PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
Vadiraj P. Kulkarni	07/20/2010
Matthew E. Leustek	07/20/2010
Sara K. Michels	07/20/2010
Rajesh N. Nair	07/20/2010
Michael A. Snopko	07/21/2010
Andrew A. Knitt	07/21/2010

RECEIVING PARTY DATA

Name:	Caterpillar Inc.	
Street Address:	100 NE Adams Street	
City:	Peoria	
State/Country:	ILLINOIS	
Postal Code:	61629-9510	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12841308

CORRESPONDENCE DATA

Fax Number: (309)675-1236

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

309-675-5140 Phone:

Email: US_Docket_Clerk@cat.com

Correspondent Name: CATERPILLAR c/o LIELL, MCNEIL & HARPER I

Address Line 1: AH9510 100 N.E. Adams Address Line 2:

Address Line 4: Peoria, ILLINOIS 61629-9510

ATTORNEY DOCKET NUMBER: 09-484

REEL: 024724 FRAME: 0692

PATENT

501240138

NAME OF SUBMITTER:	Jonathan F. Yates
Total Attachments: 6 source=09-484-assign-Kulkarni#page1.tif source=09-484-assign-Leustek#page1.tif source=09-484-assign.Michels#page1.tif source=09-484-assign-Nair#page1.tif source=09-484-assign-Snopko#page1.tif source=09-484-assign-Knitt#page1.tif	

PATENT REEL: 024724 FRAME: 0693

WHEREAS, Vadiraj P. Kulkarni, residing at Dunlap, Illinois, hereinafter referred to as ASSIGNOR has invented together with Matthew E. Leustek, Sara K. Michels, Rajesh N. Nair, Michael A. Snopko and Andrew A. Knitt a new and useful

ASH DETECTION IN DIESEL PARTICULATE FILTER

For which ASSIGNOR is about to file an international application and/or make application for Letters Patent in the United States of America, such invention being described and identified by said application naving an attached International Application Request and/or an attached Declaration and Power of Attorney executed by ASSIGNOR on
WHEREAS, Caterpillar Inc., a Delaware corporation having a place of business at Peoria, State
of Illinois, United States of America, hereinafter referred to as ASSIGNEE, is desirous of acquiring the
entire right, title and interest in and to said invention and any Letters Patent granted thereon by the United
States of America and any foreign country;
NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and
valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt of which is hereby
icknowledged by ASSIGNOR;
1. ASSIGNOR hereby sells, assigns, transfers and conveys unto ASSIGNEE the entire right, title
and interest in and to said invention, any application therefor, and any Letters Patent granted thereon by
he United States of America and any foreign country, including any continuing application, reissue or
xtension thereof, together with the right to file applications and obtain patents for said invention in any
oreign country, and covenant that ASSIGNOR has the full right to do so.
2. At the request and expense of ASSIGNEE, ASSIGNOR agrees to communicate to ASSIGNEE
The first land of the first la

- 2. At the request and expense of ASSIGNEE, ASSIGNOR agrees to communicate to ASSIGNEE any facts known respecting said invention, to execute all papers necessary to file any application on said invention necessary or desirable to aid ASSIGNEE in obtaining and enforcing proper protection for said invention in the United States of America and any foreign country.
- 3. ASSIGNOR hereby authorizes and requests the COMMISSIONER OF PATENTS AND TRADEMARKS to issue the United States Letters Patent on said invention, when granted, to Caterpillar Inc.
- 4. This assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal representatives.

IN TESTIMONY WHEREOF, ASSIGNOR has executed this instrument.

July 20 2010

VADIRAJ P. KULKARNI

Date

IN WITNESS OF the execution hereof by VADIRAJ P. KULKARNI we have hereunto set our hands.

Witness (1)

Date

Witness (2)

Address: 2401 W. ALTA RD.

Address: 1309 Hickory (4.115)

Metamera I = 61548

PEORIA, IL 61615

WHEREAS, Matthew E. Leustek, residing at Metamora, Illinois, hereinafter referred to as ASSIGNOR has invented together with Sara K. Michels, Rajesh N. Nair, Michael A. Snopko, Andrew A. Knitt and Vadiraj P. Kulkarni a new and useful

