

## 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>Michael J. Rutsch</td><td>04/29/2011</td></tr><tr><td>Craig Clerkin</td><td>04/01/2011</td></tr><tr><td>Bernard F. Duesel Jr.</td><td>04/16/2011</td></tr></tbody></table>	Name	Execution Date	Michael J. Rutsch	04/29/2011	Craig Clerkin	04/01/2011	Bernard F. Duesel Jr.	04/16/2011	
Name	Execution Date								
Michael J. Rutsch	04/29/2011								
Craig Clerkin	04/01/2011								
Bernard F. Duesel Jr.	04/16/2011								
RECEIVING PARTY DATA									
Name:	HEARTLAND TECHNOLOGY PARTNERS LLC								
Street Address:	9870 Big Bend Blvd.								
Internal Address:	P.O. Box 220842								
City:	Kirkwood								
State/Country:	MISSOURI								
Postal Code:	63122								
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>12043786</td></tr></tbody></table>	Property Type	Number	Application Number:	12043786					
Property Type	Number								
Application Number:	12043786								
CORRESPONDENCE DATA									
Fax Number: (312)474-0448 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>									
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ATTORNEY DOCKET NUMBER:	31628/30007A								
NAME OF SUBMITTER:	Michael A. Chinlund								
Total Attachments: 4 source=30007aassignment#page1.tif source=30007aassignment#page2.tif source=30007aassignment#page3.tif source=30007aassignment#page4.tif									

OP \$40.00 12043786

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PATENT  
REEL: 026222 FRAME: 0169

## ASSIGNMENT

Serial No: 12/043,786

Filed: March 6, 2008

Title: Methods of Reducing Greenhouse Gases in Landfills and Coal Mines

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby assign to HEARTLAND TECHNOLOGY PARTNERS LLC, 9870 Big Bend Blvd., P.O. Box 220842, Kirkwood, Missouri 63122 (hereinafter "Assignee"), its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for letters patent of the United States and in said application and any and all other applications, both in the United States and in other countries, which the undersigned may file or be named as an inventor, either solely or jointly with others, on said invention or improvements, and in any and all letters patent of the United States and other countries, which may be obtained on any of said applications, and in any reissue or extension thereof.

The undersigned hereby authorize and request the Commissioner for Patents to issue said letters patent to said Assignee.

The undersigned warrant themselves to be the owners of the interest herein assigned and to have the right to make this assignment and further warrant that there are no outstanding prior assignments, licenses, or other rights in the interest herein assigned except in favor of Assignee.

For said consideration the undersigned hereby agree, upon the request and at the expense of said Assignee, its successors and assigns, to execute any and all applications on said invention or improvements, and any necessary oath or affidavit relating thereto, and any application for the reissue or extension of any letters patent that may be granted upon any and all of said applications, and any and all applications and other documents for letters patent in other countries on said invention or improvements, that said Assignee, its successors or assigns, may deem necessary or expedient, and for said consideration the undersigned further agree upon the request of said Assignee, its successors or assigns, in the event of any application or letters patent assigned herein becoming involved in Interference or Opposition, to cooperate to the best of the ability of the undersigned with said Assignee, its successors or assigns, in the matters of preparing and executing the preliminary statement and giving and producing evidence in support thereof, the undersigned hereby agreeing to perform, upon request, any and all affirmative acts to obtain said letters patent, both in the United States and in other countries, and vest all rights therein hereby conveyed in said Assignee, its successors and assigns, whereby said letters patent will be held and enjoyed by said Assignee, its successors and assigns, to the full end of the term for which said letters patent may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment and sale had not been made.

WITNESS our hands this

29 day of APRIL, 2011.

State of

County of

Pennsylvania  
Allegheny

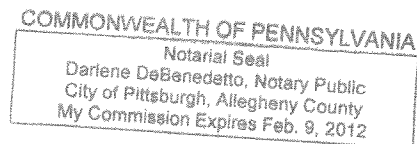
Michael J. Rutsch  
Michael J. Rutsch

On this 29 day of APRIL, 2011, before me, a  
Notary Public in and for the County and State aforesaid, appeared, to me personally known to be the same  
persons whose names are subscribed to the foregoing instrument, and acknowledged that they executed said  
instrument as their free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the same day and year last above given.

My Commission Expires:

02-09-2012 Darlene DeBenedetto  
Notary Public



WITNESS our hands this

1 day of April, 2011.

State of

Wisconsin

County of

Dane

Craig Clerkin  
Craig Clerkin

On this

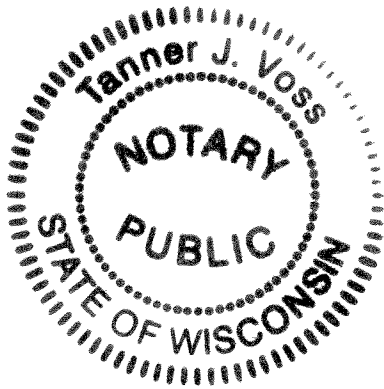
1 day of April, 2011, before me, a

Notary Public in and for the County and State aforesaid, appeared, to me personally known to be the same persons whose names are subscribed to the foregoing instrument, and acknowledged that they executed said instrument as their free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the same day and year last above given.

My Commission Expires:

2/8/15 Tanner J. Voss  
Notary Public



WITNESS our hands this

16<sup>th</sup> day of April, 2011

State of

County of

New York  
Orange

B F Duesel, Jr.  
Bernard F. Duesel, Jr.

On this 16<sup>th</sup> day of April, 2011, before me, a  
Notary Public in and for the County and State aforesaid, appeared, to me personally known to be the same  
persons whose names are subscribed to the foregoing instrument, and acknowledged that they executed said  
instrument as their free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the same day and year last above given.

My Commission Expires:

Feb 8, 2014 Marla F. Barnik  
Notary Public

Marla F. Barnik  
MARLA F. BARNIK  
Notary Public, State of New York  
No. 01BA4911656  
Qualified in Orange County  
Commission Expires February 8, 2014