

PATENT ASSIGNMENT

Electronic Version v1.1
Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT																
NATURE OF CONVEYANCE:	ASSIGNMENT																
CONVEYING PARTY DATA																	
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Zhiyuan Cheng</td><td>11/19/2009</td></tr><tr><td>James Fiorenza</td><td>11/16/2009</td></tr><tr><td>Jennifer Hydrick</td><td>11/23/2009</td></tr><tr><td>Anthony Lochtefeld</td><td>11/17/2009</td></tr><tr><td>Ji-Soo Park</td><td>11/17/2009</td></tr><tr><td>Jie Bai</td><td>11/20/2009</td></tr><tr><td>Jizhong Li</td><td>11/17/2009</td></tr></tbody></table>		Name	Execution Date	Zhiyuan Cheng	11/19/2009	James Fiorenza	11/16/2009	Jennifer Hydrick	11/23/2009	Anthony Lochtefeld	11/17/2009	Ji-Soo Park	11/17/2009	Jie Bai	11/20/2009	Jizhong Li	11/17/2009
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<table border="1"><tr><td>Name:</td><td>AmberWave Systems</td></tr><tr><td>Street Address:</td><td>13 Garabedian Drive</td></tr><tr><td>City:</td><td>Salem</td></tr><tr><td>State/Country:</td><td>NEW HAMPSHIRE</td></tr><tr><td>Postal Code:</td><td>03079-4235</td></tr></table>		Name:	AmberWave Systems	Street Address:	13 Garabedian Drive	City:	Salem	State/Country:	NEW HAMPSHIRE	Postal Code:	03079-4235						
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PROPERTY NUMBERS Total: 1																	
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PCT Number:	US0957493																
CORRESPONDENCE DATA																	
Fax Number: (603)870-8608 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>																	
Phone: 6038708700																	
Email: amartin@amberwave.com																	
Correspondent Name: AmberWave Systems																	
Address Line 1: 13 Garabedian Drive																	
Address Line 2: Andrew Martin																	
Address Line 4: Salem, NEW HAMPSHIRE 03079-4235																	
ATTORNEY DOCKET NUMBER:	ASC-3006PC																

OP \$40.00 US0957493

501024361

PATENT
REEL: 023564 FRAME: 0606

NAME OF SUBMITTER:

Andrew Martin

Total Attachments: 9

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ASSIGNMENT

I, Zhiyuan Cheng, James Fiorenza, Jennifer Hydrick, Anthony Lochtefeld, Ji-Soo Park, Jie Bai, Jizhong Li, ("Assignor"), have an interest in the invention entitled:

FORMATION OF DEVICES BY EPITAXIAL LAYER OVERGROWTH

which is the subject of a United States or International application for patent entitled above and naming the undersigned inventor

☐ in a Provisional Patent Application No. ;
☐ in a Non-Provisional Application along with a Declaration signed today with this assignment;
☐ in a Non-Provisional Application where the Declaration was signed on _____;
☒ in a Non-Provisional Application filed on 9/18/2009, docket No. ASC-3006PC and assigned Serial No. _____ or PCT International Application No. PCT/US09/57493 ;
☐ in U.S. Patent No. _____, issued _____.

AmberWave Systems, 13 Garabedian Drive, Salem, New Hampshire 03079, ("Assignee"), is desirous of acquiring Assignor's interest in the invention.

Assignor acknowledges receipt and adequacy of good and valuable consideration in exchange for this Assignment, and **assigns to Assignee** and its successors in interest, the full and exclusive right, title and interest to any and all inventions, developments and improvements disclosed or described in the patent application listed above ("the invention"), in the United States of America and all foreign countries, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, for the full term of the patent, including extensions of time, the same as if held by Assignor had this Assignment not been made. This Assignment includes the assignment of the right to recover for past infringements of, or liabilities for, any of the rights related to the invention.

Assignor covenants and agrees to cooperate with Assignee and execute all instruments or documents requested for the making and prosecution of any applications of any type for patent for the invention in the United States and in all foreign countries including, but not limited to the following: provisional, continuation, continuation-in-part, divisional, renewal or substitute, reissue, re-examination, or extension. Assignor covenants and agrees to cooperate with Assignee in any litigation regarding the invention, patents or applications regarding the invention, and render all necessary assistance deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred without further or other compensation than that provided in this Assignment; the undersigned agree that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE.

Assignor covenants that no assignment, sale or agreement or encumbrance has been or will be entered into which would conflict with this Assignment.

Assignor requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications, issue said Letters Patent, Utility Model Registration or Inventor's Certificate to Assignee.

Assignor hereby grants the firm of MUIR PATENT CONSULTING, PLLC the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of any issuing authority, including the United States Patent and Trademark Office, for recordation of this document.

Assignor: Zhiyuan Cheng (signature)

On this _____ day of _____, 20____, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that they executed the same of their own free will for the purpose therein set forth.

