PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Cory A. Brown	12/03/2012
Mayank Mittal	11/19/2012
Xiangdong Ding	11/28/2012
Hoisan Kim	11/26/2012
Mark F. Sommars	11/26/2012

RECEIVING PARTY DATA

Name:	Caterpillar Inc.
Street Address:	100 NE Adams Street
Internal Address:	AH9510
City:	Peoria
State/Country:	ILLINOIS
Postal Code:	61629-9510

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13712052

CORRESPONDENCE DATA

Fax Number: 3096751236

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

Phone: 309-675-5140

Email: US_Docket_Clerk@cat.com

Correspondent Name: Caterpillar Inc. Intellectual Property D

Address Line 1: 100 NE Adams Street

Address Line 2: AH9510

Address Line 4: PEORIA, ILLINOIS 61629-9510

ATTORNEY DOCKET NUMBER: 11-0857

REEL: 029453 FRAME: 0211

PATENT

NAME OF SUBMITTER:	Mary M. Umholtz
Total Attachments: 5 source=11-0857-Assignments#page1.tif source=11-0857-Assignments#page2.tif source=11-0857-Assignments#page3.tif source=11-0857-Assignments#page4.tif source=11-0857-Assignments#page5.tif	

<u>ASSIGNMENT</u>

WHEREAS, MAYANK MITTAL, residing at Waukesha, Wisconsin, hereinafter referred to as ASSIGNOR has invented together with Cory A. Brown, Hoisan Kim, Mark F. Sommars and Xiangdong Ding a new and useful

DUAL FUEL INJECTOR WITH CROSSOVER VALVE

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Tor Which ASSIGNOR Detent in the United Sta	is about to file an inte	ernational application an	d/or make application for Letters	
hoving on attached later	nes of America, such	Invention being describe	ed and identified by said application	
Attamacy are autodied inte	manonai Appiicanon	Request and/or an anac	ned Declaration and Power of	
Auomey executed by A	SSIGNUK on	; ar	nd	
WHEREAS, C	sterpillar Inc., a Dela	ware corporation having	a place of business at Peoria, State	
of Illinois, United State	s of America, hereina	ifter referred to as ASSIC	GNEE, is desirous of acquiring the	
entire right, title and int	erest in and to said in	rvention and any Letters	Patent granted thereon by the United	đ
States of America and a				
NOW, THERE	FORE, in considerati	on of the sum of One Do	ollar (\$1.00) and for other good and	
valuable consideration i	received by ASSIGN	OR from ASSIGNEE, th	e receipt of which is hereby	
acknowledged by ASSI		,	,	
		transfers and conveys	into ASSIGNEE the entire right, titl	
and interest in and to sa	id invention any ann	dication therefor and an	y Letters Patent granted thereon by	C
the United States of Am	ra invention, any app rariae and any forcies	s country including any	y Letters ratem granted thereon by	
the Office States of An	terica and any foreign	i country, including any	continuing application, reissue or	
extension thereof, toget	ner with the right to i	ale applications and obta	in patents for said invention in any	
foreign country, and co	venant that ASSIGNO	OR has the full right to d	0 SO.	
2. At the reque	st and expense of AS	SIGNEE, ASSIGNOR a	grees to communicate to ASSIGNE	E
any facts known respec-	ting said invention, to	execute all papers nece	ssary to file any application on said	
invention necessary or o	lesirable to aid ASSI	GNEE in obtaining and o	enforcing proper protection for said	
invention in the United	States of America an	d any foreign country.		
3. ASSIGNOR	hereby authorizes an	id requests the COMMIS	SIONER OF PATENTS AND	
TRADEMARKS to issu	ie the United States I	etters Patent on said inv	ention, when granted, to Caterpillar	
Inc.	ve are contractions	bottors atom on said my	emion, when granted, to Caterpman	
	ant chall inure to the	harafit of ASSICNED	its successors, assigns and other	
lacel representatives on	d abalt ha his discount	ADDICTION AGGIC	ns successors, assigns and other	
regar representatives, at	iu snan be omding up	on ASSIGNOR, ASSIG	NOR'S nears and legal	
representatives.				
IN TESTIMON	Y WHEREOF, ASSI	IGNOR has executed thi	s instrument.	
· No.a				
Man		11/19/2012 Date		
MAYANK ⁰ MITTAL		Date	TO THE STATE OF TH	
IN WITNESS OF the ex	xecution hereof by M	AYANK MITTAL we b	ave hereunto set our hands.	
	AUTOMOTE HOLDOL OF THE	~ * * * * * * * * * * * * * * * * * * *	acconditions of our names.	
Witness (1)	Date	Witness (2)	Date	
Address:	oak	Address:	Date	
Addicss.		Address:	IT THE WANTED HANDER OF THE PROPERTY OF THE PR	

