504835466 03/23/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DAVID TODD MOORE	03/22/2018
DAVID SAMUEL GINLEY	03/15/2018
LAUREN MARIE GARTEN	03/13/2018

RECEIVING PARTY DATA

Name:	ALLIANCE FOR SUSTAINABLE ENERGY, LLC
Street Address:	15013 DENVER WEST PARKWAY
City:	GOLDEN
State/Country:	COLORADO
Postal Code:	80401

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15934656

CORRESPONDENCE DATA

Fax Number: (303)384-7499

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 303-384-7551

Email: ipdocketing@nrel.gov

ALLIANCE FOR SUSTAINABLE ENERGY, LLC **Correspondent Name:**

Address Line 1: 15013 DENVER WEST PARKWAY

Address Line 2: MS 5231

Address Line 4: GOLDEN, COLORADO 80401-3305

ATTORNEY DOCKET NUMBER:	NREL 16-133	
NAME OF SUBMITTER:	REINA R. BERNFELD	
SIGNATURE:	/Reina R. Bernfeld/	
DATE SIGNED: 03/23/2018		
	This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 3

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PATENT REEL: 045334 FRAME: 0270

ASSIGNMENT AND DECLARATION UNDER 37 C.F.R. § 1.63

(For Use with Signed Application Data Sheet)

Title of Invention:

HYBRID PEROVSKITE BULK PHOTOVOLTAIC EFFECT DEVICES AND METHODS OF MAKING THE SAME

This assignment and declaration are directed to (check one): This assignment and declaration are directed to (check one): This assignment and declaration are directed to (check one): This assignment and declaration are directed to (check one):		
PCT International Application Number, filed		
United States Application No, filed		
<u>ASSIGNMENT</u>		
For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, as a below-named inventor I have sold and assigned, and by these presents hereby sell and assign, unto:		
Name of Assignee: Alliance for Sustainable Energy, LLC		
Address of Assignee: 15013 Denver West Parkway, Golden, CO 80401		
Thereinafter ASSIGNEE) all my right, title and interest in and to the above-identified invention in any form or embodiment thereof, in the United States and all foreign countries, including applications for patents in the United States and all countries of the world and through the Patent Cooperation Treaty and/or the European Patent Convention, including any and all applications claiming priority thereto such as divisions or continuations thereof, and in and to any and all patents granted in the United States and all countries of the world that may issue on any such applications or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors, or assigns to the full end of the term or terms for which any and all such patents may be granted as fully and entirely as would have been held and enjoyed by me had this Assignment not been made.		
hereby authorize and request the Director of the U.S. Patent and Trademark Office to issue any and all Letters Patent of the United States to said ASSIGNEE, its successors, or assigns in accordance herewith.		
warrant and covenant that I have the full and unencumbered right to sell and assign the interests herein sold and assigned and that I have not executed and will not execute any document or instrument in conflict herewith.		
further covenant and agree that I will communicate to said ASSIGNEE, its successors, legal representatives, or assigns all information known to me relating to said invention or patent application and that I will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings, and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives, or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all patents that may be granted therefor or thereon, including reissues or extensions, in said ASSIGNEE, its successors, or assigns, or to assist said ASSIGNEE, its successors, legal representatives, or assigns in obtaining, reissuing, or enforcing patents for said invention.		
<u>DECLARATION</u>		
As a below named inventor, I hereby declare that:		

Signature: David Todd Moore

Inventor: David Todd Moore

The above-identified application was made or authorized to be made by me.

or imprisonment of not more than five (5) years, or both.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine

PAPENT

REEL: 045334 FRAME: 0271

NREL 16-133 Worldwide Rights

ASSIGNMENT AND DECLARATION UNDER 37 C.F.R. § 1.63

(For Use with Signed Application Data Sheet)

Title of Invention:

