07-30-	2003		
Form PTO-1595 (Rev. 03/01) 1 - 30 - 03 F OMB No. 0651-0027 (exp. 5/31/2002) Tab settings ⇔ ⇔ ▼ 102511	U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office		
To the Honorable Commissioner of Patents and Trademarks:	Please record the attached original documents or copy thereof.		
1. Name of conveying party(ies):	Name and address of receiving party(ies)		
Gerald N. Coleman Eric C. Fluga	Name:Caterpillar Inc.		
Kevin P. Duffy Jonathan P. Kilkenny Stephen A. Faulkner Scott A. Leman	Internal Address: Intellectual Property Dept.		
Additional name(s) of conveying party(ies) attached? 🔀 Yes 🖵 No			
3. Nature of conveyance:			
🖾 Assignment 🖵 Merger	Street Address: 100 N.E. Adams Street		
Security Agreement	Olicet Address. 100 N.B. Addlis Street		
Other	<u> </u>		
01/31/2003 02/12/2003 01/31/2003 02/03/2003	City: Peoria State: IL Zip: 61629		
Execution Date: 02/15/2003 02/17/2003	Additional name(s) & address(es) attached?		
A. Patent Application No.(s) Additional numbers at	B. Patent No.(s) tached? □ Yes □ No		
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1		
Name: Steve D. Lundquist	7. Total fee (37 CFR 3.41)\$\\\\40.00		
Internal Address: Caterpillar Inc.	☐ Enclosed		
Intellectual Property Department	Authorized to be charged to deposit account		
100 N. E. Adams Street	8. Deposit account number: 03-1129		
Street Address:	Docket Number: 01-649.1		
City: Peoria State: IL Zip: 61629-6490	(Attach duplicate copy of this page if paying by deposit account)		
DO NOT USE	THIS SPACE		
 Statement and signature. To the best of my knowledge and belief, the foregoing is a true copy of the original document. 	information is true and correct and any attached copy		
Steve D. Lundquist Name of Person Signing	Signature Date		
Total number of pages including cover	er sheet, attachments, and documents: 09		

Mail documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks, Box Assignments

Commissioner of Patents & Trademarks, Box Assignments Washington, D.C. 20231

CONTINUATION SHEET

Form PTO-1595 (Rev.03/01) OMB No. 0651-0027 (exp. 5/31/2002) Tab settings ⇔ ⇔ ♥	RECORDATION FORM PATENT		U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office
	of Patents and Trademarks: F	Please record the attached	original documents or copy thereof.
Name of conveying party(ies):		2. Name and addres	s of receiving party(ies)
Cornelius N. Opris	ļ	Name:	Caterpillar Inc.
Maarten Verkiel	Í	Internal Address:	Intellectual Property Dept.
James R. Weber	1	internal Address.	intellectual Property Dept.
Additional name(s) of conveying party(les)	attached? 📮 Yes 🍒 No		
3. Nature of conveyance:			
🖾 Assignment	☐ Merger	~	
Security Agreement	☐ Change of Name	Street Address:	100 N.E. Adams Street
Other	<u></u>		
01/17/2003		City: Peoria	State: IL Zip: 61629
01/27/2003 Execution Date: 01/23/2003		Additional name(s) & a	address(es) attached? 🍱 Yes 🖵 No
4. Application number(s) or patent number(s):			
		cation, the execution of	late of the application is: 01/31/2003
If this document is being filed together with a new application, the execution date of the application is: 01/31/2003 A. Patent Application No.(s) B. Patent No.(s)			
.,			
Additional numbers attached? 🖵 Yes 🔉 No			
5. Name and address of party to vicencerning document should be		6. Total number of ap	plications and patents involved: 1
Name: Steve D. Lundqu	iist	7. Total fee (37 CFR	3.41)\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Internal Address: Caterpill		Enclosed	
Intellectual Property	Department	Authorized to	be charged to deposit account
100 N. E. Adams Street		8. Deposit account n	umber: 03-1129
Street Address:		Docket Number:	01-649.1
City: Peoria State: IL	Zìp: <u>61629-6490</u>	(Attach duplicate copy	of this page if paying by deposit account)
DO NOT USE THIS SPACE			
9. Statement and signature.			
To the best of my knowledge ar		nformation is true and	correct and any attached copy
is a true copy of the original doo	/2	11/1/1/	
Steve D. Lundquist Name of Person Signing		Signature	02/20/2003 Date
	mber of pages including cove		locuments: 09

