505692425 09/26/2019

EPAS ID: PAT5739235

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: CORRECTIVE ASSIGNMENT

NATURE OF CONVEYANCE: Corrective Assignment to correct the CORRESPONDENCE DATA previously recorded on Reel 048414 Frame 0640. Assignor(s) hereby confirms the ASSIGNMENT.

RESUBMIT DOCUMENT ID: 505371015

CONVEYING PARTY DATA

Name	Execution Date
TODD EARL HOLVERSON	04/10/2014
JOSEPH K. FINK	04/10/2014
ANDREW PATRICK MULROY	04/15/2014
JYI-JIIN LUO	04/25/2014

RECEIVING PARTY DATA

Name:	ILLINOIS TOOL WORKS INC.
Street Address:	155 HARLEM AVENUE
City:	GLENVIEW
State/Country:	ILLINOIS
Postal Code:	60025

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16283268

CORRESPONDENCE DATA

Fax Number: (312)775-8100

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: 312-775-8000

Email: mhmpto@mcandrews-ip.com

Correspondent Name: MCANDREWS HELD & MALLOY, LTD

Address Line 1: 500 WEST MADISON STREET

Address Line 2: 34TH FLOOR

Address Line 4: CHICAGO, ILLINOIS 60661

ATTORNEY DOCKET NUMBER:	62368US03 (62135-US-A)
NAME OF SUBMITTER:	MATTHEW E. MARRONE
SIGNATURE:	/Matthew E. Marrone/
DATE SIGNED:	09/26/2019

PATENT 505692425 REEL: 050522 FRAME: 0573

Total Attachments: 6 source=Original Coversheet#page1.tif

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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5389176

SUE	BMISSION TYPE:	NEW ASSIGNMENT	 1	
NAT	TURE OF CONVEYANCE:	ASSIGNMENT		

CONVEYING PARTY DATA

Name	Execution Date
TODD EARL HOLVERSON	04/10/2014
JOSEPH K. FINK	04/10/2014
ANDREW PATRICK MULROY	04/15/2014
JYI-JIIN LUO	04/25/2014

RECEIVING PARTY DATA

Name:	ILLINOIS TOOL WORKS INC.		
Street Address:	155 HARLEM AVENUE		
City:	GLENVIEW	S	
State/Country:	ILLINOIS		
Postal Code:	60025		

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	16283268	

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Phone:

312-775-8000

Email:

mhmpto@mcandrews-ip.com

Correspondent Name:

ARISTOCRAT TECHNOLOGIES, INC. C/O MCANDR

Address Line 1:

500 WEST MADISON STREET

Address Line 2:

34TH FLOOR

Address Line 4:

CHICAGO, ILLINOIS 60661

ATTORNEY DOCKET NUMBER:	62368US03 (62135-US-A)
NAME OF SUBMITTER:	MATTHEW E. MARRONE
SIGNATURE:	/Matthew E. Marrone/
DATE SIGNED:	02/22/2019

Total Attachments: 5

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ASSIGNMENT

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned, does hereby:

SELL, ASSIGN AND TRANSFER to Illinois Tool Works Inc. (the "Assignee"), a corporation of the State of Delaware, having a place of business at 155 Harlem Avenue, Glenview, Illinois 60025, the entire right, title and interest for the United States and all foreign countries in and to any and all inventions and improvements which are disclosed in the application for United States Letters Patent, which is entitled "WELDING SYSTEM FOR DETERMINING A QUALITY OF A WELDING OPERATION," and which may be further identified below, such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States, including all provisional and non-provisional applications, and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

AUTHORIZE AND REQUEST that any attorney associated with PTO Customer No. 52145 may delete, insert, or alter any information identifying this application, or any related application, below after execution of this assignment;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, when requested and without further consideration, but at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will (1) execute all provisional, non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; (2) execute all rightful oaths, declarations, assignments, powers of attorney and other papers; (3) communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; (4) cooperate with the Assignee in any interference, opposition, dispute, or litigation involving any of the applications or patents for such improvements; and (5) generally do everything possible which the Assignee shall consider desirable for vesting title to such improvements in the Assignee, and for securing, maintaining and enforcing proper patent protection for such improvements;

TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

Additional Application Information			
U.S. Provisional Application Serial No. 61/822,035	, filed on May 10, 2013		
U.S. Non-Provisional Application Serial No. 14/262,588	, filed on		
International Application Serial No.	, filed on		

INVENTOR:		
Signature:	Todd Earl Holverson	Date: 4-/0-/4
Witnessed by:	Signature	Date:
	Printed Name of Witness	
Witnessed by:	Signature	Date:
	Printed Name of Witness	
SECTIO	N BELOW IS FOR USE ONLY IF SIGNING IN PRES	SENCE OF A NOTARY
Zoda Todd Earl Ho	Earl Office.	Date: 4-10-14
STATE OF COUNTY OF This Holverson, to he/she execute	Outaganice Oth day of April , 2014 before no me personally known as the individual who executed the d the same of his/her own free will for the purposes therein	ne personally came the above-named Todd Ear foregoing assignment, who acknowledged to me tha n set forth.
Seal KATHI F	EN M. KEDDELL State of My Commission	Keddell sion Experis 5-8-17
No	tary Public of Wisconsin	

INVENTOR: Signature: Date: Joseph K. Fink Witnessed by: Date: Signature Printed Name of Witness Witnessed by: Date: Signature Printed Name of Witness SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY Date: 4-10-14 STATE OF WI) §§. COUNTY OF Outage myc.) This 10-th day of April , 2019 before me personally came the above-named Joseph K. Fink, to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.

INVENTOR:				
Signature:	Andrew Patrick Mulroy	2	Date: <u>4//</u> 5	719
Witnessed by:	Signature		Date:	5/14
	MICHASU FISC Printed Name of Witness	CHER		
Witnessed by:	Signature	Jemb)	Date:	5/14
SECTIO	Printed Name of Witness N BELOW IS FOR USE ONLY IF		CE OF A NOTARY	
Andrew Patr	ick Mulroy		Date:	
STATE OF)) §§.)			
This Mulroy, to m	day of ne personally known as the individuated the same of his/her own free will for	before me personal who executed the foregor the purposes therein set	onally came the above oing assignment, who forth.	e-named Andrew Patrick acknowledged to me that
Seal		(Notary Public)	4-44-4	

INVENTOR:		
Signature:	Jyi-Jiin Luo	Date: 4/25/2014
Witnessed by:	Signature Gregore M. Martel Printed Name of Witness	Date: 4/25/2014
Witnessed by:	Matt. 1- out	Date: 4-25-2014
Photos de la constante de la c		NOT OR A NORA DAY
SECTIO	N BELOW IS FOR USE ONLY IF SIGNING IN PRESE	NCE OF A NOTARY
Jyi-Jiin Luo	· · · · · · · · · · · · · · · · · · ·	Date:
STATE OF)) §§.)	
This personally kno same of his/he	day of before me personant as the individual who executed the foregoing assignment or own free will for the purposes therein set forth.	onally came the above-named Jyi-Jiin Luo, to me, who acknowledged to me that he/she executed the
Seal	(Notary Public)	

PATENT REEL: 050522 FRAME: 0580

RECORDED: 03/12/2019