Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE	E:	NEW ASSIGNMENT	NEW ASSIGNMENT		
NATURE OF CONV	EYANCE:	ASSIGNMENT	ASSIGNMENT		
CONVEYING PART	Υ DATA				
		Name	Execution Date		
X. Daniel Fang			10/18/2005		
David J. Wills 10/20/2005		10/20/2005			
Prakash K. Mirchar	Idani		10/19/2005		
RECEIVING PARTY	′ DATA				
Name:	TDY Industri	es, Inc.]		
Street Address:	1000 Six PP	G Place			
City:	Pittsburgh				
State/Country:	PENNSYLV	ANIA			
	15222-5479				
Postal Code: PROPERTY NUMB	ERS Total: 1		Imper		
	ERS Total: 1	Nu	umber		
	ERS Total: 1	Nu 11206368	ımber		
PROPERTY NUMB	ERS Total: 1 Type r:		Imber		
PROPERTY NUMB	ERS Total: 1 Type r: CE DATA	11206368	Imber		
PROPERTY NUMB	ERS Total: 1 Type r: CE DATA (412)35	5-6501			
PROPERTY NUMB	ERS Total: 1 Type r: CE DATA (412)35	11206368 5-6501 Mail when the fax attempt is unsucce			
PROPERTY NUMB	ERS Total: 1 Type r: CE DATA (412)35 <i>(412)35</i> 412 355	11206368 5-6501 Mail when the fax attempt is unsucce			
PROPERTY NUMB Property Application Numbe CORRESPONDENC Fax Number: <i>Correspondence wi</i> Phone: Email: Correspondent Nam	ERS Total: 1 Type r: CE DATA (412)35 (412)35 412 355 patents ne: Daniel F	11206368 5-6501 6 <i>Mail when the fax attempt is unsucce</i> 5-6773 @klng.com R. Miller			
PROPERTY NUMB Property Application Numbe CORRESPONDENC Fax Number: <i>Correspondence wi</i> Phone: Email: Correspondent Nam Address Line 1:	ERS Total: 1 Type r: CE DATA (412)35 (412)35 412 355 patents ne: Daniel F 535 Sm	11206368 5-6501 6 <i>Mail when the fax attempt is unsucce</i> 5-6773 @klng.com R. Miller ithfield Street			
PROPERTY NUMB Property Application Numbe CORRESPONDENC Fax Number: <i>Correspondence wi</i> Phone: Email: Correspondent Nam Address Line 1: Address Line 2:	ERS Total: 1 Type r: CE DATA (412)35 (412)35 (1) be sent via US 412 355 patents patents 535 Sm Henry V	11206368 5-6501 7 <i>Mail when the fax attempt is unsucce</i> 5-6773 @klng.com R. Miller ithfield Street V. Oliver Building			
PROPERTY NUMB Property Application Numbe CORRESPONDENC Fax Number: <i>Correspondence wi</i> Phone: Email: Correspondent Nam Address Line 1:	ERS Total: 1 Type r: CE DATA (412)35 (412)35 (1) be sent via US 412 355 patents patents 535 Sm Henry V	11206368 5-6501 6 <i>Mail when the fax attempt is unsucce</i> 5-6773 @klng.com R. Miller ithfield Street			
PROPERTY NUMB Property Application Numbe CORRESPONDENC Fax Number: <i>Correspondence wi</i> Phone: Email: Correspondent Nam Address Line 1: Address Line 2:	ERS Total: 1 Type r: CE DATA (412)35 (11206368 5-6501 7 <i>Mail when the fax attempt is unsucce</i> 5-6773 @klng.com R. Miller ithfield Street V. Oliver Building			
PROPERTY NUMB Property Application Numbe CORRESPONDENC Fax Number: <i>Correspondence wi</i> Phone: Email: Correspondent Nam Address Line 1: Address Line 2: Address Line 4:	ERS Total: 1 Type r: CE DATA (412)35 (412)3	11206368 5-6501 6 <i>Mail when the fax attempt is unsucce</i> 5-6773 @klng.com R. Miller ithfield Street V. Oliver Building gh, PENNSYLVANIA 15222-2312			
PROPERTY NUMB Property Application Numbe CORRESPONDENC Fax Number: <i>Correspondence wi</i> Phone: Email: Correspondent Nam Address Line 1: Address Line 2: Address Line 4:	ERS Total: 1 Type r: CE DATA (412)35 (412)3	11206368 5-6501 <i>Mail when the fax attempt is unsucce</i> 5-6773 @klng.com R. Miller ithfield Street V. Oliver Building gh, PENNSYLVANIA 15222-2312 TMP-2080/050056			