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments Washington, D.C. 20231

CON

2-20-0 3RECORDATION FORM COVER SHEET Form PTO-1595 U.S. DEPARTMENT OF COMMERCE (Rev. 03/01) U.S. Patent and Trademark Office PATENTS ONLY OMB No. 0651-0027 (exp. 5/31/2002) Tab settings ⇔ ⇔ ⇔ To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof 1. Name of conveying party(ies): 2. Name and address of receiving party(ies) Cornelius N. Opris Caterpillar Inc. Maarten Verkiel Internal Address: Intellectual Property De James R. Weber Additional name(s) of conveying party(ies) attached? 🗀 Yes 🌄 No 3. Nature of conveyance: Assignment Merger Street Address: 100 N.E. Adams Street Security Agreement Change of Name Other City: Peoria State: IL Zip: 61629 01/17/2003 01/27/2003 Execution Date: 01/23/2003 Additional name(s) & address(es) attached? Yes No 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: 01/31/2003 A. Patent Application No.(s) B. Patent No.(s) Additional numbers attached? 📮 Yes 🔀 No 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: 1 concerning document should be mailed: 7. Total fee (37 CFR 3.41).....\$ 40.00 Name: Steve D. Lundquist Enclosed Internal Address: Caterpillar Inc. Authorized to be charged to deposit account Intellectual Property Department 100 N. E. Adams Street 8. Deposit account number: 03-1129 Street Address:__ Docket Number: 01-649.1 (Attach duplicate copy of this page if paying by deposit account) City: Peoria State: IL Zip: 61629-6490 DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. 02/20/2003 Steve D. Lundquist Date Name of Person Signing Total surphes of pages including cover sheet, attachments, and documents: Mail documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks, Box Assignments 01 FC:8021 Washington, D.C. 20231

CONTINUATION SHEET

Form'PTO-1595 (Rev. 03/01) OMB No: 0651-0027 (exp. 5/31/2002)	RECORDATION FORM COVER SHEET PATENTS ONLY		U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office	
Tab settings $\Rightarrow \Rightarrow \forall$	V V	▼ ·	٠ ٧ ٩	
	of Patents and Trademarks:	Please record the attached	original documents or copy thereof.	
Name of conveying party(ies):			es of receiving party(ies)	
Cornelius N. Opris		Name:	Caterpillar Inc.	
Maarten Verkiel				
James R. Weber		internal Address:	Intellectual Property Dept?	
Additional name(s) of conveying party(ies)	attached? 📮 Yes 🖾 No			
3. Nature of conveyance:				
🖾 Assignment	Merger		_	
Security Agreement	Change of Name	Street Address:	100 N.E. Adams Street	
Other				
01/17/2003 01/27/2003		City: Peoria	State:ILZip:_61629	
Execution Date: 01/23/2003		Additional name(s) & a	address(es) attached? 🍒 Yes 🖵 No	
4. Application number(s) or patent	number(s):			
If this document is being filed to	gether with a new appli	ication, the execution o	date of the application is: 01/31/2003	
A. Patent Application No.(s)		B. Patent No.(s)		
.,				
	Additional numbers att	∤ ached? 📮 Yes 🍒 No		
5. Name and address of party to concerning document should be		6. Total number of ap	oplications and patents involved:	
Name: Steve D. Lundqu	iist	7. Total fee (37 CFR	R 3.41)\$40.00	
Internal Address: Caterpill		Enclosed		
Intellectual Property	Department	Authorized to	be charged to deposit account	
100 N. E. Adams Street		8. Deposit account r	number: 03-1129	
Street Address:				
		Docket Number:	01-649.1	
City: Peoria State: IL	Zip: <u>61629-649</u> 0	(Attach duplicate copy	of this page if paying by deposit account)	
	DO NOT USE	THIS SPACE		
9. Statement and signature.		Λ		
To the best of my knowledge ar is a true copy of the original do		information is true and	correct and any attached copy	
Steve D. Lundquis		Signature	02/20/2003 Date	
Name of Person Signin	g mber of pages including cove		· · · · · · · · · · · · · · · · · · ·	

