation of this document or a true copy thereof.

In witness whereof, this instrument has been executed by the undersigned on the date opposite the respective name of the undersigned.

Date _	1/9/2009	Signature	(SEAL) Tom Baehr-Jones
Date _	Valoq	_ Signature	(SEAL) Michael J. Hoenberg
Date _		_ Signature	(SEAL)

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Joint Assignment Attorney Docket No. CIT-5015

Each of the undersigned hereby authorizes and requests the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed and will not execute, any agreement in conflict herewith.

Each of the undersigned hereby grants to any duly empowered legal representative, including all patent practitioners associated with Customer Number **72,742** the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office or with the rules of any other national or international Patent Office for recordation of this document or a true copy thereof.

In witness whereof, this instrument has been executed by the undersigned on the date opposite the respective name of the undersigned.

Date	Signature	(SEAL) Tom Baehr-Jones
Date	Signature	(SEAL) Michael J. Hochberg
Date 1/13/09	Signature	Avel Scherer (SEAL)

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PATENT REEL: 022131 FRAME: 0281

RECORDED: 01/21/2009