

PATENT ASSIGNMENT

Electronic Version v1.1
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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Silicon Valley Bank	11/08/2012
Twin Creeks Technologies, Inc.	11/08/2012

RECEIVING PARTY DATA

Name:	GTAT Corporation
Street Address:	20 Trafalgar Square
City:	Nashua
State/Country:	NEW HAMPSHIRE
Postal Code:	03063

PROPERTY NUMBERS Total: 84

Property Type	Number
Application Number:	12026530
Application Number:	12057265
Application Number:	12057274
Patent Number:	7687786
Patent Number:	7915522
Application Number:	12189156
Patent Number:	8129613
Application Number:	12189158
Application Number:	12189159
Application Number:	12208298
Patent Number:	7842585
Application Number:	12208396
Application Number:	12209364
Patent Number:	7897945

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Application Number:	12331376
Patent Number:	7967936
Patent Number:	7858430
Application Number:	12339038
Patent Number:	8178419
Application Number:	12347690
Application Number:	12399065
Application Number:	12403187
Patent Number:	7964431
Patent Number:	8227763
Patent Number:	7750322
Patent Number:	7754519
Patent Number:	7994064
Application Number:	12493195
Application Number:	12493197
Patent Number:	7982197
Patent Number:	8044374
Patent Number:	7989784
Patent Number:	7939812
Patent Number:	8151852
Patent Number:	8247260
Application Number:	12537022
Application Number:	12540463
Application Number:	12557379
Application Number:	12568923
Application Number:	12568940
Patent Number:	8049104
Patent Number:	8089050
Application Number:	12636328
Application Number:	12636410
Patent Number:	8207047
Patent Number:	8257995
Patent Number:	8058626
Application Number:	12729878
Application Number:	12750635

	8242468
Patent Number:	8148189
Application Number:	12872629
Application Number:	12894229
Application Number:	12894254
Application Number:	12917510
Application Number:	12962723
Patent Number:	8101488
Patent Number:	8173452
Patent Number:	8101451
Application Number:	13020849
Application Number:	13048955
Application Number:	13083625
Application Number:	13186513
Application Number:	13211258
Patent Number:	8268645
Application Number:	13331915
Application Number:	13424984
Application Number:	13425870
Application Number:	13446051
Application Number:	13226590
Application Number:	13292436
Application Number:	13494687
Application Number:	13366338
Application Number:	13558826
Application Number:	13558836
Application Number:	13425877
Application Number:	13558843
Application Number:	13490460
Application Number:	13456134
Application Number:	61683313
Application Number:	61702656
Application Number:	61678758
Application Number:	61708890
Application Number:	61697142

PATENT

REEL: 029275 FRAME: 0078

Fax Number: 6172359492
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ATTORNEY DOCKET NUMBER:

108051-0023

NAME OF SUBMITTER:

Mary Jane DiPalma

Total Attachments: 16

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**ASSIGNMENT OF PATENTS
(DOMESTIC)**

This **ASSIGNMENT OF PATENTS (DOMESTIC)**, dated as of November 8, 2012, is made by and between Silicon Valley Bank, a California corporation with its principal place of business located at 3003 Tasman Drive, Santa Clara, CA 95054 (the "Assignor"), as assignor, by virtue of being the secured lender to Twin Creeks Technologies, Inc., a Delaware corporation (the "Debtor") and by virtue of the Purchase Agreement (as defined below), and GTAT Corporation, a Delaware corporation with its principal place of business located at 20 Trafalgar Square, Nashua, NH 03063 (the "Assignee"), as assignee.

