

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4639800

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JAMES E SHAW	01/11/2016
MOJI HOSSEINI	01/11/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CRYSTAL GROUP INC.
<b>Street Address:</b>	850 KACENA ROAD
<b>City:</b>	HIAWATHA
<b>State/Country:</b>	IOWA
<b>Postal Code:</b>	52233
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15783284
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(319)354-1760
<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>	319-354-1019
<b>Email:</b>	patents@simmonsperine.com
<b>Correspondent Name:</b>	SIMMONS PERRINE MOYER BERGMAN PLC
<b>Address Line 1:</b>	1150 5TH STREET, SUITE 170
<b>Address Line 4:</b>	CORALVILLE, IOWA 52241
<b>ATTORNEY DOCKET NUMBER:</b>	15721.010D1
<b>NAME OF SUBMITTER:</b>	GREGORY G. WILLIAMS
<b>SIGNATURE:</b>	/gregorygwilliams31681/
<b>DATE SIGNED:</b>	10/13/2017
<b>Total Attachments: 4</b>	
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ASSIGNMENT

WHEREAS, James E. Shaw, whose address is 7120 Old River Road, Ely, Iowa 52227, and Moji Hosseini, whose address is 101 Washington Park Road, Iowa City, Iowa 52245, have made certain new and useful inventions in

**"APPARATUS AND METHOD FOR UTILIZING COMMERCIAL OFF THE SHELF  
CIRCUIT BOARDS IN A HIGHLY KINEMATIC ENVIRONMENT"**

as disclosed or intended to be disclosed and set forth in a nonprovisional application for a United States Patent, filed on October 29, 2015, as application No. 14/926,449;

WHEREAS, said nonprovisional application claims priority from the United States from provisional application, Application No. 62/072,510 filed on October 30, 2014;

WHEREAS, Crystal Group Inc., a corporate organized and existing under the laws of the State of Iowa, (hereinafter called the "Assignee") is desirous of acquiring the entire interest in all inventions disclosed or intended to be disclosed in said Application.

NOW, THEREFORE, in consideration of the sum of one dollar (\$1.00) and other good and valuable considerations paid to me by said Assignee, the receipt and sufficiency whereof is hereby acknowledged, I do hereby sell, assign, and transfer unto said Assignee, its successors and assigns, the entire right, title and interest throughout the world in and to all said inventions disclosed or intended to be disclosed in said Applications; and in and to said Applications, including all priority rights for other countries or international or regional intergovernmental organizations arising from said Applications, and in and to all

substitutions, divisions, and continuations thereof; and in and to all Letters Patent, United States and foreign, that may be granted for said inventions; and in and to all extensions, reexaminations, and reissues thereof.


And I do hereby authorize and request the Commissioner of Patents and Trademarks of the United States and the duly constituted authorities of foreign countries to issue any Letters Patent which may be granted on said inventions, on any applications related thereto, and on any substitute, continuing, divisional, or reissue applications, or any of them, to said Assignee, its successors and assigns, as assignee of the entire right, title and interest therein and thereto.

And for the consideration aforesaid, I do hereby, for me and for my legal representatives, further covenant and agree with said Assignee, its successors and assigns, that I have full and unencumbered title to the inventions and said Applications above described and hereby assigned; that I have granted to others no license to make, use, or sell said inventions; and that I will not execute any instrument in conflict with this assignment.

And for the consideration aforesaid, I do hereby, for me and for my legal representatives, further covenant and agree with said Assignee, its successors and assigns, that upon request, I will execute substitute, continuing, divisional, or reissue applications, amended specifications, or rightful oaths; communicate to said Assignee, its successors or assigns, any facts known to me relating to said inventions or the history thereof; execute preliminary statements; testify in any interference or other legal proceedings involving said inventions; execute and deliver any application papers, assignments, or other instruments, and do all other acts which, in the opinion of counsel for said Assignee, may be necessary or convenient to secure the grant of Letters Patent to said Assignee, its successors and assigns,

or its nominees, in the United States and in all other countries where said Assignee may desire to have the said inventions, or any of them, patented, with specifications and claims in such form as shall be approved by counsel for said Assignee, and to vest and confirm and complete legal and equitable title to all such inventions, applications, and Letters Patent, and to enable it to record said title, without further consideration than now paid but at the expense of said Assignee, its successors or assigns.

Dated this 11 day of January, 2016, at Hiawatha, Iowa.

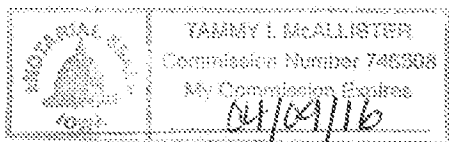
  
\_\_\_\_\_  
JAMES E. SHAW

UNITED STATES OF AMERICA

STATE OF IOWA            )  
                                      ) ss:  
COUNTY OF LINN        )

On January 11, 2016, before me, JAMES E. SHAW, personally appeared James E. Shaw, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the persons, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.



[Seal]

Signature: Tammy L. McAllister  
Notary Public

Dated this 11 day of 1, 2016, at Hawatha, Iowa.

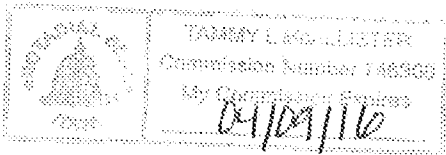
  
MOJI HOSSEINI

UNITED STATES OF AMERICA

STATE OF IOWA            )  
  ) ss:  
COUNTY OF \_\_\_\_\_)

On January 11, 2016, before me, Moji Hosseini,  
personally appeared Moji Hosseini, personally known to me (or proved to me on the basis  
of satisfactory evidence) to be the person whose name is subscribed to the within instrument  
and acknowledged to me that he executed the same in his authorized capacity, and that by  
his signature on the instrument the persons, or the entity upon behalf of which the person  
acted, executed the instrument.

WITNESS my hand and official seal.



[Seal]

Signature: Tammy L. McCallister  
Notary Public