

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5968057

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ROBIN DANIELS	10/29/2018
THOMAS MORTON	10/30/2018
THOMAS ROBERTS	11/06/2018
CHRISTOPHER PARRY	10/31/2018
RICHARD GOODYEAR	10/29/2018
MARK R. HOLDEN	11/05/2018
JON-LUKE KEATING	12/06/2018
WAQAS ALI	10/29/2018
JOHN BYWATER	11/05/2018
ROSS DEACON	10/29/2018
LAITH AL-KAZAZ	10/30/2018
GARETH WILLIAMSON	11/22/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CUMMINS LTD.
<b>Street Address:</b>	3RD FLOOR, 10 EASTBOURNE TERRACE
<b>Internal Address:</b>	PADDINGTON
<b>City:</b>	LONDON
<b>State/Country:</b>	ENGLAND
<b>Postal Code:</b>	W2 6LG
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16639869
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(317)237-1000
<i>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.</i>	
<b>Phone:</b>	317-237-0300
<b>Email:</b>	cummins.ip@faegredrinker.com
<b>Correspondent Name:</b>	ROBERT D. NULL
<b>Address Line 1:</b>	300 NORTH MERIDIAN STREET, SUITE 2500

PATENT

<b>Address Line 4:</b> INDIANAPOLIS, INDIANA 46204	
<b>ATTORNEY DOCKET NUMBER:</b>	CI-345963-01-US
<b>NAME OF SUBMITTER:</b>	ROBERT D. NULL
<b>SIGNATURE:</b>	/Robert D. Null/
<b>DATE SIGNED:</b>	02/18/2020
<b>Total Attachments: 14</b> source=20200218_CI-345963-01-US_Assignment#page1.tif source=20200218_CI-345963-01-US_Assignment#page2.tif source=20200218_CI-345963-01-US_Assignment#page3.tif source=20200218_CI-345963-01-US_Assignment#page4.tif source=20200218_CI-345963-01-US_Assignment#page5.tif source=20200218_CI-345963-01-US_Assignment#page6.tif source=20200218_CI-345963-01-US_Assignment#page7.tif source=20200218_CI-345963-01-US_Assignment#page8.tif source=20200218_CI-345963-01-US_Assignment#page9.tif source=20200218_CI-345963-01-US_Assignment#page10.tif source=20200218_CI-345963-01-US_Assignment#page11.tif source=20200218_CI-345963-01-US_Assignment#page12.tif source=20200218_CI-345963-01-US_Assignment#page13.tif source=20200218_CI-345963-01-US_Assignment#page14.tif	

## ASSIGNMENT

THIS ASSIGNMENT is made BETWEEN

Robin DANIELS, c/o Cummins Turbo Technologies Limited, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; Thomas MORTON, c/o Cummins Ltd, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; Thomas ROBERTS, c/o Cummins Turbo Technologies Limited, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; Christopher Parry, c/o Cummins Turbo Technologies Limited, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; Richard GOODYEAR, c/o Cummins Turbo Technologies Limited, St Andrews Road, Huddersfield, West Yorkshire, HD1 6RA, United Kingdom; Mark R. HOLDEN, c/o Cummins Turbo Technologies Limited, St Andrews Road, Huddersfield, West Yorkshire, HD1 6RA, United Kingdom; Jon-Luke KEATING, c/o Cummins Ltd, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; Waqas ALI, c/o Cummins Turbo Technologies Limited, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; John BYWATER, c/o Cummins Ltd, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; Gareth WILLIAMSON, c/o Cummins Turbo Technologies Limited, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; Ross DEACON, c/o Cummins Turbo Technologies Limited, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; Laith AL-KAZAZ, c/o Cummins Turbo Technologies Limited, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom (hereinafter collectively called "the Assignors");

AND

Cummins Ltd, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom (hereinafter called "the Assignee").

WHEREAS

(A) The Assignors are the inventors of an invention relating to Valve (hereinafter referred to as "the Invention") which is the subject of an International Patent Application No. PCT/GB2018/052382 filed on 22 August 2018 and designating amongst other countries the United States of America (hereinafter referred to as "the Application")

(B) The parties hereto have agreed that all the Assignors' rights in the Invention and the Application and rights ancillary thereto should be transferred by the Assignors to the Assignee for the consideration hereinafter set forth.

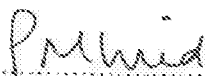
NOW THIS ASSIGNMENT WITNESSETH AS FOLLOWS:

1. In consideration of the sum of £1 paid by the Assignee to the Assignors (the receipt of whereof is hereby acknowledged) the Assignors hereby assign to the Assignee with full title guarantee all the Assignors' right, title and interest in the Invention and the Application insofar as it relates to the United States of America, and all the rights, powers, liberties and immunities conferred on the proprietor thereof by the grant of Patents thereon free from all incumbrances, including the right to sue for damages or other remedies in respect of any infringement of such rights prior to the date hereof TO HOLD unto the Assignee absolutely.
2. The Assignors agree to execute all papers and documents necessary in connection with the Application or any interference which may be declared and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient and further to perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
3. The Assignors agree to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.
4. The Assignors hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent of the United States resulting from the Application or any division or divisions or continuing applications thereof to the Assignee, as Assignee of the entire interest, and each hereby covenants that he has full right to convey the entire interest herein assigned and that he has not executed and will not execute any agreement in conflict herewith.