HYBRID PEROVSKITE BULK PHOTOVOLTAIC EFFECT DEVICES AND METHODS OF MAKING THE SAME

This assignment and declaration are directed to (check the application identified above by the attorney	
PCT International Application Number	, filed
United States Application No, filed _	
AS	SIGNMENT
For good and valuable consideration, the receipt and su inventor I have sold and assigned, and by these present	of the self-are hereby acknowledged, as a below-named as hereby sell and assign, unto:
Name of Assignee: Alliance for Sustainable Ene	rgy, LLC
Address of Assignee: 15013 Denver West Parkway	, Golden, CO 80401
embodiment thereof, in the United States and all foreig and all countries of the world and through the Patent C including any and all applications claiming priority the and all patents granted in the United States and all coun said invention, including any and all reissues or extensi	in and to the above-identified invention in any form or in countries, including applications for patents in the United States cooperation Treaty and/or the European Patent Convention, reto such as divisions or continuations thereof, and in and to any attries of the world that may issue on any such applications or for ions thereof, to be held and enjoyed by said ASSIGNEE, its may for which any and all such patents may be granted as fully and and this Assignment not been made.
I hereby authorize and request the Director of the U.S. the United States to said ASSIGNEE, its successors, or	Patent and Trademark Office to issue any and all Letters Patent of assigns in accordance herewith.
I warrant and covenant that I have the full and unencum and that I have not executed and will not execute any d	nbered right to sell and assign the interests herein sold and assigned ocument or instrument in conflict herewith.
all information known to me relating to said invention make all rightful oaths, testify in any legal proceedings by said ASSIGNEE, its successors, legal representative including divisions and continuations thereof and to an	e said ASSIGNEE, its successors, legal representatives, or assigns or patent application and that I will execute and deliver any papers, and perform all other lawful acts deemed necessary or desirable es, or assigns to perfect title to said invention, to said application y and all patents that may be granted therefor or thereon, including ors, or assigns, or to assist said ASSIGNEE, its successors, legal inforcing patents for said invention.
DECLARATION	
As a below named inventor, I hereby declare that:	
The above-identified application was made or authorize	ed to be made by me.
I believe that I am the original inventor or an original jo	oint inventor of a claimed invention in the application.
I hereby acknowledge that any willful false statement r or imprisonment of not more than five (5) years or bot	made in this declaration is punishable under 18 U.S.C. 1001 by fine h.
Signature: A A A A	15 March 2018
Inventor: David Samuel Ginley	DATE

PATENT REEL: 045334 FRAME: 0272

RECORDED: 03/23/2018

REEL: 045334 FRAME: 0273

PATENT

Worldwide Rights

3/12/18

NREL 16-133

ASSIGNMENT AND DECLARATION UNDER 37 C.F.R. § 1.63

(For Use with Signed Application Data Sheet)

Title of Invention:

METHODS OF MAKING THE SAME HABBID PEROVSKITE BULK PHOTOVOLTAIC EFFECT DEVICES AND

PCT International Application Number
United States Application No. filed The application identified above by the attorney docket no. and title of invention This assignment and declaration are directed to (check one):

VESICHMENT

inventor I have sold and assigned, and by these presents hereby sell and assign, unto: For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, as a below-named

Alliance for Sustainable Energy, LLC Same of Assignee:

Address of Assignee: 15013 Denver West Parkway, Golden, CO 80401

entirely as would have been held and enjoyed by me had this Assignment not been made. successors, or assigns to the full end of the term or terms for which any and all such patents may be granted as fully and said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its and all patents granted in the United States and all countries of the world that may issue on any such applications or for including any and all applications claiming priority thereto such as divisions or continuations thereof, and in and to any and all countries of the world and through the Patent Cooperation Treaty and/or the European Patent Convention, embodiment thereof, in the United States and all foreign countries, including applications for parents in the United States (hereinafter ASSIGNEE) all my right, title and interest in and to the above-identified invention in any form or

the United States to said ASSIGNEE, its successors, or assigns in accordance herewith. I hereby authorize and request the Director of the U.S. Patent and Trademark Office to issue any and all Letters Patent of

and that I have not executed and will not execute any document or instrument in conflict herewith. I warrant and covenant that I have the full and unencumbered right to sell and assign the interests herein sold and assigned

representatives, or assigns in obtaining, reissuing, or enforcing patents for said invention. reissues or extensions, in said ASSIGNEE, its successors, or assigns, or to assist said ASSIGNEE, its successors, legal including divisions and continuations thereof and to any and all patents that may be granted therefor or thereon, including by said ASSIGNEE, its successors, legal representatives, or assigns to perfect title to said invention, to said application make all rightful oaths, testify in any legal proceedings, and perform all other lawful acts deemed necessary or desirable all information known to me relating to said invention or patent application and that I will execute and deliver any papers, I further covenant and agree that I will communicate to said ASSIGNEE, its successors, legal representatives, or assigns

DECLARATION

As a below named inventor, I hereby declare that:

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

or imprisonment of not more than five (5) years, or both. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine

Lauren Marie Garten Inventor Signature: