PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Wenzhuo GUO	08/21/2013
Dmitry KARSHTEDT	08/19/2013
Vladimir K. DIOUMAEV	08/21/2013

RECEIVING PARTY DATA

Name:	Kovio, Inc.
Street Address:	2865 Zanker Road
City:	San Jose
State/Country:	CALIFORNIA
Postal Code:	95134

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12114741

CORRESPONDENCE DATA

Fax Number: 4089389069

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 4089389060

Email: officeaction@mhbpatents.com
Correspondent Name: Murabito Hao & Barnes LLP
Address Line 1: 2 North Market Street 3rd floor
Address Line 4: San Jose, CALIFORNIA 95113

ATTORNEY DOCKET NUMBER:	IDR1102	
NAME OF SUBMITTER:	Andrew D. Fortney, Ph.D., Reg. No. 34600	
Signature:	/Andrew D. Fortney/	
Date:	08/27/2013	

502473286 REEL: 031091 FRAME: 0536

12114741

CH \$40,00

Total Attachments: 4

source=KOVI-0006-01U00US_ASSIGNMENT#page1.tif source=KOVI-0006-01U00US_ASSIGNMENT#page2.tif source=KOVI-0006-01U00US_ASSIGNMENT#page3.tif source=KOVI-0006-01U00US_ASSIGNMENT#page4.tif

> PATENT REEL: 031091 FRAME: 0537

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned,

Wenzhuo GUO

Dmitry KARSHTEDT

Vladimir K. DIOUMAEV

who have created a certain invention for which an application for United States Letters Patent was executed by me concurrently herewith and entitled:

Print Processing for Patterned Conductor, Semiconductor and Dielectric Materials

Do hereby sell, assign and transfer to Kovio, Inc.	, a corporation
of Delaware	, having a place of business
at 2865 Zanker Road, San Jose, CA 95134	•
its successors, assigns, and legal representatives, the full and exclu and to any and all inventions described in said application for the foreign countries, and the entire right, title and interest in and to at therefor in the United States, its territorial possessions and all continuations-in-part, continuations, divisions, substitutes, reissues, Letters Patent relating thereto which have been or shall be filed in the any foreign countries, and all rights, together with all priority right unions, agreements, acts, and treaties, including all future conventions.	United States, its territorial possessions and all ny and all Letters Patent which may be granted foreign countries; and in and to any and all extensions thereof, and all other applications for the United States, its territorial possessions and/or this, under any of the international conventions.
Agree that Kovio, Inc. apply for and receive Letters Patent for said invention and said inve in its own name, in the United States, its territorial possessions, and to carry out in good faith the intent and purpose of this assignment, assigns and legal representatives, the undersigned will execute all substitutes, reissues, extensions thereof, execute all rightful oaths, as testify in any legal or quasi legal proceedings; communicate to representatives all facts known to the undersigned relating to said in everything possible which said Assignee, its successors, assigns, or aiding in securing, maintaining and enforcing proper patent protection invention and all applications for patents on said invention in s representatives; and	I all foreign countries; and that, when requested, at the expense of said Assignee, its successors, continuations-in-part, continuations, divisions, ssignments, powers of attorney and other papers, said Assignee, its successors, assigns or legal vention and the history thereof; and generally do legal representatives shall consider desirable for on for said invention and for vesting title to said
Covenant with said Assignee, its successors, assigns, or legal repre- license or other agreement affecting the rights and property here undersigned, and that full right to convey the same as herein express	in conveyed has been made to others by the
IN TESTIMONY WHEREOF I have hereunto set MY signature on t	the date indicated below.
Full Name of Sole/First Inventor:	7.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4
Wenzhuo GUO	
Inventor's Signature:	Date: Month/Day/Year
Full Name of Second Inventor, if any:	
Dmitry KARSHTEDT	
Inventor's Signature:	Date: Month/Day/Year 9 / 19 / 3

