

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT6355856

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
PAUL JOSEPH ANDERSEN	07/10/2008
HAI-YING CHEN	07/10/2008
JOSEPH MICHAEL FEDEYKO	07/10/2008
JILLIAN ELAINE BAILIE	04/10/2008
RAJ RAO RAJARAM	04/08/2008
JOHN LEONELLO CASCI	07/10/2008
RODNEY KOK SHIN FOO	10/29/2009
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	JOHNSON MATTHEY PUBLIC LIMITED COMPANY
<b>Street Address:</b>	5TH FLOOR
<b>Internal Address:</b>	25 FARRINGDON STREET
<b>City:</b>	LONDON
<b>State/Country:</b>	UNITED KINGDOM
<b>Postal Code:</b>	EC4A 4AB
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	15991565
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(610)971-3022
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	610.971.3092
<b>Email:</b>	johnsonmattheyip@matthey.com
<b>Correspondent Name:</b>	DANA KOLESAR
<b>Address Line 1:</b>	435 DEVON PARK DRIVE
<b>Address Line 2:</b>	SUITE 600
<b>Address Line 4:</b>	WAYNE, PENNSYLVANIA 19087
<b>ATTORNEY DOCKET NUMBER:</b>	P01823US15
<b>NAME OF SUBMITTER:</b>	LINDA J. REMER
<b>SIGNATURE:</b>	/Linda J. Remer/

PATENT

<b>DATE SIGNED:</b>	10/19/2020
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**Total Attachments: 10**

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- source=1823US - Assignment#page8.tif
- source=1823US - Assignment#page9.tif
- source=1823US - Assignment#page10.tif

REF: AAUS 1823

THIS DEED OF ASSIGNMENT is made the 10th day of July 2008

BETWEEN

PAUL JOSEPH ANDERSEN of 355 Brighton Road, Plymouth Meeting, Pennsylvania 19402, USA; JILLIAN ELAINE BAILIE of 12 Morecambe Avenue, Caversham, Reading RG4 7NL, United Kingdom; JOHN LEONELLO CASCI of 1 West Dyke Road, Redcar, Cleveland TS10 4QL, United Kingdom; HAI-YING CHEN of 320 Ardian Road, Conshohocken, Pennsylvania 19428, USA; JOSEPH MICHAEL FEDEYKO of 109 Hampshire Court, West Chester, Pennsylvania 19380, USA and RAJ RAO HAJARAM of 34 Buckland Avenue, Slough SL3 7PH, United Kingdom,  
(hereinafter referred to as "Inventor(s)") and

Johnson Matthey PLC of 40-42 Hatton Garden, London, EC1N 8EE, United Kingdom.  
(hereinafter referred to as "JM").

WHEREAS

(a) The Inventors have made an invention (hereinafter referred to as the "Invention"), which is described in the specification entitled "Transition Metal/Zeolite SCR Catalysts", relating to a method of converting nitrogen oxides in a gas, such as an exhaust gas of a vehicular lean-burn internal combustion engine, to nitrogen by contacting the nitrogen oxides with a nitrogenous reducing agent in the presence of a transition metal-containing small pore and/or aluminophosphate zeolite catalyst, filed with PCT application No. PCT/GB2007/056218 (hereinafter referred to as the Application) made to the European Patent Office by JM on 28 April 2007.

(b) The Inventor(s), by virtue of [his/her/their] Employment by JM, or by other Agreement have agreed to assign to JM their entire right, title and interest in and to the Invention and the Application.

NOW THIS ASSIGNMENT WITNESSETH AS FOLLOWS and it is hereby agreed as follows:

In consideration of their employment or other AGREEMENT, the Inventor(s) hereby assign(s) unto JM their entire right, title and interest in and to

- (i) the Invention
- (ii) the Application
- (iii) any and all Letters Patent or other form of protection which may be granted for the Invention.

together with the sole and exclusive benefit thereof and all rights, privileges and advantages whatsoever appertaining thereto (as far as the same would but for this assignment arise or accrue to the benefit of the inventors) to hold the same unto JM for its sole use and benefit exclusively.

The Inventors assign unto JM the right to make further applications for Letters Patent or other form of protection for the Invention in any and all countries where such applications may be made by another than the Inventors and to claim priority for such applications from the Applications.

JM hereby accepts this assignment.

The Inventors covenant and agree to sign all papers and drawings, take all rightful oaths and do all acts necessary or required by JM to be done for the procurement of Letters Patent or

continued...

other form of protection for the invention and for further vesting or confirming the right and title thereof in JM without charge to JM but at its expense.

This assignment shall be deemed to have come into full force and effect on the date as inserted above.

IN WITNESS WHEREOF the inventors have executed this deed.