WHEREAS, the Debtor, with its principal place of business located at 3930 N. 1st Street, San Jose, California, 95134, is the owner of the entire right, title and interest in and to the Patents and Patent Applications (as defined below);

WHEREAS, the Debtor is indebted to the Assignor, pursuant to the terms of a Loan and Security Agreement, dated as of May 13, 2008, by and among the Debtor, as borrower, and the Assignor and Gold Hill Venture Lending 03, LP ("Gold Hill"), as lenders (as amended, modified, or supplemented from time to time, the "2008 Loan Agreement");

WHEREAS, the Debtor has repaid to Gold Hill all indebtedness owing to Gold Hill under the 2008 Loan Agreement, Gold Hill is no longer a lender under the 2008 Loan Agreement, and the Assignor is the sole lender under the 2008 Loan Agreement;

WHEREAS, as security for the Debtor's obligations to the Assignor, the Assignor holds security interests in substantially all of the Debtor's property and assets, including, without limitation, all of the Debtor's Patents and Patent Applications, which security interests have been duly and properly perfected by the filing of UCC financing statements with the office of the Delaware Secretary of State;

WHEREAS, Events of Default have occurred under the 2008 Loan Agreement;

WHEREAS, the Assignor is entitled to exercise its remedies under the 2008 Loan Agreement and applicable law, including a disposition by private sale of all or part of the Assignor's collateral pursuant to Sections 9610, 9617, and other applicable sections of the Uniform Commercial Code as presently enacted in the State of California (including, to the extent applicable, the Uniform Commercial Code as enacted in any other state, the "Code"), with the proceeds of such sale to be applied as required by the Purchase Agreement (as defined below) and the Code;

WHEREAS, the Assignor wishes to sell the Patents and Patent Applications;

WHEREAS, the Assignee desires to acquire the Lender's and the Debtor's entire right, title, and interest in and to the Patents and Patent Applications, pursuant to that certain Asset Purchase Agreement, dated as of even date herewith, by and between the Assignor and the Assignee (as amended, restated, supplemented, or otherwise modified from time to time, the "Purchase Agreement"); and

WHEREAS, capitalized terms used but not defined herein shall have meanings given them in the Purchase Agreement.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, including the Purchase Price paid by the Buyer, the receipt and sufficiency of which is hereby acknowledged, the Assignor, through the foreclosure sale, does hereby sell, assign, transfer and set over unto the Buyer, its successors and assigns, the Debtor's and the Assignor's entire right, title and interest in and to all patents and patent applications, including, without limitation, those listed on Schedule A attached hereto, and any continuation, divisional, continuations-in-part, reissues, extensions, re-examinations or substitutions relating thereto, and any foreign applications based in whole thereon or claiming the benefit thereof; and any United States or foreign patents issued on any of the foregoing; all file histories and physical and electronic documentation, including, without limitation, all invention disclosures, prosecution papers, notes, drawings, reports, flow charts, instructions, manuals, notebooks and memoranda, that directly relate to such patents or patent applications (the foregoing, collectively, the "Patents and Patent Applications"), the same to be held and enjoyed by the Buyer for its own use and enjoyment, and for the use and enjoyment of its successors, assigns or other legal representatives, to the end of the term or terms for which said patents are or may be granted or reissued, as fully and entirely as the same would have been held and enjoyed by the Debtor, if this assignment and foreclosure sale had not been made; together with all rights, credits, judgments, choses in action, rights of set-off and any and all other claims of every type and nature of, for or arising from or relating to past, present or future infringement or claims for royalties, and any and all other rights to enforce or protect any rights constituting or relating to any of the Patents and Patent Applications, claims for damages by reason of past, present or future infringement of said patents or for past, present or future royalties or other compensation for such use, with the right to sue for such damages, and collect the same for its own use and enjoyment, and for the use and enjoyment of its successors, assigns or other legal representatives.

AND, the Assignor does hereby authorize and request competent authorities to issue any Letters Patent as shall be granted upon said patent applications to the Buyer and its successors and assigns;

AND, the Buyer hereby accepts the assignment and transfer of the Patents and Patent Applications as set forth herein.

The Buyer acknowledges that this Assignment of Patents creates no additional representations and warranties other than those set forth in the Purchase Agreement and each party hereto agrees that the Purchase Agreement shall be the definitive document with respect to any representations and warranties, as well as any limitations thereto.

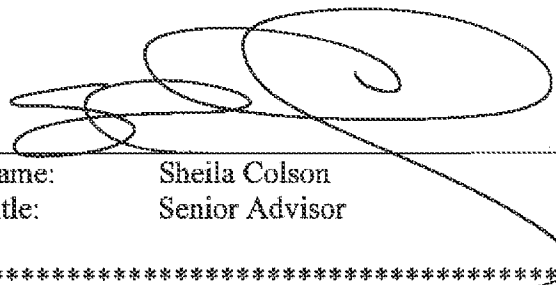
This Assignment of Patents shall be construed in accordance with and governed by the law of the State of California.

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IN WITNESS WHEREOF, the Assignor has caused this instrument to be executed under seal by its duly authorized officer on the date set forth below.

Date: November 7, 2012

LENDER: SILICON VALLEY BANK

By: 
Name: Sheila Colson
Title: Senior Advisor

State of _____)
County of _____) ss

On November _____, 2012, before me appeared Sheila Colson, to me personally known who, being duly sworn, did depose and say that she is the Senior Advisor of Silicon Valley Bank, the California corporation named in and which executed the foregoing instrument; and that said instrument was signed on behalf of said California corporation; and said Sheila Colson acknowledged said instrument to be the free and authorized act and deed of said California corporation.

Notary Public
My Commission Expires: _____

State of California, County of ALAMEDA
On 11/7/12 before me, HARPREET SHAN,
Notary Public, personally appeared SHEILA RAE COLSON
who proved to me on the basis of satisfactory evidence to be the person(s)
whose name(s) is/are subscribed to the within instrument and acknowledged
to me that he/she/they executed the same in his/her/their authorized capacity(ies),
and that by his/her/their signature(s) on the instrument the person(s), or the entity
upon behalf of which the person(s) acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California
that the foregoing paragraph is true and correct.
WITNESS my hand and official seal. H. Shan



[Signature Page to Assignment of Patents]

IN WITNESS WHEREOF, the Assignee has caused this instrument to be executed under seal by its duly authorized officer on the date set forth below.


Date: November 8, 2012

BUYER: GTAT CORPORATION

By: 
Name: Hoil Kim
Title: Vice President, Chief Administrative Officer, General Counsel and Secretary

State of NH, Hillsborough)
County of) ss

On November 8, 2012, before me appeared Hoil Kim, to me personally known who, being duly sworn, did depose and say that he is the Vice President, Chief Administrative Officer, General Counsel and Secretary of GTAT Corporation, the Delaware corporation named in and which executed the foregoing instrument; and that said instrument was signed on behalf of said Delaware corporation; and said Hoil Kim acknowledged said instrument to be the free and authorized act and deed of said Delaware corporation.


Notary Public
My Commission Expires: October 21, 2014

The undersigned hereby acknowledges and consents and agrees to the foregoing sale, assignment, and conveyance of the Patent and Patent Applications pursuant to the Assignment of Patents and, to the extent that such sale, assignment, and conveyance is ineffective for any reason or is or becomes subject to avoidance, hereby further assigns the Patents and Patent Applications and all other rights transferred hereunder to Assignee.

IN WITNESS WHEREOF, the undersigned has caused this instrument to be executed under seal by its duly authorized officer on the date set forth below.

Date: November 8th, 2012

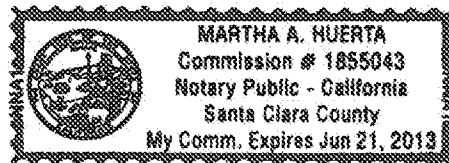
DEBTOR: TWIN CREEKS TECHNOLOGIES, INC.

By: [Signature]
Name: Srinivasan Sivaram
Title: Chief Executive Officer

State of California)
County of Santa Clara) ss

On November 8th, 2012, before me appeared Srinivasan Sivaram, to me personally known who, being duly sworn, did depose and say that he is the Chief Executive Officer of Twin Creeks Technologies, Inc., the Delaware corporation named in and which executed the foregoing instrument; and that said instrument was signed on behalf of said Delaware corporation; and said Srinivasan Sivaram acknowledged said instrument to be the free and authorized act and deed of said Delaware corporation.