ASH DETECTION IN DIESEL PARTICULATE FILTER

1011 02120	
Patent in the United States of America, such inventional an attached International Application Requested by ASSIGNOR on	corporation having a place of business at Peoria, State eferred to as ASSIGNEE, is desirous of acquiring the ion and any Letters Patent granted thereon by the United on and any Letters Patent granted thereon by the United of the sum of One Dollar (\$1.00) and for other good and rom ASSIGNEE, the receipt of which is hereby asfers and conveys unto ASSIGNEE the entire right, title ion therefor, and any Letters Patent granted thereon by intry, including any continuing application, reissue or applications and obtain patents for said invention in any as the full right to do so. NEE, ASSIGNOR agrees to communicate to ASSIGNEE ocute all papers necessary to file any application on said in obtaining and enforcing proper protection for said y foreign country. quests the COMMISSIONER OF PATENTS AND are Patent on said invention, when granted, to Caterpillar are fit of ASSIGNEE, its successors, assigns and other
IN TESTIMONY WHEREOF, ASSIGN MATTHEW E. LEUSTEK) -20 -10 Date
IN WITNESS OF the execution hereof by MAT Sara Michels Juby 20, 2010 Witness (1) Date Address: 310 Bittersweet Metamora, IL 61548	THEW E. LEUSTEK we have hereunto set our hands. VADIRAT KULK ARNI July 20 2016 Witness (2) Date Address: 1700 W HICKORY GROVE RD Apt B-206 DUNLAP IL-61525
09-484	

WHEREAS, Sara K. Michels, residing at Metamora, Illinois, hereinafter referred to as ASSIGNOR has invented together with Rajesh N. Nair, Michael A. Snopko, Andrew A. Knitt, Vadiraj P. Kulkarni and Matthew E. Leustek a new and useful

ASH DETECTION IN DIESEL PARTICULATE FILTER
for which ASSIGNOR is about to file an international application and/or make application for Letters Patent in the United States of America, such invention being described and identified by said application having an attached International Application Request and/or an attached Declaration and Power of Attorney executed by ASSIGNOR on 1-20-10 ; and WHEREAS, Caterpillar Inc., a Delaware corporation having a place of business at Peoria, State of Illinois, United States of America, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said invention and any Letters Patent granted thereon by the United States of America and any foreign country; NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt of which is hereby acknowledged by ASSIGNOR; 1. ASSIGNOR hereby sells, assigns, transfers and conveys unto ASSIGNEE the entire right, title and interest in and to said invention, any application therefor, and any Letters Patent granted thereon by the United States of America and any foreign country, including any continuing application, reissue or extension thereof, together with the right to file applications and obtain patents for said invention in any foreign country, and covenant that ASSIGNOR has the full right to do so. 2. At the request and expense of ASSIGNEE, ASSIGNOR agrees to communicate to ASSIGNEE any facts known respecting said invention, to execute all papers necessary to file any application on said invention in the United States of America and any foreign country. 3. ASSIGNOR hereby authorizes and requests the COMMISSIONER OF PATENTS AND TRADEMARKS to issue the United States Letters Patent on said invention, when granted, to Caterpillar Inc. 4. This assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal representatives.
IN TESTIMONY WHEREOF, ASSIGNOR has executed this instrument.
SARA K. MICHELS 1-20-2010 Date
IN WITNESS OF the execution hereof by SARA K. MICHELS we have hereunto set our hands. VADIRAJ KULKARNI. Witness (1) Date Witness (2) Address: 1700 W HICKORY ER RD. Address: 926 W 101ECT 676 Address: 926 W 101ECT 676 TL-61525
09-484

WHEREAS, Rajesh N. Nair, residing at Peoria, Illinois, hereinafter referred to as ASSIGNOR has invented together with Michael A. Snopko, Andrew A. Knitt, Vadiraj P. Kulkarni, Matthew E. Leustek and Sara K. Michels a new and useful

ASH DETECTION IN DIESEL PARTICULATE FILTER

for which ASSIGNOR is about to file an intermediate	11 .
for which ASSIGNOR is about to file an international a	application and/or make application for Letters
having an attached International Application Request at Attorney executed by ASSIGNOR on A 2 - 12	nd/or an attached Declaration and Power of
3 11001011011 4 2 2 0 1 D	· and
WHEREAS Caternillar Inc. a Dolowson	, allu

WHEREAS, Caterpillar Inc., a Delaware corporation having a place of business at Peoria, State of Illinois, United States of America, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to said invention and any Letters Patent granted thereon by the United States of America and any foreign country;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) and for other good and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt of which is hereby acknowledged by ASSIGNOR;