Customer No. 36872 Page 1

Full Name of Third Inventor, if any:	
Vladimir K. DIOUMAEV	
Inventor's Signature:	Date: Month/Day/Year
U. Biece	08/21/2013
V	0.0 /21/20(0
Full Name of Fourth Inventor, if any:	
Inventor's Signature:	Date: Month/Day/Year
	1.00
Full Name of Fifth Inventor, if any:	
Inventor's Signature:	Date: Month/Day/Year
Full Name of Sixth Inventor, if any:	
Inventor's Signature:	Date: Month/Day/Year
Full Name of Seventh Inventor, if any:	
Inventor's Signature:	Date: Month/Day/Year
Full Name of Eighth Inventor, if any:	
Inventor's Signature:	Date: Month/Day/Year
Full Name of Ninth Inventor, if any:	
Inventor's Signature:	Date: Month/Day/Year

Customer No. 36872

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned,

Wenzhuo GUO

Dmitry KARSHTEDT

Vladimir K. DIOUMAEV

who have created a certain invention for which an application for United States Letters Patent was executed by me concurrently herewith and entitled:

Print Processing for Patterned Conductor, Semiconductor and Dielectric Materials

Do hereby sell, assign and transfer to Kovio, Inc.	
of Delaware	, having a place of business
at 2865 Zanker Road, San Jose, CA 95134	
its successors, assigns, and legal representatives, the full and exclusive and to any and all inventions described in said application for the U foreign countries, and the entire right, title and interest in and to any therefor in the United States, its territorial possessions and all for continuations-in-part, continuations, divisions, substitutes, reissues, exclusters Patent relating thereto which have been or shall be filed in the any foreign countries, and all rights, together with all priority rights unions, agreements, acts, and treaties, including all future conventions,	nited States, its territorial possessions and all and all Letters Patent which may be granted reign countries; and in and to any and all tensions thereof, and all other applications for United States, its territorial possessions and/or a under any of the international conventions.
Agree that Kovio , Inc. apply for and receive Letters Patent for said invention and said inventin its own name, in the United States, its territorial possessions, and a to carry out in good faith the intent and purpose of this assignment, at assigns and legal representatives, the undersigned will execute all c substitutes, reissues, extensions thereof, execute all rightful oaths, assignestify in any legal or quasi legal proceedings; communicate to sair representatives all facts known to the undersigned relating to said inveneverything possible which said Assignee, its successors, assigns, or legal ding in securing, maintaining and enforcing proper patent protection invention and all applications for patents on said invention in said representatives; and	Il foreign countries; and that, when requested the expense of said Assignee, its successors, ontinuations-in-part, continuations, divisions, gnments, powers of attorney and other papers, id Assignee, its successors, assigns or legal nation and the history thereof; and generally dogal representatives shall consider desirable for for said invention and for vesting title to said
Covenant with said Assignce, its successors, assigns, or legal represe license or other agreement affecting the rights and property herein undersigned, and that full right to convey the same as herein expressed	conveyed has been made to others by the
IN TESTIMONY WHEREOF I have hereunto set MY signature on the	date indicated below.
Full Name of Sole/First Inventor:	
Wenzhuo GUO	
Inventor's Signature:	Date: Month/Day/Year
Wenzhu Gr	9-21-2013
Full Name of Second Inventor, if any:	
Dmitry KARSHTEDT	
Inventor's Signature:	Date: Month/Day/Year
	·

Customer No. 36872

Page 1

Full Name of Third Inventor, if any:	
Vladimir K. DIOUMAEV	
Inventor's Signature:	Date: Month/Day/Year
Full Name of Fourth Inventor, if any:	
Inventor's Signature:	Date: Month/Day/Year
	Date. Month Day/ 1 ca
Full Name of Fifth Inventor, if any:	
Inventor's Signature:	Date: Month/Day/Year
Full Name of Sixth Inventor, if any:	
Inventor's Signature:	Date: Month/Day/Year
Full Name of Seventh Inventor, if any:	
Inventor's Signature:	Date: Month/Day/Year
Full Name of Eighth Inventor, if any:	
Inventor's Signature:	Date: Month/Day/Year
Full Name of Ninth Inventor, if any:	
nventor's Signature:	Date: Month/Day/Year

Customer No. 36872

Page 2

PATENT REEL: 031091 FRAME: 0541