SIGNED AS A DEED by the said

Paul Andersen *Paul Andersen*

Jillian Balle \_\_\_\_\_

John Casci \_\_\_\_\_

Hai-Ying Chen *Hai-Ying Chen*

Joseph Faceyko *Joseph Faceyko*

Raj Rajaram \_\_\_\_\_

In the presence of: *Joellen Burghardt*  
Signature of Witness: *Joellen Burghardt*  
Address of Witness: *1426 Devon Park Dr.*  
*Wayne, PA 19380*  
Occupation of Witness: *Administrative Assistant*

SIGNED AS A DEED on behalf of JM;

*Ian Carmichael Wishart*

Ian Carmichael Wishart, Patent Attorney

in the presence of: *FRANCES STRANGE*

Signature of Witness: *Frances Strange*  
Address of Witness: *WILMINGTON*  
*WILMINGTON, MICH*  
*49107*  
Occupation of Witness: *PATENT ADMINISTRATOR*

REF: AAUS 1823

THIS DEED OF ASSIGNMENT is made the 10th day of April 2008

BETWEEN

PAUL JOSEPH ANDERSEN of 355 Brighton Road, Plymouth Meeting, Pennsylvania 19462, USA; JILLIAN ELAINE BAILIE of 12 Morecambe Avenue, Caversham, Reading RG4 7NL, United Kingdom; JOHN LEONELLO CASCI of 1 West Dyke Road, Redcar, Cleveland TS10 4QL, United Kingdom; HAI-YING CHEN of 320 Arden Road, Conshohocken, Pennsylvania 19428, USA; JOSEPH MICHEAL FEDEYKO of 109 Hampshire Court, West Chester, Pennsylvania 19380, USA and RAJ RAO RAJARAM of 34 Buckland Avenue, Slough SL3 7PH, United Kingdom, (hereinafter referred to as "Inventor(s)") and

Johnson Matthey PLC of 40-42 Hatton Garden, London, EC1N 8EE, United Kingdom. (hereinafter referred to as "JM").

WHEREAS

(a) The Inventors have made an invention (hereinafter referred to as the "Invention"), which is described in the specification entitled "Transition Metal/Zeo-lite SCR Catalysts", relating to a method of converting nitrogen oxides in a gas, such as an exhaust gas of a vehicular lean-burn internal combustion engine, to nitrogen by contacting the nitrogen oxides with a nitrogenous reducing agent in the presence of a transition metal-containing small pore and/or aluminophosphate zeolite catalyst, filed with PCT application No. PCT/GB2007/050216 (hereinafter referred to as the Application) made to the European Patent Office by JM on 26 April 2007.

(b) The Inventor(s), by virtue of [his/her/their] Employment by JM, or by other Agreement have agreed to assign to JM their entire right, title and interest in and to the Invention and the Application.

NOW THIS ASSIGNMENT WITNESSETH AS FOLLOWS and it is hereby agreed as follows:

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JM hereby accepts this assignment.

The Inventors covenant and agree to sign all papers and drawings, take all rightful oaths and do all acts necessary or required by JM to be done for the procurement of Letters Patent or

continued...

other form of protection for the invention and for further vesting or confirming the right and title thereof in JM without charge to JM but at its expense.

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IN WITNESS WHEREOF the inventors have executed this deed.

SIGNED AS A DEED by the said

Paul Andersen \_\_\_\_\_

Jillian Balle \_\_\_\_\_ *Alban Ballo*

John Cascl \_\_\_\_\_

Hai-Ying Chen \_\_\_\_\_

Joseph Fedeyko \_\_\_\_\_

Raj Rajaram \_\_\_\_\_

In the presence of: \_\_\_\_\_ *PAUL COLLIER*

Signature of Witness: \_\_\_\_\_ *P. Collier*

Address of Witness: \_\_\_\_\_ *12 Monticello Avenue*

Occupation of Witness: \_\_\_\_\_ *Reading, Parks*  
*Scientist*

SIGNED AS A DEED on behalf of JM;

