

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	XINGHUA LIU	01/18/2018
<b>RECEIVING PARTY DATA</b>		
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<b>State/Country:</b>	PENNSYLVANIA	
<b>Postal Code:</b>	15212-5858	
<b>PROPERTY NUMBERS Total: 2</b>		
	<b>Property Type</b>	<b>Number</b>
	<b>Application Number:</b>	17372248
	<b>Patent Number:</b>	11060199
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<b>ATTORNEY DOCKET NUMBER:</b>	L80011578US1;L80011578US2	
<b>NAME OF SUBMITTER:</b>	GENEVIEVE BOUCHER	
<b>SIGNATURE:</b>	/Genevieve Boucher/	
<b>DATE SIGNED:</b>	07/14/2021	
<b>Total Attachments: 2</b>		
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source=Executed_Assignment_from_inventor_to_Alcoa#page2.tif		

**ASSIGNMENT**

WHEREAS, I Xinghua Liu of 5087 Harvest Drive, Murrysville, PA 15668, USA has invented a certain new and useful invention entitled **"ELECTRODE CONFIGURATIONS FOR ELECTROLYTIC CELLS AND RELATED METHODS"**, for which the following patent applications have been prepared and filed:

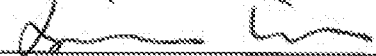
- (i) with the U.S. Patent and Trademark Office on March 24, 2017, receiving Serial No. 15/469,318; and
- (ii) with the U.S. Patent and Trademark Receiving Office on March 24, 2017, receiving Serial No. PCT/US17/24129

NOW THEREFORE, be it known that I, for and in consideration of one U.S. dollar (\$1 US) and other certain good and valuable consideration, the sufficiency and receipt of which is hereby acknowledged, at the request of the assignee do sell, assign and transfer unto said assignee, Alcoa USA Corp., a Pennsylvania corporation having a place of business at Alcoa Corporate Center, 201 Isabella Street, Pittsburgh, PA 15212-5858, its successors, legal representatives and assigns, the aforesaid applications and all rights to claim priority directly or indirectly to the aforesaid applications and all continuation, divisional, continuation-in-part and reissue applications, all patent applications that claim priority directly or indirectly to the aforesaid applications, all patent applications in foreign countries, all applications pursuant to the Patent Cooperation Treaty and all applications for extension filed or to be filed for the invention(s), and all Letters Patent, Invention Registrations, Utility Models, Extensions or Reissues and other patent rights, obtained for the invention(s) in the United States or any other country; I also assign any right, title or interest in and to the invention(s) that has not already been transferred to the assignee; I warrant that no assignment of the invention(s), application or patent therefor has been made to a party other than Alcoa USA Corp.; I warrant that there is no obligation to make any assignment, grant, mortgage, license, or other agreement affecting the rights, and property herein conveyed, and that I have the full right to convey the same as expressed herein of the invention(s), application, or any patent therefor to any party other than Alcoa USA Corp.; and agree that, when requested, without charge to but at the expense of said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, I will, for all countries execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said improvements; execute all rightful oaths and other papers; communicate to said Assignee, its successors, assigns, and representatives, all facts known to me relating to said improvements and the history thereof; testify in all legal proceedings; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said improvements, and for vesting title to said improvements and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns and legal representatives.

The Commissioner For Patents is hereby authorized and requested to issue the Letters Patent solely in accordance with the terms of this Assignment to Alcoa USA Corp., its successors, legal representatives and assigns, as the assignee of the entire right, title and interest therein.

IN WITNESS WHEREOF, the parties hereto have executed this Assignment as of the date indicated hereunder.

Date: 1/18/2018

By:   
Xinghua Liu