(seal) Notary Public. _____
Acting in the County of _____
State of _____
My Commission Expires _____

[Signature]
Assignor: James Fiorenza (signature)

On this 16 day of November, 2009, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that they executed the same of their own free will for the purpose therein set forth.

(seal) Notary Public. _____
Acting in the County of Rockingham
State of New Hampshire
My Commission Expires Suzanne Oliveri

SUZANNE OLIVERI, Notary Public
My Commission Expires June 27, 2012

[Signature]
Assignor: Jennifer Hydrick (signature)

On this 23 day of November, 2009, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that they executed the same of their own free will for the purpose therein set forth.

(seal) Notary Public. _____
Acting in the County of Rockingham
State of New Hampshire
My Commission Expires Suzanne Oliveri

[Signature]
Assignor: Anthony Locktefeld al (signature)

SUZANNE OLIVERI, Notary Public
My Commission Expires June 27, 2012

On this _____ day of _____, 20____, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that they executed the same of their own free will for the purpose therein set forth.

(seal) Notary Public. _____
Acting in the County of Rockingham
State of New Hampshire
My Commission Expires Suzanne Oliveri

SUZANNE OLIVERI, Notary Public
My Commission Expires June 27, 2012

J. S. Park (signature)
Assignor: Ji-Soo Park

On this 17th day of Nov, 2009, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that they executed the same of their own free will for the purpose therein set forth.

(seal) Notary Public. _____
Acting in the County of Rockingham
State of New Hampshire
My Commission Expires Suzanne Oliveri

SUZANNE OLIVERI, Notary Public
My Commission Expires June 27, 2012

Assignor: Jie Bai

On this _____ day of _____, 20____, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that they executed the same of their own free will for the purpose therein set forth.

(seal) Notary Public. _____
Acting in the County of _____
State of _____
My Commission Expires _____

Jizhong Li (signature)
Assignor: Jizhong Li

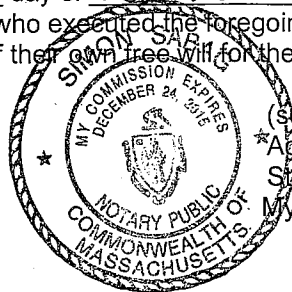
On this _____ day of _____, 20____, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that they executed the same of their own free will for the purpose therein set forth.

(seal) Notary Public. _____
Acting in the County of Rockingham
State of New Hampshire
My Commission Expires Suzanne Oliveri

SUZANNE OLIVERI, Notary Public
My Commission Expires June 27, 2012

(signature)
Assignor: Zhiyuan Cheng

On this 19 day of November, 2009, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that they executed the same of their own free will for the purpose therein set forth.



(seal) Notary Public. Simon Sabag
Acting in the County of Middlesex
State of Massachusetts
My Commission Expires 12/24/2015

(signature)
Assignor: James Fiorenza

On this _____ day of _____, 20____, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that they executed the same of their own free will for the purpose therein set forth.

(seal) Notary Public. _____
Acting in the County of _____
State of _____
My Commission Expires _____

(signature)
Assignor: Jennifer Hydrick

On this _____ day of _____, 20____, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that they executed the same of their own free will for the purpose therein set forth.

(seal) Notary Public. _____
Acting in the County of _____
State of _____
My Commission Expires _____

(signature)
Assignor: Anthony Locktefeld

On this _____ day of _____, 20____, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that they executed the same of their own free will for the purpose therein set forth.


(seal) Notary Public. _____
Acting in the County of _____
State of _____
My Commission Expires _____

_____ (signature)

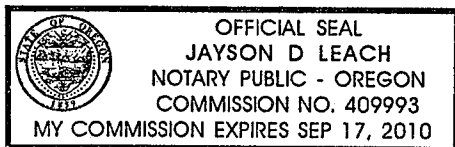
Assignor: Ji-Soo Park

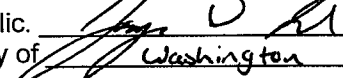
On this _____ day of _____, 20____, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that they executed the same of their own free will for the purpose therein set forth.

(seal) Notary Public. _____
Acting in the County of _____
State of _____
My Commission Expires _____


_____ (signature)
Assignor: Jie Bai

On this 20 day of November, 2009, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that they executed the same of their own free will for the purpose therein set forth.



(seal) Notary Public. 
Acting in the County of Washington
State of Oregon
My Commission Expires Sep 17, 2010

_____ (signature)
Assignor: Jizhong Li

On this _____ day of _____, 20____, before me personally appeared the foregoing individual, who executed the foregoing instrument and who acknowledged to me that they executed the same of their own free will for the purpose therein set forth.