- 1. ASSIGNOR hereby sells, assigns, transfers and conveys unto ASSIGNEE the entire right, title and interest in and to said invention, any application therefor, and any Letters Patent granted thereon by the United States of America and any foreign country, including any continuing application, reissue or extension thereof, together with the right to file applications and obtain patents for said invention in any foreign country, and covenant that ASSIGNOR has the full right to do so.
- 2. At the request and expense of ASSIGNEE, ASSIGNOR agrees to communicate to ASSIGNEE any facts known respecting said invention, to execute all papers necessary to file any application on said invention necessary or desirable to aid ASSIGNEE in obtaining and enforcing proper protection for said invention in the United States of America and any foreign country.
- 3. ASSIGNOR hereby authorizes and requests the COMMISSIONER OF PATENTS AND TRADEMARKS to issue the United States Letters Patent on said invention, when granted, to Caterpillar Inc.
- 4. This assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal representatives.

IN TESTIMONY WHE	REOF, ASSIG	NOR has execute Old 120 Date		nt.
IN WITNESS OF the execution Matthew Lewster Witness (1) Address: 1300 Hickory Metamora	H. 115	Address 210	D if	Date
09-484				

WHEREAS, Michael A. Snopko, residing at Washington, Illinois, hereinafter referred to as ASSIGNOR has invented together with Andrew A. Knitt, Vadiraj P. Kulkarni, Matthew E. Leustek, Sara K. Michels and Rajesh N. Nair a new and useful

ASH DETECTION IN DIESEL PARTICULATE FILTER
for which ASSIGNOR is about to file an international application and/or make application for Letters Patent in the United States of America, such invention being described and identified by said application having an attached International Application Request and/or an attached Declaration and Power of Attorney executed by ASSIGNOR on
acknowledged by ASSIGNOR:
1. ASSIGNOR hereby sells, assigns, transfers and conveys unto ASSIGNEE the entire right, title and interest in and to said invention, any application therefor, and any Letters Patent granted thereon by extension thereof, together with the right to file applications and obtain patents for said invention in any foreign country, and covenant that ASSIGNOR has the full right to do see
any facts known respecting said invention, to execute all papers necessary to file any application on said invention necessary or desirable to aid ASSIGNEE in obtaining and enforcing proper protection for said invention in the United States of America and any foreign country. 3. ASSIGNOR hereby authorizes and requests the COLO RESPONDED.
Inc.
4. This assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal representatives.

MICHAEL A. SNOPKO

Date

IN WITNESS OF the execution hereof by MICHAEL A. SNOPKO we have hereunto set our hands.

Witness (1)

Date

Witness (2)

Date

Address:

S24 W. Eleanst

Ch.II.colly #U (1525)

Peorin IL 61604

09-484

IN TESTIMONY WHEREOF, ASSIGNOR has executed this instrument.

WHEREAS, Andrew A. Knitt, residing at Deer Creek, Illinois, hereinafter referred to as ASSIGNOR has invented together with Vadiraj P. Kulkarni, Matthew E. Leustek, Sara K. Michels, Rajesh N. Nair and Michael A. Snopko a new and useful

ASH DETECTION IN DIESEL PARTICULATE FILTER
for which ASSIGNOR is about to file an international application and/or make application for Letters Patent in the United States of America, such invention being described and identified by said application having an attached International Application Request and/or an attached Declaration and Power of Attorney executed by ASSIGNOR on
1. ASSIGNOR hereby sells, assigns, transfers and conveys unto ASSIGNEE the entire right, title and interest in and to said invention, any application therefor, and any Letters Patent granted thereon by the United States of America and any foreign country, including any continuing application, reissue or extension thereof, together with the right to file applications and obtain patents for said invention in any foreign country, and coverant that ASSIGNOR has the fill in the latest and invention in any

- foreign country, and covenant that ASSIGNOR has the full right to do so. 2. At the request and expense of ASSIGNEE, ASSIGNOR agrees to communicate to ASSIGNEE any facts known respecting said invention, to execute all papers necessary to file any application on said invention necessary or desirable to aid ASSIGNEE in obtaining and enforcing proper protection for said invention in the United States of America and any foreign country.
- 3. ASSIGNOR hereby authorizes and requests the COMMISSIONER OF PATENTS AND TRADEMARKS to issue the United States Letters Patent on said invention, when granted, to Caterpillar
- 4. This assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal representatives.

IN TESTIMONY WHEREOF, ASSI	
ANDREW A. KNITT	7/21/10 Date
Witness (1) Date Address: 5326 E. CA. Stev Ave	Witness (2) Address:
99-484	Washington, IL 6/57,

RECORDED: 07/22/2010

PATENT

REEL: 024724 FRAME: 0699