Form PTO-1595 RE 10-27-2 (Rev. 03/01)	EET U.S. DEPARTMENT OF C	
OMB No. 0651-0027 (exp. 5/31/2002)		
Tab settings	701 ▼ ▼	
To the Honorable Commissioner of Patents and Trademarks	: Please Record the attached original documents or copy there	of.
Name of conveying party(ies): Kartik G. lyer	2. Name and address of receiving party(ies)	
Owen C. Kolstad Cornelius N. Opris	Name: Caterpillar, Inc. Patent Department	0
Additional name of conveying party(ies) attached? 🔲 Yes 🔯 No	Internal Address:	3 U.S.
		31086 1086
3. Nature of conveyance:	Street Address: 100 NE Adams Street	
☐ Security Agreement ☐ Change of Name ☐ Other	City: Peoria State: IL Zip: 61629	
Execution Date: <u>10-08-03</u>	Additional Name(s) & address(es) attached? ☐ Yes ☒ No	
 Application number(s) or patent number(s): If this document is being filed together with a new application A. Patent Application No.(s) 	on, the execution data of the application is: 10-08-03 B. Patent No.(s)	
If this document is being filed together with a new application A. Patent Application No.(s)	on, the execution data of the application is: 10-08-03	
If this document is being filed together with a new application A. Patent Application No.(s)	on, the execution data of the application is: <u>10-08-03</u> B. Patent No.(s)	1
If this document is being filed together with a new application A. Patent Application No.(s) Additional numbers a Section No. (s)	B. Patent No.(s) ttached? Yes No.	1
If this document is being filed together with a new application A. Patent Application No.(s) Additional numbers a 5. Name and address of party to whom correspondence concerning this document should be mailed: Name: Michael B. McNeil	B. Patent No.(s) ttached? Yes No 6. Total number of applications and patents involved:	1
If this document is being filed together with a new application A. Patent Application No.(s) Additional numbers a 5. Name and address of party to whom correspondence concerning this document should be mailed:	B. Patent No.(s) ttached? Yes No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41) \$ 40	1
If this document is being filed together with a new application A. Patent Application No.(s) Additional numbers a 5. Name and address of party to whom correspondence concerning this document should be mailed: Name: Michael B. McNeil	B. Patent No.(s) ttached? Yes No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41) \$ 40 Enclosed	1
If this document is being filed together with a new application A. Patent Application No.(s) Additional numbers a 5. Name and address of party to whom correspondence concerning this document should be mailed: Name: Michael B. McNeil Internal Address: Liell & McNeil Attorneys PC	B. Patent No.(s) ttached? Yes No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41) \$ 40 Enclosed Authorized to be charged to deposit account 8. Deposit account number:	
If this document is being filed together with a new application A. Patent Application No.(s) Additional numbers a 5. Name and address of party to whom correspondence concerning this document should be mailed: Name: Michael B. McNeil Internal Address: Liell & McNeil Attorneys PC Street Address: P.O. Box 2417 City: Bloomington State: IN Zip: 47402	B. Patent No.(s) ttached? Yes No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41) \$ 40 Enclosed Authorized to be charged to deposit account 8. Deposit account number: 500226	
If this document is being filed together with a new application A. Patent Application No.(s) Additional numbers a 5. Name and address of party to whom correspondence concerning this document should be mailed: Name: Michael B. McNeil Internal Address: Liell & McNeil Attorneys PC Street Address: P.O. Box 2417 City: Bloomington State: IN Zip: 47402	B. Patent No.(s) ttached? Yes No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41) \$ 40 Enclosed Authorized to be charged to deposit account 8. Deposit account number: 500226 (Attach duplicate copy of this page if paying by deposit	

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

Commissioner of Patents & Trademarks, Box Assignments

Washington, D.C. 20231

<u>0</u>1-817

ASSIGNMENT

WHEREAS, Kartik G. Iyer, residing at Novi, Michigan, hereinafter referred to ASSIGNOR has invented together with Owen C. Kolstad, Cornelius N. Opris a new and useful

EFFICENTLY REGENERATED PARTICLE TRAP FOR AN INTERNAL COMBUSTION ENGINE AND METHOD OF OPERATING SAME

ENGINE METHOD OF OFERTING STANE				
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 10/08/03; 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.				
Kylyer 10/05/03				
KARTIK G. IYER Date				
IN WITNESS OF the execution hereof by KARTIK G. IYER we have hereunto set our hands.				
Hand Matta 10/08/2003 Oliver a Uhman 80 +03				
Witness (1) Date Witness (2) Date				
Address: 37167 Northerd (r Address: 3176 HIDEAWAY GOACH DA				
Westland MI 48186 BRICHTINI MI 48114				

01-817

ASSIGNMENT

WHEREAS, Owen C. Kolstad, residing at Peoria, Illinois, hereinafter referred to ASSIGNOR has invented together with Kartik G. Iyer, Cornelius N. Opris a new and useful

EFFICENTLY REGENERATED PARTICLE TRAP FOR AN INTERNAL COMBUSTION ENGINE AND METHOD OF OPERATING SAME

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.

OWEN C. KOLSTAD

IN WITNESS OF the execution hereof by OWEN C. KOLSTAD we have hereunto set our hands.

Richard Candell 9/26/2003 Line A. Dillachs 1/26/2002

Witness (1) Date Witness (2) Date

Address: 1025 Johnson Address:

Morton, IL 61550 5402 Dichisan Genetary Rd

O1-817

PATENT REEL: 014618 FRAME: 0731

ASSIGNMENT

WHEREAS, Cornelius N. Opris, residing at Peoria, Illinois, hereinafter referred to ASSIGNOR has invented together with Owen C. Kolstad, Kartik G. Iyer a new and useful

EFFICENTLY REGENERATED PARTICLE TRAP FOR AN INTERNAL COMBUSTION ENGINE AND METHOD OF OPERATING SAME

ENGINE AND METHOD OF OPERATING SAME	
for which ASSIGNOR is about to file an international application and/or make applicat	tion for Letters
Patent in the United States of America, such invention being described and identified b	y said
application having an attached International Application Request and/or an attached De	claration and
Power of Attorney executed by ASSIGNOR on	; and
WHEREAS, Caterpillar Inc., a Delaware corporation having a place of busines	s at Peoria,
State of Illinois, United States of America, hereinafter referred to as ASSIGNEE, is des	sirous of
acquiring the entire right, title and interest in and to said invention and any Letters Pate	nt 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	~
and valuable consideration received by ASSIGNOR from ASSIGNEE, the receipt of w	hich 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 ASSIGN	OR has executed this instrumen	t.
CORNELIUS N. OPRIS	Date 1/2005	
IN WITNESS OF the execution bereof by COR		aunto sat our hands
	Witness (2)	eunto set our nands $9/25/63$
Witness (1) Date Address: 308 BITTERSUEET AUG.	Witness (2)	Date
	419 W. CLYBOURN PEORIA, IL 61614	CT
	12011/12 6/017	

01-817

RECORDED: 10/15/2003

PATENT REEL: 014618 FRAME: 0732