

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>Brian K. Hargrave Jr.</td> <td>04/05/2013</td> </tr> <tr> <td>Mark M. Flees</td> <td>04/05/2013</td> </tr> <tr> <td>Kamal K. Gupta</td> <td>04/05/2013</td> </tr> <tr> <td>Matthew J. Reiland</td> <td>04/05/2013</td> </tr> <tr> <td>Steven Koxlien</td> <td>04/05/2013</td> </tr> <tr> <td>Wesley P. Taylor</td> <td>04/05/2013</td> </tr> <tr> <td>Ryan A. Munoz</td> <td>04/05/2013</td> </tr> </tbody> </table>		Name	Execution Date	Brian K. Hargrave Jr.	04/05/2013	Mark M. Flees	04/05/2013	Kamal K. Gupta	04/05/2013	Matthew J. Reiland	04/05/2013	Steven Koxlien	04/05/2013	Wesley P. Taylor	04/05/2013	Ryan A. Munoz	04/05/2013
Name	Execution Date																
Brian K. Hargrave Jr.	04/05/2013																
Mark M. Flees	04/05/2013																
Kamal K. Gupta	04/05/2013																
Matthew J. Reiland	04/05/2013																
Steven Koxlien	04/05/2013																
Wesley P. Taylor	04/05/2013																
Ryan A. Munoz	04/05/2013																
RECEIVING PARTY DATA																	
Name:	Harnischfeger Technologies, Inc.																
Street Address:	2751 Centerville Road																
Internal Address:	suite 342																
City:	Wilmington																
State/Country:	DELAWARE																
Postal Code:	19808																
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>13804951</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13804951												
Property Type	Number																
Application Number:	13804951																
CORRESPONDENCE DATA																	
Fax Number:	4142770656																
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>																	
Phone:	414-271-6560																
Email:	mkeipdocket@michaelbest.com																
Correspondent Name:	MICHAEL BEST & FRIEDRICH LLP (Mke)																
Address Line 1:	100 E WISCONSIN AVENUE																
Address Line 2:	Suite 3300																
Address Line 4:	MILWAUKEE, WISCONSIN 53202																

CH \$40.00 13804951

ATTORNEY DOCKET NUMBER:	043020-9120-US02
NAME OF SUBMITTER:	Molly S. Lawson
Signature:	/molly s. lawson/
Date:	06/05/2013
Total Attachments: 3 source=13251271_043020-9120-US02_Executed_Assignment_-_as_filed#page1.tif source=13251271_043020-9120-US02_Executed_Assignment_-_as_filed#page2.tif source=13251271_043020-9120-US02_Executed_Assignment_-_as_filed#page3.tif	

ASSIGNMENT

Pursuant to our obligation to Harnischfeger Technologies, Inc. (hereinafter referred to as "Assignee"), a Delaware corporation having its principal place of business at:

2751 Centerville Road
Suite 342
Wilmington, DE 19808

and for other valuable and sufficient consideration, receipt whereof is hereby acknowledged,

we:

Brian K. Hargrave Jr.
5707 Ellsworth Avenue
Dallas, TX 75206

Mark M. Flees
13560 Oak Hill Lane
Brookfield, WI 53005

Kamal K. Gupta
730 N Plankinton Avenue, 7A
Milwaukee, WI 53203

Matthew J. Reiland
8535 W. Mequon Road
Mequon, WI 53097

Steven Koxlien
1403 E. Roberta Avenue
Waukesha, WI 53186

Wesley P. Taylor
6541 N Braeburn Lane
Glendale, WI 53209

Ryan A. Munoz
4651 N. Ironwood Lane
Glendale, WI 53209

confirm our obligation to and hereby sell, assign and convey, unto Assignee, its successors and assigns, our entire right, title and interest -

(1) in and to inventions described in a patent application titled "COLLISION DETECTION AND MITIGATION SYSTEMS AND METHODS FOR A SHOVEL" for which we filed United States Patent Application No. 13/804,951 (Atty. File No. 043020-9120-US02)

(hereinafter the "U.S. utility patent application") which application claims the benefit of United States Provisional Patent Application No. 61/617,516, filed March 29, 2012 and United States Provisional Patent Application No. 61/763,229, filed February 11, 2013 (hereinafter the "U.S. provisional patent applications");

(2) in and to the U.S. utility patent application, and the U.S. provisional patent applications, in and to all other patent applications (including divisional, continuation, continuation-in-part, 35 U.S.C. §111(b) provisional, 35 U.S.C. §111(a), and reissue applications) based upon said inventions, and in and to the patent or patents to be granted thereon, to the full end of the term or terms for which said patent or patents may be granted;

(3) in and to all patent applications on said invention now or hereafter filed in countries foreign to the United States of America, and in and to any and all patents granted on said applications to the full end of the terms for which said patents may be granted; and

(4) under the International Convention in respect to the U.S. utility patent application and the U.S. provisional patent applications, and agree that any patent applications of any foreign countries which may be filed shall be filed in the name of our Assignee with a claim to priority based on either or both of the U.S. utility patent application and the U.S. provisional patent applications.

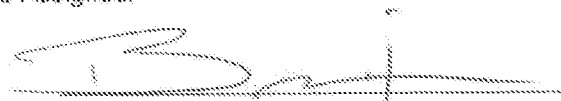
We hereby agree that we will, upon demand of Assignee, its successors or assigns, and without further consideration to us, execute any and all papers that may be necessary, or deemed by Assignee, its successors or assigns, to be necessary, to a complete fulfillment of the intent and purposes of this Assignment, it being understood that any expense incident to the execution of such papers shall be paid by Assignee, its successors and assigns, and not by us.

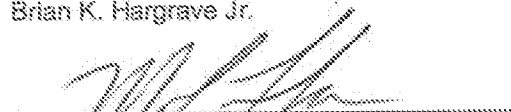
The Commissioner of Patents and Trademarks of the United States is hereby authorized and requested to issue said patent or patents to Assignee.

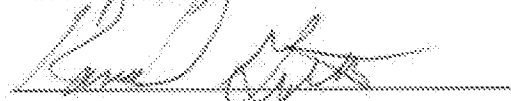
9-5-2013
Date

9-5-2013
Date

9/5/13
Date

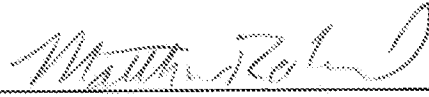

Brian K. Hargrave Jr.


Mark M. Fiees


Kamal K. Gupta

4/5/2013

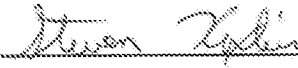
Date



Matthew J. Reiland

4/5/2013

Date



Steven Koxlien

4/5/13

Date



Wesley P. Taylor

4/5/13

Date



Ryan A. Munoz