[Signature]
Notary Public
My Commission Expires: June 21st, 2013



[Signature Page to Assignment of Patents]

SCHEDULE A

See attached.

[Signature Page to Assignment of Patents]

**TWIN CREEKS TECHNOLOGIES, INC.
PATENTS AND PATENT APPLICATIONS**

DOMESTIC

Docket No.	Title	Filing Date	App. No.	Patent No. (Date Issued)	Priority
TWINP001/TCA-001	Method To Form A Photovoltaic Cell Comprising A Thin Lamina	2/5/08	12/026,530		
TWINP002/TCA-002	Method To Form A Photovoltaic Cell Comprising A Thin Lamina Bonded To A Discrete Receiver Element	3/27/08	12/057,265		
TWINP003/TCA-003	Photovoltaic Assembly Including A Conductive Layer Between A Semiconductor Lamina And A Receiver Element	3/27/08	12/057,274		
TCA-004	Ion Implanter For Noncircular Wafers	5/16/08	12/122,108	7,687,786 (3/30/10)	
TWINP005/TCA-005	Asymmetric Surface Texturing For Using In A Photovoltaic Cell And Method Of Making	5/30/08	12/130,241	7,915,522 (3/29/11)	
TWINP006/TCA-006y	Method To Mitigate Shunt Formation In A Photovoltaic Cell Comprising A Thin Lamina	8/10/08	12/189,156		
TWINP001CIP/TC A-001-1	Photovoltaic Cell Comprising A Thin Lamina Having Low Base Resistivity And Method Of Making	8/10/08	12/189,157	8,129,613 (3/6/12)	CIP of 12/026,530
TWINP007/TCA-007	Photovoltaic Cell Comprising A Thin Lamina Having A Rear Junction And Method Of Making	8/10/08	12/189,158		

Docket No.	Title	Filing Date	App. No.	Patent No. (Date Issued)	Priority
TWINP009/TCA-006z	Photovoltaic Module Comprising Thin Laminae Configured To Mitigate Efficiency Loss Due To Shunt Formation	8/10/08	12/189,159		
TWINP001C1/TCA-001-a	Method To Form A Photovoltaic Cell Comprising A Thin Lamina	9/10/08	12/208,298		Con of 12/026,530
TWINP001C2/TCA-001-B	Method To Form A Photovoltaic Cell Comprising A Thin Lamina	9/11/08	12/208,392	7,842,585 (11/30/10)	Con of 12/026,530
TWINP001C3/TCA-001-c	Method To Form A Photovoltaic Cell Comprising A Thin Lamina	9/11/08	12/208,396		Con of 12/026,530
TWINP001C4/TCA-001-d	Method To Form A Photovoltaic Cell Comprising A Thin Lamina	9/12/08	12/209,364		Con of 12/026,530
TCA-010	Hydrogen Ion Implanter Using A Broad Beam Source	9/25/08	12/237,963	7,897,945 (3/1/11)	
TWINP012/TCA-015	Front Connected Photovoltaic Assembly And Associated Methods	12/9/08	12/331,376		
TWINP011/TCA-017	Methods Of Transferring A Lamina To A Receiver Element	12/15/08	12/335,479	7,967,936 (6/28/11)	
TWINP018/TCA-018Y	Method For Making A Photovoltaic Cell Comprising Contact Regions Doped Through Lamina	12/18/08	12/339,032	7,858,430 (12/28/10)	
TWINP019/TCA-018Z	Photovoltaic Cell Comprising Contact [Sic] Regions Doped Through A Lamina	12/18/08	12/339,038		