(seal) Notary Public. _____
Acting in the County of _____
State of _____
My Commission Expires _____

ASSIGNMENT

WHEREAS, We, James Fiorenza, Anthony J. Lochtefeld, Ji-Soo Park, Jie Bai, and Jennifer Hydrick, have invented one or more inventions described in an application for Letters Patent of the United States entitled:

Formation of Devices by Epitaxial Layer Overgrowth

and identified by

☐ Attorney Docket No. _____ and/or executed by us on even date herewith and about to be filed in the United States Patent Office; and

☒ Serial No. 61/098,597 filed in the United States Patent Office on September 19, 2008; and

WHEREAS, AmberWave Systems Corporation (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of Delaware, and having a usual place of business at 13 Garabedian Drive, Salem, New Hampshire 03079, desires to acquire an interest therein, in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the invention(s) described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon or claim priority under United States law or international convention, including but not limited to non-provisionals, continuations, continuations-in-part, divisionals, reissues, reexaminations, extensions, and substitutions of said application or such Letters Patent, and any right, title and interest we may have in provisional applications to which said application claims priority; said invention(s), applications and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all of our rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, including but not limited to any cause(s) of action and damages accruing prior to this assignment. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all Letters Patent to ASSIGNEE in its own name as assignee of our entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns,

and legal representatives, but at its or their expense and charges, including the execution of non-provisional, substitution, continuation, continuation-in-part, divisional, reissue, reexamination, or corresponding foreign or international patent applications;

AND, we hereby further agree to provide statements or testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved;

AND, we hereby authorize ASSIGNEE or its attorneys or agents to insert the correct serial number and filing date into this assignment, if none is indicated on the date of our execution of this assignment;

AND, we hereby authorize and request the Director of the United States Patent and Trademark Office and the empowered officials of all other governments to issue such Letters Patent as shall be granted upon said application, or applications based thereon, to said ASSIGNEE, its successors, assigns, or legal representatives.

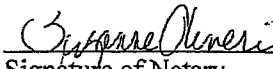
IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals on the date(s) set forth below.

Inventor:

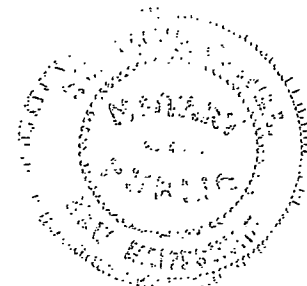

James Fiorenza

New Hampshire)
County of Rockingham ss

Subscribed and sworn to before me, by the above-named James Fiorenza this 23 day of September, 2008.


Signature of Notary

SUZANNE OLIVERI, Notary Public (Seal)
My Commission Expires June 27 2012



PATENT

REEL: 023564 FRAME: 0614

Inventor:

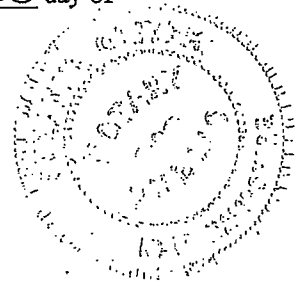
A. Jochtefeld
Anthony J. Lochtefeld

New Hampshire
County of Rockingham) ss

Subscribed and sworn to before me, by the above-named Anthony J. Lochtefeld this 23 day of
September, 2008.

Suzanne Oliveri
Signature of Notary

(Seal)



SUZANNE OLIVERI, Notary Public
My Commission Expires June 27, 2012

Inventor:

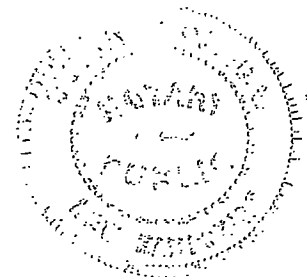
Ji-Soo Park
Ji-Soo Park

New Hampshire
County of Rockingham) ss

Subscribed and sworn to before me, by the above-named Ji-Soo Park this 23 day of
September, 2008.

Suzanne Oliveri
Signature of Notary

(Seal)

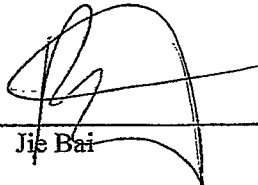


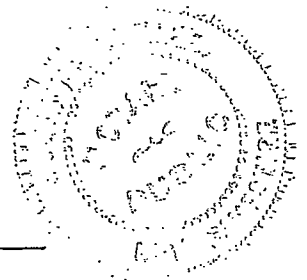
SUZANNE OLIVERI, Notary Public
My Commission Expires June 27, 2012

PATENT

REEL: 023564 FRAME: 0615


Inventor:


Jie Bai



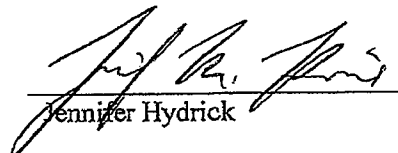
New Hampshire)
County of Rockingham ss

Subscribed and sworn to before me, by the above-named Jie Bai this 23 day of September
2008.


Signature of Notary


SUZANNE OLIVERI, Notary Public
My Commission Expires June 27, 2012 (Seal)

Inventor:


Jennifer Hydrick

New Hampshire)
County of Rockingham ss

Subscribed and sworn to before me, by the above-named Jennifer Hydrick this 23 day of
September, 2008.


Signature of Notary

SUZANNE OLIVERI, Notary Public
My Commission Expires June 27, 2012 (Seal)



LIBC/3388798

PATENT