<u>ASSIGNMENT</u>

WHEREAS, CORY A. BROWN, residing at Peoria, Illinois, hereinafter referred to as ASSIGNOR has invented together with Hoisan Kim, Mark F. Sommars, Xiangdong Ding and Mayank Mittal a new and useful

DUAL FUEL INJECTOR WITH CROSSOVER VALVE

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 and
Attorney executed by ASSIGNOR on; 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 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.
The Marine Commence of the Com
<u> </u>
CORY/A. BROWN Date
IN WITNESS OF the execution hereof by CORY A. BROWN we have hereunto set our hands.
May & Jonners 12/3/12 SES 12/3/12
36.5 (ASS)
Witness (1) Date Witness (2) Date
Address: 114 Running Ele Ch Address: 217 6 Contre La
Sparland, DL 6/575 Dunkp. 12 61525

ASSIGNMENT

WHEREAS, XIANGDONG DING, residing at Peoria, Illinois, hereinafter referred to as ASSIGNOR has invented together with Cory A. Brown, Hoisan Kim, Mark F. Sommars and Mayank Mittal a new and useful

DUAL FUEL INJECTOR WITH CROSSOVER VALVE

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 ; 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;

- 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.
- 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.

支援 2012·11つ8	NGDONG DING we have hereunto set our hands
Witness (1) Date Address: 中国注意着當個各個地区在 国际 新聞 新聞 在 Till Address: 中國 (2 Till Address) 中	Witness (2) Liangwirg Villed Date Address: No. 20 Long Qiu Jown. Gao You City, Jiang Su Province Chren
No Vizor Xin Chan Gong Guan Jensham Hua Yun	
Street. Wu Jin dissolut . Chang zhou city	
Jidong SU Province China	

ASSIGNMENT

WHEREAS, HOISAN KIM, residing at Dunlap, Illinois, hereinafter referred to as ASSIGNOR has invented together with Cory A. Brown, Mark F. Sommars, Xiangdong Ding and Mayank Mittal a new and useful

DUAL FUEL INJECTOR WITH CROSSOVER VALVE

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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		
IN TESTIMONY WHEREOF, ASSIGN		
	Nov. 26, 2012	
HOISAN KIM	Date	
IN WITNESS OF the execution hereof by HOIS	AN EXM we have have not our hands	
Merle Dominion 11/26/12	Witness (2) Date Address: 215 & William Frank DK,	
Witness (1) Date	Witness (2) Date	
Address: 114 Running Elk CT		
Sportend, IL 61585	10 4 708, REPLY 31-61614	
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<u>ASSIGNMENT</u>

WHEREAS, MARK F. SOMMARS, residing at Hopewell, Illinois, hereinafter referred to as ASSIGNOR has invented together with Cory A. Brown, Hoisan Kim, Xiangdong Ding and Mayank Mittal a new and useful

DUAL FUEL INJECTOR WITH CROSSOVER VALVE

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		
IN ŢESTIMOŅY WHEREOF, ASSIGI	NOR has executed th	is instrument.
Mark D. Jonmara		
MARK F, SOMMARS	Date	
IN WITNESS OF the execution hereof by MAF hands.	RK F. SOMMARS W	
Arethy Elekon 1126/2012		11/26/2-12
Witness (1) Date Address: 225 k Willow Exetts Dr.	Witness (2) Address:	Date
Apt # 708 Devis IL-61614	_ 267 W.	Cortiste In.
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RECORDED: 12/12/2012