REEL: 016791 FRAME: 0921

source=PI-#1473966-v1-Assignment_TMP-2080_(082364-1_11_17_2005_10_25_44_AM)#page2.tif source=PI-#1473966-v1-Assignment_TMP-2080_(082364-1_11_17_2005_10_25_44_AM)#page3.tif source=PI-#1473966-v1-Assignment_TMP-2080_(082364-1_11_17_2005_10_25_44_AM)#page4.tif source=PI-#1473966-v1-Assignment_TMP-2080_(082364-1_11_17_2005_10_25_44_AM)#page5.tif source=PI-#1473966-v1-Assignment_TMP-2080_(082364-1_11_17_2005_10_25_44_AM)#page6.tif

Attorney's Docket No.	TMP-2080	PATENT	
		 For: X U.S. and/or X Foreign Rights For: U.S. Application or U.S. Provisional Application For: U.S. Patent For: PCT Application By: Multiple Inventors 	

ASSIGNMENT OF INVENTION (MULTIPLE INVENTORS)

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNORS (Inventors):

X. Daniel Fang	509 Hodges Court Franklin, TN 37067	Australia
(type or print name of inventors)	Address	Nationality
David J. Wills	9051 Fallswood Lane Brentwood, TN 37027	United Kingdom
Prakash K. Mirchandani	2606 Trellis Post Court <u>Hampton Cove, AL 35763</u>	USA

(Assignment of Invention–Multiple Inventors [16-3.2]–page 1)

hereby sells, assigns and transfers to

ASSIGNEE:

TDY Industries, Inc. (type or print name of ASSIGNEE) 1000 Six PPG Place

Address

(a California corporation)

Pittsburgh, PA 15222-5479

and the successors, assigns and legal representatives of the ASSIGNEE

(complete one of the following)

Ithe entire right, title and interest

an undivided _____ percent (____%) interest for the United States and its territorial possessions

(check the following box, if foreign rights are also to be assigned)

⊠and in all foreign countries, including all rights to claim priority, in and to any and all improvements which are disclosed in the invention entitled: COMPOSITE CUTTING INSERTS AND METHODS OF MAKING THE SAME

(check and complete (a), (b), (c), (d), (e), (f) or (g))

and which is found in

(a) U.S. patent application executed on even date herewith

(b) U.S. patent application executed on _____

(c) U.S. provisional application naming the above inventor(s) for the above-entitled invention

Express mail label no.:

Mailed:

To comply with 37 CFR 3.21 for recordal of this assignment, I, an ASSIGNOR signing below, hereby authorize and request my attorney to insert below the filing date and application number when they become known.

(d) X U.S. application no.: <u>11/206,368</u> filed on <u>August 18, 2005</u>

(e) International application no. PCT /____/____/_____/

(f) U.S. patent no. _____issued _____

A change of address to which correspondence is to be sent regarding patent maintenance fees is being sent separately.

(also check (g), if foreign application(s) is also being assigned)

(g) and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof.

(Assignment of Invention-Multiple Inventors [16-3.2]-page 2)

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

IN WITNESS WHEREOF, We have hereunto set hand and seal on the date(s) indicated below:

WARNING: The date of signing must be the same as the date of execution of the application, if item (a) was checked above.

