

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT7337047

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
BENJAMIN H. BOLLINGER	12/16/2020
MERT GEVECI	01/21/2021
BAO H. TRUONG	12/16/2020
ERHAN KARACA	01/16/2021
SEBASTIAN W. FREUND	12/14/2020
DAVID M. BRANTZEG	06/01/2021
JAMES J. UNDERWOOD	06/02/2021
JOHN S. BOWEN	05/28/2021
ROY T. COLLINS	12/16/2020
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	MALTA INC.
<b>Street Address:</b>	ONE BROADWAY, 14TH FLOOR
<b>City:</b>	CAMBRIDGE
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	02142
<b>PROPERTY NUMBERS Total: 4</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	62936491
Application Number:	63113386
Application Number:	17777128
PCT Number:	US2020060700
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(312)759-5646
<i>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.</i>	
<b>Phone:</b>	312-357-1313
<b>Email:</b>	msweetin@btlaw.com
<b>Correspondent Name:</b>	KURT W. ROHDE
<b>Address Line 1:</b>	BARNES & THORNBURG LLP
<b>Address Line 2:</b>	P.O. BOX 2786

<b>Address Line 4:</b> CHICAGO, ILLINOIS 60690-2786	
<b>ATTORNEY DOCKET NUMBER:</b>	84007-364117
<b>NAME OF SUBMITTER:</b>	KURT W. ROHDE (REG. NO. 62923
<b>SIGNATURE:</b>	/Kurt W. Rohde/
<b>DATE SIGNED:</b>	05/18/2022
<b>Total Attachments: 21</b> source=321835-329295-329296_364117_Assignment#page1.tif source=321835-329295-329296_364117_Assignment#page2.tif source=321835-329295-329296_364117_Assignment#page3.tif source=321835-329295-329296_364117_Assignment#page4.tif source=321835-329295-329296_364117_Assignment#page5.tif source=321835-329295-329296_364117_Assignment#page6.tif source=321835-329295-329296_364117_Assignment#page7.tif source=321835-329295-329296_364117_Assignment#page8.tif source=321835-329295-329296_364117_Assignment#page9.tif source=321835-329295-329296_364117_Assignment#page10.tif source=321835-329295-329296_364117_Assignment#page11.tif source=321835-329295-329296_364117_Assignment#page12.tif source=321835-329295-329296_364117_Assignment#page13.tif source=321835-329295-329296_364117_Assignment#page14.tif source=321835-329295-329296_364117_Assignment#page15.tif source=321835-329295-329296_364117_Assignment#page16.tif source=321835-329295-329296_364117_Assignment#page17.tif source=321835-329295-329296_364117_Assignment#page18.tif source=321835-329295-329296_364117_Assignment#page19.tif source=321835-329295-329296_364117_Assignment#page20.tif source=321835-329295-329296_364117_Assignment#page21.tif	

**ASSIGNMENT**

Matter Nos.: 84007-321835, 329295, 329296

Inventor(s): Benjamin R. Bollinger, Mert Geveci, Bao H. Truong, Erhan Karaca, Sebastian W. Freund, David M. Brantzeg, James J. Underwood, John S. Bowen, Roy T. Collins.

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to:

**MALTA INC.**  
210 Broadway, Suite 201  
Cambridge, MA 02139  
United States of America

its successors and assigns, the entire right, title and interest in the invention and improvements of the undersigned disclosed in applications for Letters Patent of the United States and internationally, entitled and identified as:

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**  
U.S. Provisional Patent Application No. 62/936,491, filed November 16, 2019  
Case No. 19-1665-US-PRO  
Matter No. 321835

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**  
U.S. Provisional Patent Application No. 63/113,386, filed November 13, 2020  
Case No. 19-1665-US-PRO2  
Matter No. 329295

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**  
International (PCT) Patent Application No. PCT/US2020/060700, filed November 16, 2020  
Case No. 19-1665-WO  
Matter No. 329296

in the offices of BARNES & THORNBURG LLP and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention and improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application(s) to insert in this assignment the filing date and serial number of said application when officially

1 of 3

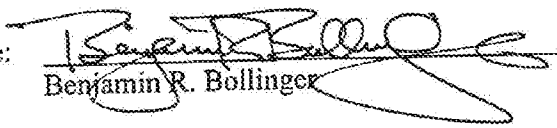
known, and the date of execution of the application.

The undersigned warrant themselves to be the owners of the entire right, title and interest in said invention and improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all provisional, non-provisional, divisional, continuation, continuation-in-part, and substitute applications for said invention and improvements, and any necessary oath, affidavit or declaration relating thereto, and any application(s) for the reissue or extension of any Letters Patent that may be granted upon said application(s) and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorize said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

Assignor Signature: \_\_\_\_\_

Name: \_\_\_\_\_

  
Benjamin R. Bollinger

Date: DECEMBER 16, 2020

Assignor Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Mert Geveci

Date: \_\_\_\_\_

Assignor Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Bao H. Truong

Date: \_\_\_\_\_

Assignor Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Erhan Karaca

Date: \_\_\_\_\_

Assignor Signature: \_\_\_\_\_

Name: \_\_\_\_\_


Sebastian W. Freund

Date: \_\_\_\_\_

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: David M. Brantzeg

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: James J. Underwood

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: John S. Bowen

Assignor Signature:  \_\_\_\_\_ Date: 12-16-2020  
Name: Roy T. Collins

Assignee Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Elvir Mujanovic, Vice President Finance  
as legal representative of:  
MALTA INC.  
210 Broadway, Suite 201  
Cambridge, MA 02139  
United States of America

DMS 18346136v1

**ASSIGNMENT**

Matter Nos.: 84007-321835, 329295, 329296

Inventor(s): Benjamin R. Bollinger, Mert Geveci, Bao H. Truong, Erhan Karaca, Sebastian W. Freund, David M. Brantzeg, James J. Underwood, John S. Bowen, Roy T. Collins.

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to:

**MALTA INC.**  
210 Broadway, Suite 201  
Cambridge, MA 02139  
United States of America

its successors and assigns, the entire right, title and interest in the invention and improvements of the undersigned disclosed in applications for Letters Patent of the United States and internationally, entitled and identified as:

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**  
U.S. Provisional Patent Application No. 62/936,491, filed November 16, 2019  
Case No. 19-1665-US-PRO  
Matter No. 321835

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**  
U.S. Provisional Patent Application No. 63/113,386, filed November 13, 2020  
Case No. 19-1665-US-PRO2  
Matter No. 329295

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**  
International (PCT) Patent Application No. PCT/US2020/060700, filed November 16, 2020  
Case No. 19-1665-WO  
Matter No. 329296

in the offices of BARNES & THORNBURG LLP and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention and improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application(s) to insert in this assignment the filing date and serial number of said application when officially

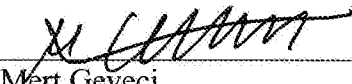
1 of 3

known, and the date of execution of the application.

The undersigned warrant themselves to be the owners of the entire right, title and interest in said invention and improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all provisional, non-provisional, divisional, continuation, continuation-in-part, and substitute applications for said invention and improvements, and any necessary oath, affidavit or declaration relating thereto, and any application(s) for the reissue or extension of any Letters Patent that may be granted upon said application(s) and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorize said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Benjamin R. Bollinger

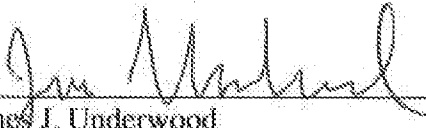
Assignor Signature:  \_\_\_\_\_ Date: January 21, 2021  
Name: Mert Geveci

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Bao H. Truong

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Erhan Karaca

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Sebastian W. Freund

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: David M. Brantzeg

Assignor Signature:  \_\_\_\_\_ Date: 06/02/2021  
Name: James J. Underwood

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: John S. Bowen

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Roy T. Collins

Assignee Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Elvir Mujanovic, Vice President Finance  
as legal representative of:  
MALTA INC.  
210 Broadway, Suite 201  
Cambridge, MA 02139  
United States of America



**ASSIGNMENT**

Matter Nos.: 84007-321835, 329295, 329296

Inventor(s): Benjamin R. Bollinger, Mert Geveci, Bao H. Truong, Erhan Karaca, Sebastian W. Freund, David M. Brantzeg, James J. Underwood, John S. Bowen, Roy T. Collins.

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to:

**MALTA INC.**  
210 Broadway, Suite 201  
Cambridge, MA 02139  
United States of America

its successors and assigns, the entire right, title and interest in the invention and improvements of the undersigned disclosed in applications for Letters Patent of the United States and internationally, entitled and identified as:

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**  
U.S. Provisional Patent Application No. 62/936,491, filed November 16, 2019  
Case No. 19-1665-US-PRO  
Matter No. 321835

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**  
U.S. Provisional Patent Application No. 63/113,386, filed November 13, 2020  
Case No. 19-1665-US-PRO2  
Matter No. 329295

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**  
International (PCT) Patent Application No. PCT/US2020/060700, filed November 16, 2020  
Case No. 19-1665-WO  
Matter No. 329296

in the offices of BARNES & THORNBURG LLP and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention and improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application(s) to insert in this assignment the filing date and serial number of said application when officially

1 of 3

BARNES & THORNBURG  
ONE NORTH WACKER DRIVE  
SUITE 4400  
CHICAGO, ILLINOIS 60606  
TELEPHONE (312) 357-1313

known, and the date of execution of the application.

The undersigned warrant themselves to be the owners of the entire right, title and interest in said invention and improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all provisional, non-provisional, divisional, continuation, continuation-in-part, and substitute applications for said invention and improvements, and any necessary oath, affidavit or declaration relating thereto, and any application(s) for the reissue or extension of any Letters Patent that may be granted upon said application(s) and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorize said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Benjamin R. Bollinger

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Mert Geveci

Assignor Signature: Bao H. Truong Date: 12/16/2020  
Name: Bao H. Truong

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Erhan Karaca

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Sebastian W. Freund

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: David M. Brantzeg

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: James J. Underwood

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: John S. Bowen

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Roy T. Collins

Assignee Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Elvir Mujanovic, Vice President Finance  
as legal representative of:  
MALTA INC.  
210 Broadway, Suite 201  
Cambridge, MA 02139  
United States of America

DMS 18546136v1

**ASSIGNMENT**

Matter Nos.: 84007-321835, 329295, 329296

Inventor(s): Benjamin R. Bollinger, Mert Geveci, Bao H. Truong, Erhan Karaca, Sebastian W. Freund, David M. Brantzeg, James J. Underwood, John S. Bowen, Roy T. Collins.

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to:

**MALTA INC.**

210 Broadway, Suite 201  
Cambridge, MA 02139  
United States of America

its successors and assigns, the entire right, title and interest in the invention and improvements of the undersigned disclosed in applications for Letters Patent of the United States and internationally, entitled and identified as:

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**

**U.S. Provisional Patent Application No. 62/936,491, filed November 16, 2019**

**Case No. 19-1665-US-PRO**

**Matter No. 321835**

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**

**U.S. Provisional Patent Application No. 63/113,386, filed November 13, 2020**

**Case No. 19-1665-US-PRO2**

**Matter No. 329295**

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**

**International (PCT) Patent Application No. PCT/US2020/060700, filed November 16, 2020**

**Case No. 19-1665-WO**

**Matter No. 329296**

in the offices of BARNES & THORNBURG LLP and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention and improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application(s) to insert in this assignment the filing date and serial number of said application when officially

known, and the date of execution of the application.

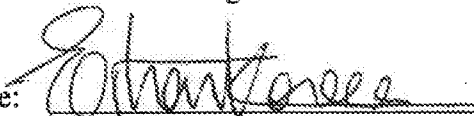
The undersigned warrant themselves to be the owners of the entire right, title and interest in said invention and improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all provisional, non-provisional, divisional, continuation, continuation-in-part, and substitute applications for said invention and improvements, and any necessary oath, affidavit or declaration relating thereto, and any application(s) for the reissue or extension of any Letters Patent that may be granted upon said application(s) and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorize said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Benjamin R. Bollinger

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Mert Geveci

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Bao H. Truong

Assignor Signature:  \_\_\_\_\_ Date: 01/16/2021  
Name: Erhan Karaca

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Sebastian W. Freund

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: David M. Brantzeg

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: James J. Underwood

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: John S. Bowen

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Roy T. Collins

Assignee Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Elvir Mujanovic, Vice President Finance  
as legal representative of:  
MALTA INC.  
210 Broadway, Suite 201  
Cambridge, MA 02139  
United States of America

DMS 18546136v1

**ASSIGNMENT**

Matter Nos.: 84007-321835, 329295, 329296

Inventor(s): Benjamin R. Bollinger, Mert Geveci, Bao H. Truong, Erhan Karaca, Sebastian W. Freund, David M. Brantzeg, James J. Underwood, John S. Bowen, Roy T. Collins.

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to:

**MALTA INC.**

210 Broadway, Suite 201  
Cambridge, MA 02139  
United States of America

its successors and assigns, the entire right, title and interest in the invention and improvements of the undersigned disclosed in applications for Letters Patent of the United States and internationally, entitled and identified as:

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**

**U.S. Provisional Patent Application No. 62/936,491, filed November 16, 2019**

**Case No. 19-1665-US-PRO**

**Matter No. 321835**

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**

**U.S. Provisional Patent Application No. 63/113,386, filed November 13, 2020**

**Case No. 19-1665-US-PRO2**

**Matter No. 329295**

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**

**International (PCT) Patent Application No. PCT/US2020/060700, filed November 16, 2020**

**Case No. 19-1665-WO**

**Matter No. 329296**

in the offices of BARNES & THORNBURG LLP and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention and improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application(s) to insert in this assignment the filing date and serial number of said application when officially

known, and the date of execution of the application.

The undersigned warrant themselves to be the owners of the entire right, title and interest in said invention and improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

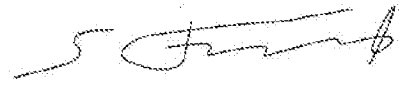
For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all provisional, non-provisional, divisional, continuation, continuation-in-part, and substitute applications for said invention and improvements, and any necessary oath, affidavit or declaration relating thereto, and any application(s) for the reissue or extension of any Letters Patent that may be granted upon said application(s) and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorize said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Benjamin R. Bollinger

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Mert Geveci

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Bao H. Truong

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Erhan Karaca

Assignor Signature:  \_\_\_\_\_ Date: 12/14/2020  
Name: Sebastian W. Freund



Assignor Signature: David M. Brantzeg Date: 6/1/2021  
Name: David M. Brantzeg

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: James J. Underwood

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: John S. Bowen

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Roy T. Collins

Assignee Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Elvir Mujanovic, Vice President Finance  
as legal representative of:  
MALTA INC.  
210 Broadway, Suite 201  
Cambridge, MA 02139  
United States of America

**ASSIGNMENT**

Matter Nos.: 84007-321835, 329295, 329296

Inventor(s): Benjamin R. Bollinger, Mert Geveci, Bao H. Truong, Erhan Karaca, Sebastian W. Freund, David M. Brantzeg, James J. Underwood, John S. Bowen, Roy T. Collins.

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to:

**MALTA INC.**  
210 Broadway, Suite 201  
Cambridge, MA 02139  
United States of America

its successors and assigns, the entire right, title and interest in the inventions and improvements of the undersigned disclosed in applications for Letters Patent of the United States and internationally, entitled and identified as:

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**  
**U.S. Provisional Patent Application No. 62/936,491, filed November 16, 2019**  
**Case No. 19-1665-US-PRO**  
**Matter No. 321835**

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**  
**U.S. Provisional Patent Application No. 63/113,386, filed November 13, 2020**  
**Case No. 19-1665-US-PRO2**  
**Matter No. 329295**

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**  
**International (PCT) Patent Application No. PCT/US2020/060700, filed November 16, 2020**  
**Case No. 19-1665-WO**  
**Matter No. 329296**

in the offices of BARNES & THORNBURG LLP and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said inventions and improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application(s) to insert in this assignment the filing date and serial number of said application when officially

known, and the date of execution of the application.

