

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT																
NATURE OF CONVEYANCE:	ASSIGNMENT																
CONVEYING PARTY DATA																	
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Qingjun Zheng</td> <td>03/13/2013</td> </tr> <tr> <td>Yixiong Liu</td> <td>03/13/2013</td> </tr> <tr> <td>James A Faust</td> <td>03/14/2013</td> </tr> <tr> <td>Danie J De Wet</td> <td>03/15/2013</td> </tr> <tr> <td>Sudharsan Subbaiyan</td> <td>03/15/2013</td> </tr> <tr> <td>Piyamanee Komolwit</td> <td>03/13/2013</td> </tr> <tr> <td>Mark J Rowe</td> <td>03/13/2013</td> </tr> </tbody> </table>		Name	Execution Date	Qingjun Zheng	03/13/2013	Yixiong Liu	03/13/2013	James A Faust	03/14/2013	Danie J De Wet	03/15/2013	Sudharsan Subbaiyan	03/15/2013	Piyamanee Komolwit	03/13/2013	Mark J Rowe	03/13/2013
Name	Execution Date																
Qingjun Zheng	03/13/2013																
Yixiong Liu	03/13/2013																
James A Faust	03/14/2013																
Danie J De Wet	03/15/2013																
Sudharsan Subbaiyan	03/15/2013																
Piyamanee Komolwit	03/13/2013																
Mark J Rowe	03/13/2013																
RECEIVING PARTY DATA																	
<table border="1"> <tr> <td>Name:</td> <td>Kennametal Inc.</td> </tr> <tr> <td>Street Address:</td> <td>1600 Technology Way</td> </tr> <tr> <td>City:</td> <td>Latrobe</td> </tr> <tr> <td>State/Country:</td> <td>PENNSYLVANIA</td> </tr> <tr> <td>Postal Code:</td> <td>15650-0231</td> </tr> </table>		Name:	Kennametal Inc.	Street Address:	1600 Technology Way	City:	Latrobe	State/Country:	PENNSYLVANIA	Postal Code:	15650-0231						
Name:	Kennametal Inc.																
Street Address:	1600 Technology Way																
City:	Latrobe																
State/Country:	PENNSYLVANIA																
Postal Code:	15650-0231																
PROPERTY NUMBERS Total: 1																	
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13833411</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13833411												
Property Type	Number																
Application Number:	13833411																
CORRESPONDENCE DATA																	
Fax Number:	7245395903																
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>																	
Phone:	724-539-5485																
Email:	k-corp.patents@kennametal.com																
Correspondent Name:	KENNAMETAL INC. Intellectual Property De																
Address Line 1:	P.O. BOX 231																
Address Line 2:	1600 TECHNOLOGY WAY																
Address Line 4:	LATROBE, PENNSYLVANIA 15650																
ATTORNEY DOCKET NUMBER:	K-4253USUS1																

CH \$40.00 13833411

NAME OF SUBMITTER:

Tammy Stevens

Total Attachments: 4

source=K4253Assgnmt#page1.tif

source=K4253Assgnmt#page2.tif

source=K4253Assgnmt#page3.tif

source=K4253Assgnmt#page4.tif

ASSIGNMENT

In accordance with my/our obligations under an Employment Agreement or (as applicable) arising out of other agreements, and/or for other good and valuable consideration of which I/we acknowledge receipt, I/we,

Qingjun Zheng	of	1022 Lexington Drive Export, PA 15632 United States
Yixiong Liu	of	317 Marigold Drive Greensburg, PA 15601 United States
James A. Faust	of	408 Parkline Drive South New Albany, IN 47150 United States
Danie J. De Wet	of	471 Dundas Street East Belleville, ON K8N 1G2 Canada
Sudharsan Subbaiyan	of	249 Bridge Street West Apt #1501 Belleville, ON K8P 4V4 Canada
Piyamane Komolwit	of	1400 Clearview Dr. Greensburg, PA 15601 United States
Mark J. Royce	of	135 Franklin Drive New Derry, PA 15650 United States

hereby sell and assign to Kennametal Inc., a corporation of the Commonwealth of Pennsylvania, (hereinafter referred to as Assignee) having an address at 1600 Technology Way, Latrobe, Pennsylvania 15650-0231, USA, its successors and assigns my (our) entire respective right(s), title(s) and interest(s) in and to the invention and improvements invented and originated by me/us and described in the application for United States Patent currently entitled:

