

## PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT5474134

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
KATHARINE E. RUSSELL	08/27/2015
KHAMBATH VICHITVONGSA	08/28/2015
JEFFREY SCOTT BROMBOLICH	08/27/2015
RICHARD A. MROZOWICZ	08/27/2015
EDWARD A. GLASS	10/01/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	SUNCOKE TECHNOLOGY AND DEVELOPMENT LLC.
<b>Street Address:</b>	1011 WARRENVILLE ROAD 6TH FLOOR
<b>City:</b>	LISLE
<b>State/Country:</b>	ILLINOIS
<b>Postal Code:</b>	60532
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16251352
<b>CORRESPONDENCE DATA</b>	
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<b>ATTORNEY DOCKET NUMBER:</b>	084553-8035.US01
<b>NAME OF SUBMITTER:</b>	TORI ASHFORD-DOWNING
<b>SIGNATURE:</b>	/Tori Ashford-Downing/
<b>DATE SIGNED:</b>	04/15/2019
<b>Total Attachments: 8</b>	
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## ASSIGNMENT BY INVENTOR

This Assignment is by the following individuals (the "Assignors"):

- Katharine E. Russell, having a mailing address of 1011 Warrenville Road, 6th Floor, Lisle, IL 60532
- Khambath Vichitvongsa, having a mailing address of 1011 Warrenville Road, 6th Floor, Lisle, IL 60532
- Jeffrey Scott Brombolich, having a mailing address of 1011 Warrenville Road, 6th Floor, Lisle, IL 60532
- Richard A. Mrozowicz, having a mailing address of 1011 Warrenville Road, 6th Floor, Lisle, IL 60532
- Edward A. Glass, having a mailing address of 1011 Warrenville Road, 6th Floor, Lisle, IL 60532

The Assignors invented one or more certain inventions (the "Invention(s)") described in an application for Letters Patent of the United States titled METHOD AND SYSTEM FOR OPTIMIZING COKE PLANT OPERATION AND OUTPUT, and filed on August, 28 2015 as U.S. Non-Provisional Application No. 14/839,493 and PCT No. PCT/US2015/047522 (the "Applications"). Assignor hereby authorizes, and requests, Assignee's Legal Representatives to insert the Application Nos. and filing date into the assignment after they are known.

SunCoke Technology and Development LLC., a Corporation of Delaware having its principal place of business at 1011 Warrenville Road 6th Floor, Lisle, IL 60532 (the "Assignee"), desire to acquire the entire right, title and interest in and to the Invention(s) and the Applications, and in and to any patents (collectively, "Patents") that may be granted for the Invention(s) in the United States or in any foreign countries.

For valuable consideration, the receipt and sufficiency of which Assignors acknowledges, Assignors hereby sell, assign, and transfer to Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to: the Invention(s), the Applications, and any Patents; any divisions, continuations, and

continuations-in-part of the Applications and any other application claiming priority rights from the Applications; any reissues, reexaminations, or extensions of any and all Patents; the right to file foreign applications directly in the name of Assignee; and the right to claim priority rights deriving from the Applications (collectively, the "Rights"). Assignor warrants that Assignors own the Rights, and that the Rights are unencumbered. Assignors also agree to not sign any writing or do any act conflicting with this assignment, and, without further compensation, sign all documents and do such additional acts as Assignee deem necessary or desirable to: perfect Assignee's enjoyment of the Rights; conduct proceedings regarding the Rights, including any litigation or interference proceedings; or perfect or defend title to the Rights. Assignors request the Commissioner of Patents to issue any Patent of the United States that may be issued on the Invention(s) to Assignee. This Assignment may be executed in counterparts.

For Assignor/Inventor Katharine Elizabeth Russell:

Date: 8/27/15

Signature

Katharine Russell  
Katharine Elizabeth Russell

United States of America )

State of Illinois ) ss.

County of DuPage )

On this August day of 27th, 2015 before me personally came Katharine Elizabeth Russell, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Angela D. Hogue  
Notary Public



For Assignor/Inventor Khambath Vichitvongsa:

Date: 8/28/2015 Signature Khambath Vichitvongsa  
Khambath Vichitvongsa

United States of America )  
State of Illinois ) ss.  
County of Madison )

On this 28th day of August, 2015 before me  
personally came Khambath Vichitvongsa, to me known to be the individual  
described in and who executed the foregoing instrument, and acknowledged execution  
of the same.

Angela D. Hogue  
Notary Public



For Assignor/Inventor Jeffrey Scott Brombolich:

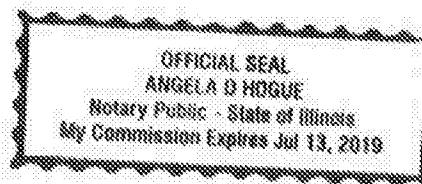
Date: 8/27/2015 Signature

  
Jeffrey Scott Brombolich


United States of America )  
State of Illinois ) ss.  
County of DuPage )

On this 27th day of August, 2015 before me  
personally came Jeffrey Scott Brombolich, to me known to be the individual  
described in and who executed the foregoing instrument, and acknowledged execution  
of the same.

  
Notary Public

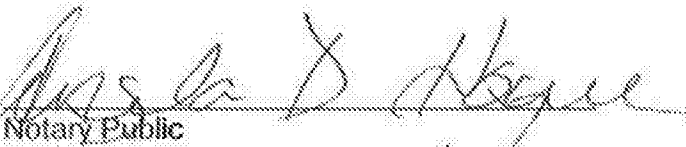


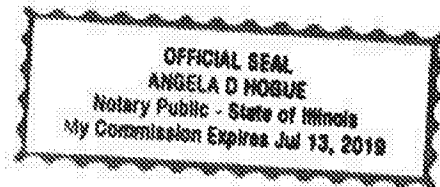
For Assignor/Inventor Richard A. Mrozowicz:

Date: 8/27/15 Signature   
Richard A. Mrozowicz

United States of America )  
State of Illinois ) ss.  
County of DePue )

On this 27th day of August, 2015 before me  
personally came Richard A. Mrozowicz to me known to be the individual  
described in and who executed the foregoing instrument, and acknowledged execution  
of the same.

  
Notary Public



For Assignor/Inventor Edward A. Glass:

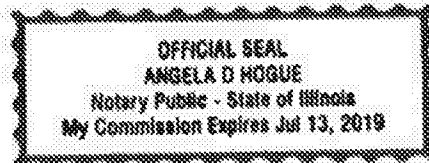
Date: 10/01/2015 Signature

Edward A. Glass  
Edward A. Glass

United States of America )  
State of Illinois ) ss.  
County of Madison )

On this 1st day of October, 2015 before me  
personally came Edward A. Glass, to me known to be the individual  
described in and who executed the foregoing instrument, and acknowledged execution  
of the same.

Angela D. Hogue  
Notary Public



For Assignee SunCoke Technology and Development LLC:

Date:

August 27, 2015

Signature

John F. Quanci

Authorized Signer

John F. Quanci

Authorized Signer - Printed Name

Vice President, Technology

Authorized Signer - Title