PATENT ASSIGNMENT

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SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYAN	CE:	ASSIGNMENT		
CONVEYING PARTY DAT	A			
		Name	Execution Date	
Gerald Michael Malen			08/23/2011	
Timothy Costanzo			04/10/2012	
lan W. Donaldson			08/18/2011	
Joel H. Mandel			08/15/2011	
RECEIVING PARTY DATA				
Name:	GKN SINTER METALS, LLC			
Street Address:	3300 University Drive			
City:	Auburn Hills			
State/Country:	MICHIGAN			
Postal Code: 4	18326-2362			
Application Number: 133184				
Property Type Application Number: 133184		A37		
CORRESPONDENCE DA	TA			
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Phone: Email:	414-277-5000 pat-dept@quark		s cont via US	
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Phone: Email: <i>Correspondence will be se Mail.</i> Correspondent Name:	414-277-5000 pat-dept@quark	ress first; if that is unsuccessful, it will be	esent via US	
Phone: Email: <i>Correspondence will be se Mail.</i> Correspondent Name: Address Line 1:	414-277-5000 pat-dept@quark ent to the e-mail addr QUARLES & BF 411 E. Wiscons	<i>ress first; if that is unsuccessful, it will be</i> RADY LLP in Avenue	e sent via US	
Phone: Email: <i>Correspondence will be se Mail.</i> Correspondent Name:	414-277-5000 pat-dept@quark ent to the e-mail addr QUARLES & BF 411 E. Wiscons	<i>tess first; if that is unsuccessful, it will be</i>	e sent via US	
Phone: Email: <i>Correspondence will be se Mail.</i> Correspondent Name: Address Line 1: Address Line 4:	414-277-5000 pat-dept@quark ent to the e-mail addr QUARLES & BF 411 E. Wiscons Milwaukee, WIS	<i>ress first; if that is unsuccessful, it will be</i> RADY LLP in Avenue	e sent via US	
Phone: Email: <i>Correspondence will be se Mail.</i> Correspondent Name: Address Line 1:	414-277-5000 pat-dept@quark ent to the e-mail addr QUARLES & BF 411 E. Wiscons Milwaukee, WIS	ress first; if that is unsuccessful, it will be RADY LLP in Avenue SCONSIN 53202	e sent via US	

ASSIGNMENT

WHEREAS, We, Gerald Michael Malen of Troy, Michigan, Timothy Costanzo of Emporium, Pennsylvania, Ian W. Donaldson of Jefferson, Massachusetts and Joel H. Mandel, of Hartford, Wisconsin, have made certain inventions which are described in an application for Letters Patent of the United States entitled ADHESIVE JOINING FOR POWDER METAL COMPONENTS executed by us preparatory to obtaining United States Letters Patent therefor and claiming the benefit of U.S. Provisional Patent Application Nos. 61/175,154 filed 04 May 2009, and PCT/US2009/046423 filed 05 June 2009, and U.S. Patent Application filed , and

WHEREAS, GKN SINTER METALS, LLC, a Delaware corporation having a place of business at Auburn Hills, Michigan, (hereinafter called **Company**), is desirous of acquiring the entire interest in said inventions throughout the United States of America and the territories thereof and for all foreign countries.

NOW, THEREFORE, for and in consideration of One Dollar (\$1.00) to us in hand paid, and other good and valuable consideration, receipt whereof is hereby acknowledged, we hereby sell, assign, and transfer unto said **Company**, its successors and assigns, effective retroactively from the date of making said inventions, the entire right, title and interest throughout the United States of America and the territories thereof and for all foreign countries, in and to said inventions, the aforesaid application, and all other applications hereafter filed in the United States or any other country based in whole or in part on said inventions, and all Letters Patent granted upon said application by the United States or any other country, and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said **Company**. We further grant to said **Company**, its successors and assigns, the right to claim for any of said applications the full benefits and priority rights of any international agreement between the United States and any foreign country or countries.

We hereby warrant that we have the full right to make the conveyance herein, and we hereby covenant that we, our heirs, legal representatives and assigns, will, when requested, communicate to said **Company**, its representatives, successors and assigns, all facts known respecting said inventions, execute all applications including regular, divisional, continuing, reissue, reexamination and foreign applications together with individual assignments therefor, make all rightful oaths, sign all lawful papers, testify in any legal proceeding and generally do everything possible to aid said **Company**, its successors and assigns, in the obtaining of Letters Patent.