**CLADDED ARTICLES AND METHODS OF MAKING THE SAME**

☒ executed concurrently herewith,

☐ filed on        having Serial Number

and any and all applications for patent and patents therefrom in any and all countries, including all divisions, continuations, reexaminations and reissues thereof, and all rights of priority resulting from the filing of said United States application, and authorize and request any official whose duty it is to issue patents, to issue any patent on said inventions and improvements resulting therefrom to said Assignee, or its successors or assigns and agree that on request and without further consideration, but at the expense of said Assignee, I/we will

DOCKET NUMBER: K-4253

communicate to said Assignee or its representatives or nominees any facts known to me/us respecting said inventions and improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, reexamination and reissue applications, make all rightful oaths and generally do everything possible to aid said Assignee, its successors, assigns, and nominees to obtain and enforce proper patent protection for said invention and its improvements in all countries.

I/we, an inventor signing below, hereby authorize and request my attorneys associated with Customer Number 27877 to insert the application number and filing date, when known, into the assignment for this invention.

INVENTOR 1

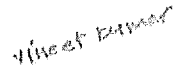
Signature: 

Date: 03/13/2013

Witnessed by: 

Date: 03/13/2013

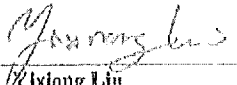
Zhenyu Liu  
Signature  
Zhenyu Liu  
Printed Name of Witness

Witnessed by: 

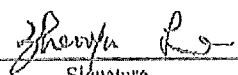
Date: 03/13/2013

VINEET KUMAR  
Signature  
VINEET KUMAR  
Printed Name of Witness

INVENTOR 2

Signature: 

Date: 3/13/2013

Witnessed by: 

Date: 3/13/2013

Zhenyu Liu  
Signature  
Zhenyu Liu  
Printed Name of Witness

Witnessed by: 

Date: 03/13/2013

VINEET KUMAR  
Signature  
VINEET KUMAR  
Printed Name of Witness

DOCKET NUMBER: K-4253

INVENTOR 3

Signature: [Signature]  
James A. Faust

Date: 3/14/13

Witnessed by: [Signature]  
Signature  
Karen M. Sager  
Printed Name of Witness

Date: 3/14/13

Witnessed by: [Signature]  
Signature  
Robert W. Sager  
Printed Name of Witness

Date: 3-14-2013

INVENTOR 4

Signature: [Signature]  
Danie J. De Wet

Date: 3/15/13

Witnessed by: [Signature]  
Signature  
AZAZ FARUKE  
Printed Name of Witness

Date: March 15/13

Witnessed by: [Signature]  
Signature  
J. Coughlan  
Printed Name of Witness

Date: March 15/2013

INVENTOR 5

Signature: [Signature]  
Sudharsan Subbayan

Date: March 15/13

Witnessed by: [Signature]  
Signature  
AZAZ FARUKE  
Printed Name of Witness

Date: March 15/13

Witnessed by: [Signature]  
Signature  
J. Coughlan  
Printed Name of Witness

Date: March 15, 2013

DOCKET NUMBER: K-4253

INVENTOR 6

Signature: Piyamane Komolwitt  
Piyamane Komolwitt

Date: 3/12/2013

Witnessed by: Zhenyu Liu  
Signature  
ZHENYU Liu  
Printed Name of Witness

Date: 3/13/2013

Witnessed by: Vineet Kumar  
Signature  
VINEET KUMAR  
Printed Name of Witness

Date: 03/13/2013

INVENTOR 7

Signature: Mark J. Howe  
Mark J. Howe

Date: 3/13/13

Witnessed by: Vineet Kumar  
Signature  
VINEET KUMAR  
Printed Name of Witness

Date: 03/13/2013

Witnessed by: Zhenyu Liu  
Signature  
Zhenyu Liu  
Printed Name of Witness

Date: 03/13/2013