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments Washington, D.C. 20231

WHEREAS, GERALD N. COLEMAN, residing at Dunlap, Illinois, hereinafter referred to ASSIGNOR has invented together with Kevin P. Duffy, Stephen A. Faulkner, Eric C. Fluga, Jonathan P. Kilkenny, Scott A. Leman, Cornelius N. Opris, Maarten Verkiel and James R. Weber a new and useful

AIR AND FUEL SUPPLY SYSTEM FOR COMBUSTION ENGINE

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 _____1/31/03_____; 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.

GERALD N. COLEMAN

Date

IN WITNESS OF the execution hereof by GERALD N. COLEMAN we have hereunto set our hands.

Legel S. Wylen J. 1-31-03

Witness (1)

Address: 8/3 6th Street

Colona, IL 6/241

Legel S. Lege

WHEREAS, KEVIN P. DUFFY, residing at East Peoria, Illinois, hereinafter referred to ASSIGNOR has invented together with Gerald N. Coleman, Stephen A. Faulkner, Eric C. Fluga, Jonathan P. Kilkenny, Scott A. Leman, Cornelius N. Opris, Maarten Verkiel and James R. Weber a new and useful

AIR AND FUEL SUPPLY SYSTEM FOR COMBUSTION ENGINE

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 1/31/03; 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.		
Tevin P Duffy_ 1-31-03		
Tevrin P Duffy 1-31-03 KEVIN P. DUFFY Date		
DANKED TOO OF A CALL OF A		
IN WITNESS OF the execution hereof by KEVIN P. DUFFY we have hereunto set our hands.		
Secolification interest of the state of the		
Witness (1) Date Witness (2) Date		
Address: 11 Col 4. Marel Ch. Address: 813 6th 301ell		
Dunky, 16 61525 Colona, Il 6124/		

WHEREAS, STEPHEN A. FAULKNER, residing at Peoria, Illinois, hereinafter referred to ASSIGNOR has invented together with Gerald N. Coleman, Kevin P. Duffy, Eric C. Fluga, Jonathan P. Kilkenny, Scott A. Leman, Cornelius N. Opris, Maarten Verkiel and James R. Weber a new and useful

AIR AND FUEL SUPPLY SYSTEM FOR COMBUSTION ENGINE

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 2/15/03; 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.

SAFULL 15th Feb 2003
Date STEPHEN A. FAULKNER IN WITNESS OF the execution hereof by STEPHEN A. FAULKNER we have hereunto set our hands. Mater Illille 2/17/03

Witness (1)

Address: 2300 WEST BROOKLYN PC

DUNLAP, IL 6/525

DUNLAP, IL 6/525

Amrein 7

Witness (2)

Address: 1017 W. Brook forest Orive

Peoria, IL 6/6/5

<u>ASSIGNMENT</u>

WHEREAS, ERIC C. FLUGA, residing at Dunlap, Illinois, hereinafter referred to ASSIGNOR has invented together with Gerald N. Coleman, Kevin P. Duffy, Stephen A. Faulkner, Jonathan P. Kilkenny, Scott A. Leman, Cornelius N. Opris, Maarten Verkiel and James R. Weber a new and useful

AIR AND FUEL SUPPLY SYSTEM FOR COMBUSTION ENGINE

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;

- 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.