_____ X. Daniel Fang Date (type name of Inventor) Signature of INVE David J. Wills (type name of Inventor) Signature of INVENTOR Date Prakash K. Mirchandani Signature of INVENTOR (type name of Inventor) Date

Notarization or Legalization Page Added.

NOTE: No witnessing, notarization or legalization is necessary. If the assignment is notarized or legalized, then it will only be prima facie evidence of execution. 35 USC 261. Use next page if notarization is desired.

(Assignment of Invention–Multiple Inventors [16-3.2]–page 3)

Attorney's Docket No.	<u>TMP-2080</u>	PATENT
		 For: X U.S. and/or X Foreign Rights For: X U.S. Application or U.S. Provisional Application For: U.S. Patent For: PCT Application

ASSIGNMENT OF INVENTION (MULTIPLE INVENTORS)

By: Multiple Inventors

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNORS (Inventors):

X. Daniel Fang	509 Hodges Court Franklin, TN 37067	Australia
(type or print name of inventors)	Address	Nationality
David J. Wills	9051 Fallswood Lane Brentwood, TN 37027	United Kingdom
Prakash K. Mirchandani	2606 Trellis Post Court Hampton Cove, AL 35763	USA

(Assignment of Invention-Multiple Inventors [16-3.2]-page 1)

hereby sells	, assigns	and	transfers	to
--------------	-----------	-----	-----------	----

ASSIGNEE:

TDY Industries, Inc. (type or print name of ASSIGNEE)

(a California corporation) Nationality 1000 Six PPG Place

Address

Pittsburgh, PA 15222-5479

and the successors, assigns and legal representatives of the ASSIGNEE

(complete one of the following)

 \boxtimes the entire right, title and interest

an undivided _____ percent (____%) interest for the United States and its territorial possessions

(check the following box, if foreign rights are also to be assigned)

And in all foreign countries, including all rights to claim priority, in and to any and all improvements which are disclosed in the invention entitled: COMPOSITE CUTTING INSERTS AND METHODS OF MAKING THE SAME

(check and complete (a), (b), (c), (d), (e), (f) or (g))

and which is found in

(a) U.S. patent application executed on even date herewith

(b) U.S. patent application executed on _____

(c) U.S. provisional application naming the above inventor(s) for the above-entitled invention

Express mail label no.:

Mailed: _____

☐ To comply with 37 CFR 3.21 for recordal of this assignment, I, an ASSIGNOR signing below, hereby authorize and request my attorney to insert below the filing date and application number when they become known.

(d) 🛛 U.S. application no.: <u>11/206,368</u> filed on <u>August 18, 2005</u>

(e) International application no. PCT /_____/____/____/____/

(f) U.S. patent no. _____issued _____

A change of address to which correspondence is to be sent regarding patent maintenance fees is being sent separately.

(also check (g), if foreign application(s) is also being assigned)

(g) ⊠ and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof.

(Assignment of Invention-Multiple Inventors [16-3.2]-page 2)

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

IN WITNESS WHEREOF, We have hereunto set hand and seal on the date(s) indicated below:

WARNING: The date of signing must be the same as the date of execution of the application, if item (a) was checked above.

X. Daniel Fang		
(type name of Inventor)	Signature of INVENTOR	Date
David J. Wills		
(type name of Inventor)	Signature of INVENTOR	Date
Prakash K. Mirchandani	N Mu K Mint.	× 10/19/2015
(type name of Inventor)	Signature of INVENTOR	Date
Prakash K. Mirchandani	- X Mu K Mine,	× 10/19/2005

Notarization or Legalization Page Added.

NOTE: No witnessing, notarization or legalization is necessary. If the assignment is notarized or legalized, then it will only be prima facie evidence of execution. 35 USC 261. Use next page if notarization is desired.

(Assignment of Invention–Multiple Inventors [16-3.2]–page 3)

PATENT REEL: 016791 FRAME: 0928

RECORDED: 11/17/2005