The undersigned warrant themselves to be the owners of the entire right, title and interest in said inventions and improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all provisional, non-provisional, divisional, continuation, continuation-in-part, and substitute applications for said invention and improvements, and any necessary oath, affidavit or declaration relating thereto, and any application(s) for the reissue or extension of any Letters Patent that may be granted upon said application(s) and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorize said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Benjamin R. Bollinger

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Mert Geveci

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Bao H. Truong

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Erhan Karaca

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Sebastian W. Freund

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: David M. Brantzeg

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: James J. Underwood

Assignor Signature: *John S. Bowen* Date: 5/23/2021  
Name: John S. Bowen

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Roy T. Collins

Assignee Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Elvir Mujanovic, Vice President Finance  
as legal representative of:  
MALTA INC.  
210 Broadway, Suite 201  
Cambridge, MA 02139  
United States of America

**ASSIGNMENT**

Matter Nos.: 84007-321835, 329295, 329296

Inventor(s): Benjamin R. Bollinger, Mert Geveci, Bao H. Truong, Erhan Karaca, Sebastian W. Freund, David M. Brantzeg, James J. Underwood, John S. Bowen, Roy T. Collins.

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to:

**MALTA INC.**  
210 Broadway, Suite 201  
Cambridge, MA 02139  
United States of America

its successors and assigns, the entire right, title and interest in the invention and improvements of the undersigned disclosed in applications for Letters Patent of the United States and internationally, entitled and identified as:

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**  
U.S. Provisional Patent Application No. 62/936,491, filed November 16, 2019  
Case No. 19-1665-US-PRO  
Matter No. 321835

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**  
U.S. Provisional Patent Application No. 63/113,386, filed November 13, 2020  
Case No. 19-1665-US-PRO2  
Matter No. 329295

**PUMPED HEAT ELECTRIC STORAGE SYSTEM**  
International (PCT) Patent Application No. PCT/US2020/060700, filed November 16, 2020  
Case No. 19-1665-WO  
Matter No. 329296

in the offices of BARNES & THORNBURG LLP and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention and improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application(s) to insert in this assignment the filing date and serial number of said application when officially

1 of 3

BARNES & THORNBURG  
ONE NORTH WACKER DRIVE  
SUITE 4400  
CHICAGO, ILLINOIS 60606  
TELEPHONE (312) 357-1313

known, and the date of execution of the application.

The undersigned warrant themselves to be the owners of the entire right, title and interest in said invention and improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all provisional, non-provisional, divisional, continuation, continuation-in-part, and substitute applications for said invention and improvements, and any necessary oath, affidavit or declaration relating thereto, and any application(s) for the reissue or extension of any Letters Patent that may be granted upon said application(s) and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorize said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Benjamin R. Bollinger

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Mert Geveci

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Bao H. Truong

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Erhan Karaca

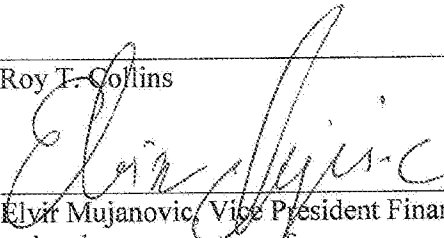
Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Sebastian W. Freund

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: David M. Brantzeg

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: James J. Underwood

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: John S. Bowen

Assignor Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Name: Roy T. Collins

Assignee Signature:  Date: 12/17/20  
Name: Elvir Mujanovic, Vice President Finance  
as legal representative of:  
MALTA INC.  
210 Broadway, Suite 201  
Cambridge, MA 02139  
United States of America

DMS 18546136v1