Docket No.	Title	Filing Date	App. No.	Patent No. (Date Issued)	Priority
TWINP014/TCA-014	Method To Texture A Lamina Surface Within A Photovoltaic Cell	12/23/08	12/343,420	8,178,419 (5/15/12)	CIP 12/026,530
TWINP013/TCA-022	Double-Sided Donor For Preparing A Pair Of Thin Laminae	12/31/08	12/347,690		
TWINP015/TCA-011	Photovoltaic Cell Comprising An Mis-Type Tunnel Diode	3/6/09	12/399,065		
TWINP020/TCA-021	Back-Contact Photovoltaic Cell Comprising A Thin Lamina Having A Superstrate Receiver Element	3/12/09	12/403,187		
TWINP016/TCA-019	Method To Make Electrical Contact To A Bonded Face Of A Photovoltaic Cell	3/19/09	12/407,064	7,964,431 (6/21/11)	
TCA-029	Isolation Circuit For Transmitting AC Power To A High-Voltage Region	3/25/09	12/411,048	8,227,763 (7/24/12)	
TCA-004-a	Ion Implanter For Photovoltaic Cell Fabrication	4/3/09	12/418,237	7,750,322 (7/6/10)	Con of 12/122,108, now U.S. Pat. No. 7,687,786
TWINP022/TCA-030	Methods Of Forming A Photovoltaic Cell	5/13/09	12/465,351	7,754,519 (7/13/10)	
TWINP027/TCA-031	Selective Etch For Damage At Exfoliated Surface	6/15/09	12/484,271	7,994,064 (8/9/11)	
TWINP035/TCA-033y	Method To Form A Thin Semiconductor Lamina Adhered To A Flexible Substrate	6/27/09	12/493,195		
TWINP036/TCA-033z	Thin Semiconductor Lamina Adhered To A Flexible Substrate	6/27/09	12/493,197		

Docket No.	Title	Filing Date	App. No.	Patent No. (Date Issued)	Priority
TWINP017/TCA-023X	Ion Implantation Apparatus And A Method For Fluid Cooling	6/30/09	12/494,268	7,982,197 (7/19/11)	
TWINP030/TCA-023Y	Ion Implantation Apparatus	6/30/09	12/494,269	8,044,374 (10/25/11)	
TWINP023/TCA-023Z	Ion Implantation Apparatus And A Method	6/30/09	12/494,270	7,989,784 (8/2/11)	
TWINP024/TCA-023W	Ion Source Assembly For Ion Implantation Apparatus And A Method Of Generating Ions Therein	6/30/09	12/494,272	7,939,812 (5/10/11)	
129005-0004U	Bonding Apparatus And Method	6/30/09	12/495,114	8,151,852 (4/10/12)	Prov. 61/122,699
TWINP001C5/TCA-001-E	Method To Form A Photovoltaic Cell Comprising A Thin Lamina	7/8/09	12/499,294	8,247,260 (8/21/12)	Con of 12/026,530
129005-0005	Mirror-Image Voltage Supply	8/6/09	12/537,022		
TWINP033/TCA-041	Intermetal Stack For Use In A Photovoltaic Device	8/13/09	12/540,463		
TWINP034/TCA-042	Method For Preparing A Donor Surface For Reuse	9/10/09	12/557,379		Prov. App. 61/173,584
TWINP029/TCA-036	Ion Implantation Apparatus	9/29/09	12/568,923		
TWINP038/TCA-043	Photovoltaic Cell Comprising A Thin Lamina Having Emitter Formed At Light-Facing And Back Surfaces	9/29/09	12/568,940		
TWINP041/TCA-046	Intermetal Stack For Use In A Photovoltaic Cell	9/30/09	12/571,415	8,049,104 (11/1/11)	

Docket No.	Title	Filing Date	App. No.	Patent No. (Date Issued)	Priority
TWINP026/TCA-034	Method And Apparatus For Modifying A Ribbon-Shaped Ion Beam	11/19/09	12/621,689	8,089,050 (1/3/12)	
TCA-040z	Apparatus And Method For Simultaneous Treatment Of Multiple Workpieces	12/11/09	12/636,328		
TCA-040x	Two-Chamber System And Method For Serial Bonding And Exfoliation Of Multiple Workpieces	12/11/09	12/636,410		
TCA-040y	Apparatus And Method For Simultaneous Treatment Of Multiple Workpieces	12/11/09	12/636,490	8,207,047 (6/26/12)	
TWINP043/TCA-049	Microwave Anneal Of A Thin Lamina For Use In A Photovoltaic Cell	12/11/09	12/636,704	8,257,995 (9/4/12)	
TWINP026C1/TCA-034-a	Method And Apparatus For Modifying A Ribbon-Shaped Ion Beam	2/10/10	12/703,194	8,058,626 (11/15/11)	Con of 12/621,689, now U.S. Pat. No. 8,089,050
TWINP046/TCA-053	Creation Of Low-Relief Texture For A Photovoltaic Cell	3/23/10	12/729,878		
TWINP001CIP2/TC A-001-2	Creation And Translation Of Low-Relief Texture For A Photovoltaic Cell	3/30/10	12/750,635		CIP of 12/026,530
TCA-004-b	Ion Implanter For Photovoltaic Cell Fabrication	6/28/10	12/824,426	8,242,468 (8/14/12)	Con of 12/418,237, now U.S. Pat. No. 7,750,322; which is a Con of 12/122,108, now U.S. Pat. No. 7,687,786

Docket No.	Title	Filing Date	App. No.	Patent No. (Date Issued)	Priority
TWINP037/TCA-055	Formed Ceramic Receiver Element Adhered To A Semiconductor Lamina	6/30/10	12/826,762	8,148,189 (4/3/12)	
TWINP049/TCA-052	Method To Adhere A Lamina To A Receiver Element Using Glass Frit Paste	8/31/10	12/872,629		
TWINP029CIP/TC A-036-1	Ion Implantation Apparatus	9/30/10	12/894,229		CIP of 12/568923
TWINP052/TCA-071	Semiconductor Assembly With A Metal Oxide Layer Having Intermediate Refractive Index	9/30/10	12/894,254		
TWINP053/TCA-072	Ion Source And A Method Of Generating An Ion Beam Using An Ion Source	11/2/10	12/917,510		
TWINP055/TCA-074	A D.C. Charge Particle Accelerator, A Method Of Accelerating Charged Particles Using D.C. Voltages And A High Voltage Power Supply Apparatus For Use Therewith	12/8/10	12/962,723		
TWINP059/TCA-050	Hydrogen Implantation With Reduced Radiation	12/25/10	12/978,558	8,101,488 (1/24/12)	
TWINP050/TCA-059X	Method To Form A Device By Constructing A Support Element On A Thin Semiconductor Lamina	12/29/10	12/980,424	8,173,452 (5/8/12)	
TWINP057/TCA-059Y	Method To Form A Device Including An Annealed Lamina And Having Amorphous Silicon On Opposing Faces	12/29/10	12/980,427	8,101,451 (1/24/12)	

Docket No.	Title	Filing Date	App. No.	Patent No. (Date Issued)	Priority
TWINP050CIP/TC A-059x-1	Zener Diode Within A Diode Structure Providing Shunt Protection	2/4/11	13/020,849		CIP of 12/980,424, filed 12/29/10, now U.S. Pat. No. 8,173,452
TWINP005C1/TCA-005-a	Assymmetric Surface Texturing For Use In A Photovoltaic Cell And Method Of Making	3/16/11	13/048,955		Con of 12/130,241 filed 5/30/2008 issued as Patent 7,915,522
TWINP062/TCA-087	Low-Temperature Method For Forming Amorphous Semiconductor Layers	4/11/11	13/083,625		
TwinP055CIP/TCA-083	D.C. Charged Particle Accelerator And A Method Of Accelerating Charged Particles	7/20/11	13/186,513		CIP of 12/962,723
TCA-046-1	Intermetal Stack For Use In A Photovoltaic Cell	8/16/11	13/211,258		CIP of 13/048,955, filed 3/16/01; which is a CIP of 12/571,415, filed 9/30/09, now U.S. Pat. No. 8,049,104; which is a Con of 12/130,241, filed 5/30/08, now U.S. Pat. No. 7,915,522

Docket No.	Title	Filing Date	App. No.	Patent No. (Date Issued)	Priority
TWINP064A/TCA-091Y	Method And Apparatus For Forming A Thin Lamina	12/20/11	13/331,909	8,268,645 (9/18/12)	Provs. 61/510,476, 61/510,475, 61/510,478, 61/510,477 all filed on 7/21/11; CIP of 12/980,424, filed 12/29/10, now U.S. Pat. No. 8,173,452
TwinP064b/TCA-091z	Method And Apparatus For Forming A Thin Lamina	12/20/11	13/331,915		Prov. App. 61/510,476 filed 7/21/2011; Prov. App. 61/510,475 filed 7/21/2011; Prov. App. 61/510,478 filed 7/21/2011; Prov. App. 61/510,477 filed 7/21/2011; CIP of 12/980,424 filed 12/29/2010 issued as Patent 8,173,452
TCA-009	Bonding Apparatus And Method	3/20/12	13/424,984		Con of 12/495,114
TWINP020CIP/TC A-021-1	Back-Contact Photovoltaic Cell Comprising A Thin Lamina Having A Superstrate Receiver Element	3/21/12	13/425,870		CIP of 12/403,187, now abandoned

Docket No.	Title	Filing Date	App. No.	Patent No. (Date Issued)	Priority
TWINP014D1/TCA-014-a	Method To Texture A Lamina Surface Within A Photovoltaic Cell	4/13/12	13/446,051		DIV of 12/343,420 filed 12/23/2008 issued as Patent 8,178,419
TCA-096	Drum Architecture For Ion Implanter Target Chamber	12/20/11	13/226,590		
TCA-097 & 101	Ion Implant Apparatus And A Method Of Implanting Ions	9/7/11	13/292,436		
TCA-105 (TCA-109 + TCA-107+TCA-107+TCA-114)	Methods For Texturing A Semiconductor Material	11/15/11	13/494,687		
TCA-121	Method For Forming Flexible Monocrystalline Solar Cells	6/12/12	13/366,338		
TCA-121-1 (formerly TCA-117)	Multilayer Nickel-Iron And Nickel Plating For Mechanical Stability	2/5/12	13/558,826		
TCA-121-2 (formerly TCA-125)	Exfoliation Of Ge, Gaas Gan For High Efficiency PV Cells Or Leds	7/26/12	13/558,836		
TCA-123	Method For Fabricating Backside-Illuminated Sensors	7/26/12	13/425,877		
TCA-124	Exfoliation Of Silicon Carbide For High Efficiency PV Cells And Leds	3/21/12	13/558,843		
TCA-126	Method For Three-Dimensional Packaging Of Electronic Devices	7/26/12	13/490,460		

Docket No.	Title	Filing Date	App. No.	Patent No. (Date Issued)	Priority
TCA-129	Method Of Forming A Permanently Supported Lamina	6/7/12	13/456,134		
TCA-139P	Laminator Bonding Apparatus And Method	4/25/12	61/683,313		
TCA-140b	Implanting Through Epitaxial Materials For PV, LED, Or Power Devices: Sic Power And Low-T Gaas	8/15/12	61/702,656		
TCA-140P	Implanting Through Epitaxial Materials For PV, LED, Or Power Devices	9/18/12	61/678,758		
TCA-141-1P	Sapphire Coating Bonded To A Cover Glass/Plastic With Touch Screen	8/2/12	61/708,890		
TCA-141P	Sapphire Coating Bonded To A Cover Glass	10/2/12	61/697,142		
TCA-032	Mirror-Image Voltage Supply	8/6/09	12/537,022		