\_\_\_\_\_ *Ian Carmichael Wishart*

Ian Carmichael Wishart, Patent Attorney

In the presence of: \_\_\_\_\_ *FRANCES STRANGE*

Signature of Witness: \_\_\_\_\_ *F. Strange*

Address of Witness: \_\_\_\_\_ *HIGHFIELD*  
*WITCHAMERE HILL*  
*RG2 7PY*

Occupation of Witness: \_\_\_\_\_ *PATENT ADMINISTRATOR*

REF: AAUS 1823

THIS DEED OF ASSIGNMENT is made the 8th day of April 2008

BETWEEN

PAUL JOSEPH ANDERSEN of 355 Brighton Road, Plymouth Meeting, Pennsylvania 19482, USA; JILLIAN ELAINE BAILIE of 12 Morecambe Avenue, Caversham, Reading RG4 7NL, United Kingdom; JOHN LEONELLO CASCI of 1 West Dyke Road, Redcar, Cleveland TS10 4QL, United Kingdom; HAI-YING CHEN of 320 Arden Road, Conshohocken, Pennsylvania 19428, USA; JOSEPH MICHEAL FEDEYKO of 108 Hampshire Court, West Chester, Pennsylvania 19380, USA and RAJ RAO RAJARAM of 34 Buckland Avenue, Slough SL3 7PH, United Kingdom,  
(hereinafter referred to as "inventor(s)") and

Johnson Matthey PLC of 40-42 Hatton Garden, London, EC1N 8EE, United Kingdom,  
(hereinafter referred to as "JM").

WHEREAS

(a) The inventors have made an invention (hereinafter referred to as the "Invention"), which is described in the specification entitled "Transition Metal/Zeolite SCR Catalysts", relating to a method of converting nitrogen oxides in a gas, such as an exhaust gas of a vehicular lean-burn internal combustion engine, to nitrogen by contacting the nitrogen oxides with a nitrogenous reducing agent in the presence of a transition metal-containing small pore and/or aluminophosphate zeolite catalyst, filed with PCT application No. PCT/GB2007/050216 (hereinafter referred to as the Application) made to the European Patent Office by JM on 26 April 2007.

(b) The Inventor(s), by virtue of [his/her/their] Employment by JM, or by other Agreement have agreed to assign to JM their entire right, title and interest in and to the Invention and the Application.

NOW THIS ASSIGNMENT WITNESSETH AS FOLLOWS and it is hereby agreed as follows:

In consideration of their employment or other AGREEMENT, the inventor(s) hereby assign(s) unto JM their entire right, title and interest in and to

- (i) the Invention
- (ii) the Application
- (iii) any and all Letters Patent or other form of protection which may be granted for the Invention.

together with the sole and exclusive benefit thereof and all rights, privileges and advantages whatsoever appertaining thereto (as far as the same would but for this assignment arise or accrue to the benefit of the inventors) to hold the same unto JM for its sole use and benefit exclusively.

The inventors assign unto JM the right to make further applications for Letters Patent or other form of protection for the Invention in any and all countries where such applications may be made by another than the inventors and to claim priority for such applications from the Applications.

JM hereby accepts this assignment.

The inventors covenant and agree to sign all papers and drawings, take all rightful oaths and do all acts necessary or required by JM to be done for the procurement of Letters Patent or

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IN WITNESS WHEREOF the inventors have executed this deed.

SIGNED AS A DEED by the said

Paul Andersen \_\_\_\_\_

Jillian Ballie \_\_\_\_\_

John Casol \_\_\_\_\_

Hai-Ying Chen \_\_\_\_\_

Joseph Fedayko \_\_\_\_\_

Raj Rajaram RR Rajaram \_\_\_\_\_

In the presence of: Paul M. Livingston \_\_\_\_\_

Signature of Witness: J. R. Lott \_\_\_\_\_

Address of Witness: 185 ST. KENNETH ST \_\_\_\_\_

Occupation of Witness: READING CON. TIA \_\_\_\_\_

Occupation of Witness: CHEMIST \_\_\_\_\_

SIGNED AS A DEED on behalf of JM:

Ian Carmichael Wishart \_\_\_\_\_

Ian Carmichael Wishart, Patent Attorney

In the presence of: FRANCES STRANGE \_\_\_\_\_

Signature of Witness: F Strange \_\_\_\_\_

Address of Witness: HIGHFIELD \_\_\_\_\_

Address of Witness: WHITCHAMBERG HILL \_\_\_\_\_

Address of Witness: RG2 7PY \_\_\_\_\_

Occupation of Witness: PATENT ADMINISTRATOR \_\_\_\_\_



REF: AAUS 1823

THIS DEED OF ASSIGNMENT is made the 10th day of July 2008

BETWEEN

PAUL JOSEPH ANDERSEN of 355 Brighton Road, Plymouth Meeting, Pennsylvania 19462, USA; JILLIAN ELAINE BAILIE of 12 Morecambe Avenue, Caversham, Reading RG4 7NL, United Kingdom; JOHN LEONELLO CASCI of 1 West Dyke Road, Redcar, Cleveland TS10 4QL, United Kingdom; HAI-YING CHEN of 320 Arden Road, Conshohocken, Pennsylvania 19428, USA; JOSEPH MICHEAL FEDEYKO of 109 Hampshire Court, West Chester, Pennsylvania 19380, USA and RAJ RAO RAJARAM of 34 Buckland Avenue, Slough SL3 7PH, United Kingdom, (hereinafter referred to as "inventor(s)") and

Johnson Matthey PLC of 40-42 Hatton Garden, London, EC1N 3EE, United Kingdom. (hereinafter referred to as "JM").

