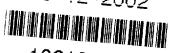
FORM PTO-1619A Expires 06/30/99 OMB 0651-0027

08-12-2002

U.S. Department of Commerce Patent and Trademark Office **PATENT**



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Reel # Frame #	Departmental File Secret File
Conveying Party(ies)	X Mark if additional names of conveying parties attached Execution Date Month Day Year
Name (line 1) James J. Callas	06/18/2002
Name (line 2)	Function Date
Second Party	Execution Date Month Day Year
Name (line 1) Gerald N. Coleman	06/17/2002
Name (line 2)	10/210273
Receiving Party	Mark if additional names of receiving parties attached
Name (line 1) Caterpillar Inc.	If document to be recorded is an assignment and the
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Domestic Representative Name and	Address Enter for the first Receiving Party only.
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FORM PTO-1619B Expires 06/30/99 OMB 0651-0027	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT
Correspondent Name and Address	Area Code and Telephone Number (309)	675-1668
Name Keith P. Roberson		
Address (line 1) Caterpillar Inc.		
Address (line 2) Intellectual Property	Department	
Address (line 3) 100 N. E. Adams Stree	t	
Address (line 4) Peoria, IL 61629-649	0	
Pages Enter the total number of including any attachment	pages of the attached conveyance document ts.	# 5
Patent Application Number(s)	Patent Number (DO NOT ENTER BOTH numbers for the Patent Num	nber(s)
Patent Cooperation Treaty (PCT) Enter PCT application number only if a U.S. Application Numb has not been assigned.	PCT PCT PCT	PCT PCT
Number of Properties Enter the t	total number of properties involved. #	1
Fee Amount Fee Amoun	nt for Properties Listed (37 CFR 3.41): \$40.	00
Deposit Account	closed Deposit Account X	
(Enter for payment by deposit account or if a	ndditional fees can be charged to the account.) Deposit Account Number: # 03 -	1129

Statement and Signature

Docket No. 02-156

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. Charges to deposit account are authorized, as

Authorization to charge additional fees:

indicated herein.

w III B. Behavean	(a Do	08/01/2002
Keith P. Roberson	Signature	Date

PATENT REEL: 013167 FRAME: 0488

No

FORM PTO-1619C Expires 06/30/99 OMB 0651-0027

RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

U.S. Department of Commerce Patent and Trademark Office PATENT

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F***		Month Day Year
Name (line 1) Jan	mes J. Faletti	06/19/2002
Name (line 2)		. 02.
		Execution Date Month Day Year
Name (line 1) Da	vid A. Pierpont	06/24/2002
Name (line 2)		Execution Date
Nama a: a		Month Day Year
Name (line 1) Jai	mes R. Weber	06/17/2002
Name (line 2)		
Receiving Par	ty(ies) Mark if additional names of receiving pa	arties attached
	eceiving Party(ies)	
Name (line 1)		If document to be recorded is an assignment and the
		receiving party is not domiciled in the United
Name (line 2)		States, an appointment of a domestic representative
Address (line 1)		is attached. (Designation
		must be a separate document from
Address (line 2)		Assignment.)
Address (line 3)	City State/Country Zip	Code
		If document to be recorded
Name (line 1)		is an assignment and the receiving party is not
Name (line 2)		domiciled in the United
italii (mis 4)		States, an appointment of a domestic representative is
Address (line 1)		attached. (Designation must be a separate document from
Bulleting and all all all all all all all all all al		Assignment.)
Address (line 2)		
Address (line 3)	State/Country Z	ip Code
Application N	umber(s) or Patent Number(s) Mark if additional numbers attach	ed
Application in	Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for th	e same property).
	tent Application Number(s)	ımber(s)
		1

WHEREAS, JAMES J. CALLAS, residing at Peoria, Illinois, hereinafter referred to ASSIGNOR has invented together with Gerald N. Coleman, James J. Faletti, David A. Pierpont and James R. Weber a new and useful

COOLING OF ENGINE COMBUSTION AIR

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
4. This assignment shall mule to the benefit of Assignor, its successors, assignment shall mule to the benefit of Assignor's heirs and legal
legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR'S heirs and legal
representatives.
IN TESTIMONY WHEREOF, ASSIGNOR has executed this instrument.
IN TESTIMONY WHEREOF, ASSIGNOR has executed this historian
(1/20) $(1/2/0)$
6/18/02 Date
JAMES J. CALLAS
7 CALLAS we have hereunto set our hands.
IN WITNESS OF the execution hereof by JAMES J. CALLAS we have hereunto set our hands.
Date
Witness (I) Date Witness (2)
Address: Position Address:
VEGGIO TO LIVIU
La Rose IL Ce1541 TEORIT, JE Bis.

WHEREAS, GERALD N. COLEMAN, residing at Dunlap, Illinois, hereinafter referred to ASSIGNOR has invented together with James J. Callas, James J. Faletti, David A. Pierpont and James R. Weber a new and useful

COOLING OF ENGINE COMBUSTION AIR

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.
GERALDIN COLEMAN Date
GERALD IV. COLLINA
NWITNESS OF the execution hereof by GERALD N. COLEMAN we have hereunto set our hands. Raymond Gerges Innell, 2002 Rogel Witness (2) Witness (1) Address: 3727 W. SAYMORE LN. Address: 813 6th street PEDRIA IL 61615 Colona, FL 6/241

WHEREAS, JAMES J. FALETTI, residing at Spring Valley, Illinois, hereinafter referred to ASSIGNOR has invented together with James J. Callas, Gerald N. Coleman, David A. Pierpont and James R. Weber a new and useful

COOLING OF ENGINE COMBUSTION AIR

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.
James I FALETTI Date
JAMES J. FALETTI Date
IN WITNESS OF the execution hereof by JAMES J. FALETTI we have hereunto set our hands.
m 1 0.44 12002
Mark Patterson 19 June 2002 Like Mark 19 / 2002
True (1) Date Wilmess (2)
Address: 7400 N. V.114 Lake Or. Address: 5901 N. ASPENWOOD DR.
Bldg 0 Unit 7 APT. 5304
PEORIA 16/6/5
Pearia IL 61617

WHEREAS, DAVID A. PIERPONT, residing at Peoria, Illinois, hereinafter referred to ASSIGNOR has invented together with James J. Callas, Gerald N. Coleman, James J. Faletti and James R. Weber a new and useful

COOLING OF ENGINE COMBUSTION AIR

COOLING OF ENGINE COMPOSITION AIR
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
INTESTIMONY WHEREOF, ASSIGNOR has executed this instrument.
IN WITNESS OF the execution hereof by DAVID A. PIERPONT we have hereunto set our hands. Land La

WHEREAS, JAMES R. WEBER, residing at Lacon, Illinois, hereinafter referred to ASSIGNOR has invented together with James J. Callas, Gerald N. Coleman, James J. Faletti and David A. Pierpont a new and useful

COOLING OF ENGINE COMBUSTION AIR

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.
$O \cdot I$
James R. Webe 6/17/2002
JAMES R. WEBER Date
IN WITNESS OF the execution hereof by JAMES R. WEBER we have hereunto set our hands.
IN WITNESS OF the execution nereof by JAIVIES R. WEBER We have nereum of
Italy Tanks 6/17/2002 shomas J. Crowell 6/17/2002
Witness (1) Date Witness (2) Date
Witness (1)/ Address: 12829 W. Chippe Dr. Address: 1200 F. Melbourne Ave.
Pennia TI (1/203)
Princeville, 1C, 61559

PATENT
RECORDED: 08/01/2002 REEL: 013167 FRAME: 0494