506370467 11/24/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6417223

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ERIC LEE SCHROEDER	08/10/2020
JONATHAN KEVIN TOOKER	08/14/2020
ADAM JOSEPH CLUTE	09/23/2020

RECEIVING PARTY DATA

Name:	CATERPILLAR INC.
Street Address:	100 NE ADAMS STREET, SUITE 100
City:	PEORIA
State/Country:	ILLINOIS
Postal Code:	61629-9510

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17034143

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Email: jyates@bscattorneys.com

Correspondent Name: CATERPILLAR INC./BRANNON SOWERS & CRACRAFT

Address Line 1: 100 N.E. ADAMS STREET, SUITE 100

Address Line 4: PEORIA, ILLINOIS 61629-9510

ATTORNEY DOCKET NUMBER:	20-0315US01
NAME OF SUBMITTER:	JONATHAN F. YATES
SIGNATURE:	/Jonathan F. Yates/
DATE SIGNED:	11/24/2020

Total Attachments: 4

source=200315US01USPatentApplicationAssignment#page1.tif source=200315US01USPatentApplicationAssignment#page2.tif source=200315US01USPatentApplicationAssignment#page3.tif source=200315US01USPatentApplicationAssignment#page4.tif

PATENT 506370467 REEL: 054457 FRAME: 0382

SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 20-0315US01

ASSIGNMENT

WHEREAS We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

ENGINE OPERATING METHOD AND PISTON HAVING NON-REENTRANT COMBUSTION BOWL AND ANTI-SOOTING RAMP

for which We will or have filed a patent application; and

WHEREAS, Caterpillar Inc., a corporation of the State of Delaware, having an address at 100 NE Adams Street, Peoria, Illinois 61629-9510 (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention, and in and to the patent application for this invention and any and all patents to be issued upon this application throughout the world;

NOW THEREFORE, be it known that for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, We, as Assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, our entire right, title, and interest in and to this invention, and this application, and all divisions, and continuations thereof, and all patents which may be granted thereon, and all reissues thereof, as well as all rights to claim priority in any country or jurisdiction or patent office on the basis of this application, and all applications for patents which may hereafter be filed for this invention in any country or jurisdiction or patent office, and all extensions, renewals, and reissues thereof; and I hereby authorize and request any official of any country or jurisdiction or patent office whose duty it is to issue patents on applications as described above, to issue all patents for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, WE HEREBY covenant that we have the full right to convey the interest assigned by this Assignment, and we have not executed and will not execute any agreement in conflict with this Assignment;

AND, WE HEREBY further covenant and agree that we will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in any country or jurisdiction or patent office, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns;

AND, WE HEREBY authorize Assignee or the attorneys/representatives of Assignee to insert here in parentheses the country, application number, and official filing date (<u>United States</u> Application No. <u>17/034,143</u>, filed September 28, 2020).

IN TESTIMONY WHEREOF. I/We have hereunto set our hands.

Page 1 of 4

PATENT REEL: 054457 FRAME: 0383

FULL NAME OF SOLE OR FIRST ASSIGNOR Eric Lee Schroeder	ASSIGNOR'S SIGNATURE	DATE Aug 10, 2020
ADDRESS 706 Bayside Circle, Germantown Hills, IL 61548		CITIZENSHIP USA
1. WITNESS NAME	WITNESS SIGNATURE	DATE
Deborah Lee Ribordy	Dupa	Aug 11, 2020
ADDRESS 1710 Fieldstone St, Chillicothe, IL 61523		CITIZENSHIP USA
2. WITNESS NAME	WITNESS SIGNATURE	DATE
Anthony Thomas Petrou	anthony Petrov	Aug 11, 2020
ADDRESS 1911 West Geneva Road, Peoria, IL 61615		CITIZENSHIP USA

2. FULL NAME OF SOLE OR SECOND ASSIGNOR Jonathan Kevin Tooker	ASSIGNOR'S SIGNATURE JONATHA Z TOOPLIR	DATE 8/14/2020
ADDRESS 6300 El Paso Street, Whitestown, IN 46075		CITIZENSHIP USA
1. WITNESS NAME Siara Chupp	WITNESS SIGNATURE HARD	DATE 8/14/2020
ADDRESS 6300 El Paso St Whitestown, IN 46075		CITIZENSHIP USA
2 WITNESS NAME Kevin Legau (†	WITNESS SIGNATURE K-J. Ly. H	DATE 8/14/2020
ADDRESS 381 APEX DINE APT 308 PI	amfield, IN 46168	CITIZENSHIP USA

3. FULL NAME OF THIRD ASSIGNOR Adam Joseph Clute	ASSIGNOR'S SIGNATURE	DATE 9/23/20
ADDRESS 4683 Wharfside Pkwy, Lafayette, IN 47909		CITIZENSHIP USA
1. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP
2. WITNESS NAME	WITNESS SIGNATURE	DATE
ADDRESS		CITIZENSHIP

PATENT REEL: 054457 FRAME: 0386

RECORDED: 11/24/2020