WHEREAS

(a) The inventors have made an invention (hereinafter referred to as the "invention"), which is described in the specification entitled "Transition Metal/Zeolite SCR Catalysts", relating to a method of converting nitrogen oxides in a gas, such as an exhaust gas of a vehicular lean-burn internal combustion engine, to nitrogen by contacting the nitrogen oxides with a nitrogenous reducing agent in the presence of a transition metal-containing small pore and/or aluminophosphate zeolite catalyst, filed with PCT application No. PCT/GB2007/050216 (hereinafter referred to as the Application) made to the European Patent Office by JM on 26 April 2007.

(b) The inventor(s), by virtue of [his/her/their] Employment by JM, or by other Agreement have agreed to assign to JM their entire right, title and interest in and to the invention and the Application.

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- (ii) the Application
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IN WITNESS WHEREOF the inventors have executed this deed.

SIGNED AS A DEED by the said

Paul Andersen \_\_\_\_\_

Jillian Ballie \_\_\_\_\_

John Casci John Casci \_\_\_\_\_

Hai-Ying Chen \_\_\_\_\_

Joseph Fedayko \_\_\_\_\_

Raj Rajaram \_\_\_\_\_

In the presence of: Beverly McCabe

Signature of Witness: B McCabe

Address of Witness: 36 Aulicora Drive,

Sturbridge, MA 01581

Occupation of Witness: Patent Administrator

SIGNED AS A DEED on behalf of JIM:

Ian Carmichael Wishart \_\_\_\_\_

Ian Carmichael Wishart, Patent Attorney

In the presence of: FRANCES STRAN & S

Signature of Witness: Frances Stran

Address of Witness: HIGHFIELD

WALTERMERE HILL

RG8 7PY

Occupation of Witness: PATENT ADMINISTRATOR

REF: AAUS 1823

THIS DEED OF ASSIGNMENT is made the 29<sup>th</sup> day of October 2009

BETWEEN

RODNEY FOO KOK SHIN of Johnson Matthey Technology Centre, Blounts Court, Sonning Common, Reading RG4 9NH, United Kingdom;  
(hereinafter referred to as "Inventor(s)") and

Johnson Matthey PLC of 40-42 Hatton Garden, London, EC1N 8EE, United Kingdom.  
(hereinafter referred to as "JM").

WHEREAS

(a) The Inventors have made an invention (hereinafter referred to as the "Invention"), which is described in the specification entitled "Transition Metal/Zeolite SCR Catalysts", relating to a method of converting nitrogen oxides in a gas, such as an exhaust gas of a vehicular lean-burn internal combustion engine, to nitrogen by contacting the nitrogen oxides with a nitrogenous reducing agent in the presence of a transition metal-containing email pore and/or aluminophosphate zeolite catalyst, filed with PCT application No. PCT/GB2008/001451 (hereinafter referred to as the Application) made to the European Patent Office by JM on 24<sup>th</sup> April 2008.

(b) The Inventor(s), by virtue of [his/her/their] Employment by JM, or by other Agreement have agreed to assign to JM their entire right, title and interest in and to the Invention and the Application.

NOW THIS ASSIGNMENT WITNESSETH AS FOLLOWS and it is hereby agreed as follows:

In consideration of their employment or other AGREEMENT, the Inventor(s) hereby assign(s) unto JM their entire right, title and interest in and to

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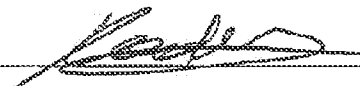
other form of protection for the invention and for further vesting or confirming the right and title thereof in JM without charge to JM but at its expense.

This assignment shall be deemed to have come into full force and effect on the date as inserted above.

IN WITNESS WHEREOF the inventors have executed this deed.

SIGNED AS A DEED by the said


Rodney Foo



In the presence of: Pam MILLINGTON

Signature of Witness: J. Rullota  
Address of Witness: 185 GREAT HOLLIS STREET  
READING RI 01 719  
Occupation of Witness: RESEARCH CHEMIST

SIGNED AS A DEED on behalf of JM;



Sarah Dixon, Patent Attorney

In the presence of: FRANCES STANGE

Signature of Witness: F. Stange  
Address of Witness: TECHNOLOGY CENTRE  
READING RG4 9NH  
Occupation of Witness: PATENT ADMINISTRATOR