IN TESTIMONY WHEREOF, we have hereunto set our hands and seals on the date indicated below our signatures.

Gerald Michael MalysEAL)

Gerald Michael Malen

STATE OF MICHIGAN COUNTY OF DAKLAND) SS. AUGUST Before me on this 22 day of 2017, 2011, came Gerald Michael Malen, to me known to be the person named in the foregoing Assignment and acknowledged the execution thereof to be his free act and deed. (SEAL) Notary-Public, State of Michigan-) My Commission: GHAIDA K KINAIA Notary Public - Michigan Macomb County My Commission Expires Aug 1, 2014 Acting in the County of \bigcirc Page 1 of 2

PATENT REEL: 028424 FRAME: 0888

(SEAL) Timothy Costanzo

STATE OF PEI	NNSYLVANIA	1	
COUNTY OF)	SS.

Before me on this _____ day of _____, 2011, came Timothy Costanzo, to me known to be the person named in the foregoing Assignment and acknowledged the execution thereof to be his free act and deed.

(SEAL)

Notary Public, State of Pennsylvania My Commission:

____(SEAL)

Ian W. Donaldson

STATE OF MASSACHUSETTS)

) ss.

Before me on this _____ day of _____, 2011, came Ian W. Donaldson, to me known to be the person named in the foregoing Assignment and acknowledged the execution thereof to be his free act and deed.

(SEAL)

Notary Public, State of Massachusetts My Commission:

> _____(SEAL) Joel H. Mandel

STATE OF WISCONSIN)) ss. COUNTY OF ______)

Before me on this _____ day of _____, 2011, came Joel H. Mandel, to me known to be the person named in the foregoing Assignment and acknowledged the execution thereof to be his free act and deed.

(SEAL)

Notary Public, State of Wisconsin My Commission: _____

(SEAL)

Timothy Costanzo

STATE OF PENNSYLVANIA)) ss. COUNTY OF _____)

Before me on this _____ day of _____, 2011, came Timothy Costanzo, to me known to be the person named in the foregoing Assignment and acknowledged the execution thereof to be his free act and deed.

(SEAL)

Notary Public, State of Pennsylvania My Commission:

(SEAL)

Ian W. Donaldson

STATE OF MICHIGAN)

) ss. COUNTY OF <u>Oakind</u>)

Before me on this $\underline{18}^{44}$ day of $\underline{A_{4444}}$, 2011, came Ian W. Donaldson, to me known to be the person named in the foregoing Assignment and acknowledged the execution thereof to be his free act and deed.

(SEAL)

KATHERINE GRANT NOTARY PUBLIC, STATE OF M COUNTY OF OAKLAND MY COMMISSION EXPIRES Nov 3, 2011 ACTING IN THE COUNTY OF

Notary Public, State of Michigan My Commission:

__(SEAL)

Joel H. Mandel

STATE OF WISCONSIN)) ss. COUNTY OF _____)

Before me on this _____ day of _____, 2011, came Joel H. Mandel, to me known to be the person named in the foregoing Assignment and acknowledged the execution thereof to be his free act and deed.

(SEAL)

Notary Public, State of Wisconsin My Commission:

	Timothy Costanzo
STATE OF PENNSYLVANIA)) ss.	
COUNTY OF)	
Before me on this day of to be the person named in the foregoing Ass free act and deed.	, 2011, came Timothy Costanzo, to me kr signment and acknowledged the execution thereof to b
(SEAL)	Notary Public, State of Pennsylvania My Commission:
	(SEAL) Ian W. Donaldson
STATE OF MASSACHUSETTS)	
) ss.	
COUNTY OF)	
to be the person named in the foregoing Assi free act and deed. (SEAL)	, 2011, came Ian W. Donaldson, to me kn ignment and acknowledged the execution thereof to be
	Notary Public, State of Massachusetts My Commission:
	Jul H. Mandel
STATE OF WISCONSIN)	
COUNTY OF Ulashington	
he the memory in the foregoing Assistant	χ_{μ} , 2011, came Joel H. Mandel, to me known nent and acknowledged the execution thereof to be his
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