ERIC C. FLUGA	12 Feb 2003 Date
NWITNESS OF the execution hereof by ERIC Roger S. Huner Jr. H12/03 Witness (1) Address: 813 6th Street Colona, IL	

WHEREAS, JONATHAN P. KILKENNY, residing at Peoria, Illinois, hereinafter referred to ASSIGNOR has invented together with Gerald N. Coleman, Kevin P. Duffy, Stephen A. Faulkner, Eric C. Fluga, Scott A. Leman, Cornelius N. Opris, Maarten Verkiel and James R. Weber a new and useful

AIR AND FUEL SUPPLY SYSTEM FOR COMBUSTION ENGINE

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, ASSIGNOR has executed this instrument. Feb. 3, 2003 JONATHAN P. KILKENNY Date		
IN WITNESS OF the execution hereof by JONATHAN P. KILKENNY we have hereunto set our hands. Augh John Jajos Juin Duff 2/3/03		

WHEREAS, SCOTT A. LEMAN, residing at Eureka, Illinois, hereinafter referred to ASSIGNOR has invented together with Gerald N. Coleman, Kevin P. Duffy, Stephen A. Faulkner, Eric C. Fluga, Jonathan P. Kilkenny, Cornelius N. Opris, Maarten Verkiel and James R. Weber a new and useful

AIR AND FUEL SUPPLY SYSTEM FOR COMBUSTION ENGINE

AIR AND FORE SOFFET STSTEM FOR COMBUSTION ENGINE
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 2/17/03; 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

- 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.

WHEREAS, CORNELIUS N. OPRIS, residing at Peoria, Illinois, hereinafter referred to ASSIGNOR has invented together with Gerald N. Coleman, Kevin P. Duffy, Stephen A. Faulkner, Eric C. Fluga, Jonathan P. Kilkenny, Scott A. Leman, Maarten Verkiel and James R. Weber a new and useful

AIR AND FUEL SUPPLY SYSTEM FOR COMBUSTION ENGINE

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;

- 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 WHEDEOF, ASSIGN	NOR has executed this instrument.
Quelles dicolor fors	1/17/03
CORNELIUS N. OPRIS	Date
	NELIUS N. OPRIS we have hereunto set our hands.
Witness (1) Date Address: 1700 W. Hickory draw Rd 11-209	Damis f. Endirott 1/17/03 Witness (2) Address: 419 W. CLYBOURN CT
Dunkep IL 61525	PEORIA, 11 61614

WHEREAS, MAARTEN VERKIEL, residing at Metamora, Illinois, hereinafter referred to ASSIGNOR has invented together with Gerald N. Coleman, Kevin P. Duffy, Stephen A. Faulkner, Eric C. Fluga, Jonathan P. Kilkenny, Scott A. Leman, Cornelius N. Opris and James R. Weber a new and useful

AIR AND FUEL SUPPLY SYSTEM FOR COMBUSTION ENGINE

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 $1/2 > 0.3$; 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.		
1/1/10 // // // // // // // // // // // // //		
1/		
MAARTEN VERKIEL Date		
IN WITNESS OF the execution hereof by MAARTEN VERKIEL we have hereunto set our hands.		
Damis J. Endigt 01/27/2003		
Witness (1) Date Witness (2) Date		
Address: 419 W CI VROUPN CT Address: 1700 W Hickory France Hold 1/208		
Witness (1) Date Witness (2) Date Address: 419 W. CLYBOURN CT Address: 1700 W. Hickory Grove Held 1/209		
PEORIA, IL 61614 Dunap IL 61525		

WHEREAS, JAMES R. WEBER, residing at Lacon, Illinois, hereinafter referred to ASSIGNOR has invented together with Gerald N. Coleman, Kevin P. Duffy, Stephen A. Faulkner, Eric C. Fluga, Jonathan P. Kilkenny, Scott A. Leman, Cornelius N. Opris and Maarten Verkiel a new and useful

AIR AND FUEL SUPPLY SYSTEM FOR COMBUSTION ENGINE

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;

- 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.

RECORDED: 02/20/2003

AMES R. WEBER	Date	23,2005	
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Carol Rethre 1/	23/03 Eran	Sarler	23JANO3
Witness (1) Address: 4414 S. McCar	Date Witness (Mick Rd Address:	2) 1124 w. orch	Date ard Ln
Farmington, 1L			
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