PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:		NEW ASSIGNMENT				
NATURE OF CONVEYANCE:		ASSIGNMENT				
CONVEYING PARTY DATA						
			lame	Execution Date		
D. Ryan Williams				11/15/2012		
Scott B. Fiveland				12/05/2012		
RECEIVING PARTY DATA						
Name:	Caterpillar In	Caterpillar Inc.				
Street Address:		100 N.E. Adams Street				
City:	Peoria	Peoria				
State/Country:	ILLINOIS					
Postal Code:	61629-6490					
PROPERTY NUMBERS Total: 1						
Property Type			Number			
Application Number: 13712		13712	285			
Property Type Number Application Number: 13712285 CORRESPONDENCE DATA						
Fax Number:31261657008Correspondence will be sent via US Mail when the fax attempt is unsuccessful.8						
Correspondence will be sent via US Mail when the fax attempt is unsuccessful.						
Phone: (312) 616-5648					CH	
Email: assignments@leydig.com					e	
Correspondent Name: Elias P. Soupos						
Address Line 1:	Address Line 1:Leydig, Voit & Mayer, Ltd.Address Line 2:180 North Stetson Ave., Suite 4900					
Address Line 4:						
ATTORNEY DOCKET NUMBER:			710304			
NAME OF SUBMITTER:			Elias P. Soupos			
Total Attachments: 2 source=Executed Assignment#page1.tif source=Executed Assignment#page2.tif						

Attorney Docket No. 710304 Client Ref. No. 12-0261

~1 of 2-

ASSIGNMENT

WHEREAS, D. Ryan Williams, hereinafter referred to as ASSIGNOR, has invented together with Scott B. Fiveland a new and useful

Six-Stroke Internal Combustion Engine Valve Activation System and Method for Operating Such Engine

for which ASSIGNOR has made application for Letters Patent in the United States of America, such invention being described and identified by said application identified as Application No. 13/712,285

12,285 , filed ______ December 12, 2012 ; 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.

D. RYAN WILLIAMS

IN WITNESS OF the execution hereof by D. RYAN WILLIAMS we have hereunto set our hands.

John	Der Derekt - 11	15./xx12	a manganan se	01792 Uniterior sets.	(disf _t)
Witness (1)	Date	Winess (2)	(and the second se	Date
Address: _	Tech Cash	<u>F-724</u>	Address: <u>7</u> /	<u>19 6 Alui</u>	<u>ionka Ed.</u>
	<u> 7.0 502 18</u>	<u>20</u>	<u>Cárro</u>	<u></u>	<u>52.8</u>
	<u>. Pessoa U. bi</u>	<u> 656</u>	. <u></u>		

Attorney Docket No. 710304 Client Ref. No. 12-0261

-2 of 2-

12/05/2012 Date SCOTT B. FIVELAND

IN WITNESS OF the execution hereof by SCOTT B. FIVELAND we have hereunto set our hands. Sching 12/5/12 Date Date Witness (2) Date Date

Address: 6909 veford RA 525

Address:	
711	1) Chestnut St.
$\frac{1}{1}$	licothe, T1-61523

PATENT REEL: 029504 FRAME: 0043

RECORDED: 12/19/2012