5. The Assignors hereby grant the firm of MARKS & CLERK LLP the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordation of this document.

IN WITNESS WHEREOF THE PARTIES HERETO HAVE EXECUTED THIS ASSIGNMENT

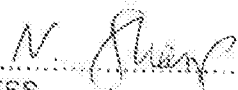
EXECUTED ON 08<sup>th</sup> NOVEMBER 2018 [date]  
FOR AND ON BEHALF OF THE ASSIGNEE BY

  
Authorized Officer of Cummins Ltd

Name: PHILIP MARK WILD

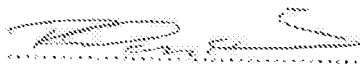
Position: DIRECTOR OF TECHNOLOGY

IN THE PRESENCE OF

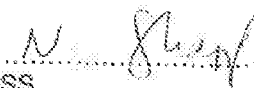
  
WITNESS

Name: NICHOLAS SHARP

EXECUTED ON 29<sup>th</sup> OCTOBER 2018 [date]  
BY ONE OF THE ASSIGNORS

  
Robin Daniels

IN THE PRESENCE OF


  
WITNESS

Name: NICHOLAS SHARP

EXECUTED ON 30<sup>th</sup> OCTOBER 2018 [date]  
BY ONE OF THE ASSIGNORS

  
Thomas Morton

IN THE PRESENCE OF

  
WITNESS

Name: NICHOLAS SHARP

EXECUTED ON 6 November 2018 [date]  
BY ONE OF THE ASSIGNORS



Thomas Roberts

IN THE PRESENCE OF

N. Sharp  
WITNESS

Name: NICHOLAS SHARP

EXECUTED ON 3<sup>rd</sup> October 2018 [date]  
BY ONE OF THE ASSIGNORS



Christopher Parry

IN THE PRESENCE OF

N. Sharp  
WITNESS

Name: NICHOLAS SHARP

EXECUTED ON October 29/10/18 [date]  
BY ONE OF THE ASSIGNORS



Richard Goodyear

IN THE PRESENCE OF

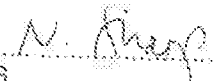
N. Sharp  
WITNESS

Name: NICHOLAS SHARP

EXECUTED ON 5<sup>th</sup> November 2018 [date]  
BY ONE OF THE ASSIGNORS

  
Mark R. Holden

IN THE PRESENCE OF

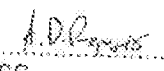
  
WITNESS

Name: NICHOLAS SHARP

EXECUTED ON 06 Dec 2018 [date]  
BY ONE OF THE ASSIGNORS

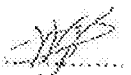
  
Jon-Luke Keating

IN THE PRESENCE OF

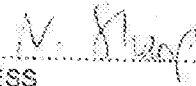
  
WITNESS

Name: Andrew David Repris

EXECUTED ON 29 October 2018 [date]  
BY ONE OF THE ASSIGNORS

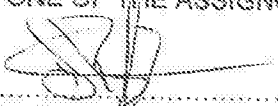
  
Waqas Ali

IN THE PRESENCE OF

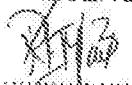
  
WITNESS

Name: NICHOLAS SHARP

EXECUTED ON 13 November 2018 [date]  
BY ONE OF THE ASSIGNORS

  
.....  
John Bywater

IN THE PRESENCE OF

  
.....  
WITNESS

Name: RICKY YAU

EXECUTED ON ..... [date]  
BY ONE OF THE ASSIGNORS


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Gareth Williamson

IN THE PRESENCE OF


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WITNESS

Name: .....

EXECUTED ON 29 October 2018 [date]  
BY ONE OF THE ASSIGNORS

  
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Ross Deacon

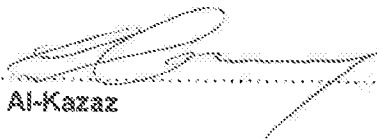
IN THE PRESENCE OF

  
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WITNESS

Name: NICHOLAS SHARP



EXECUTED ON 12 October 2018 [date]  
BY ONE OF THE ASSIGNORS

  
.....  
Laith Al-Kazaz

IN THE PRESENCE OF

  
.....  
WITNESS

Name: IAN R HIRST

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## ASSIGNMENT

THIS ASSIGNMENT is made BETWEEN

**Robin DANIELS**, c/o Cummins Turbo Technologies Limited, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; **Thomas MORTON**, c/o Cummins Ltd, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; **Thomas ROBERTS**, c/o Cummins Turbo Technologies Limited, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; **Christopher Parry**, c/o Cummins Turbo Technologies Limited, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; **Richard GOODYEAR**, c/o Cummins Turbo Technologies Limited, St Andrews Road, Huddersfield, West Yorkshire, HD1 6RA, United Kingdom; **Mark R. HOLDEN**, c/o Cummins Turbo Technologies Limited, St Andrews Road, Huddersfield, West Yorkshire, HD1 6RA, United Kingdom; **Jon-Luke KEATING**, c/o Cummins Ltd, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; **Waqas ALI**, c/o Cummins Turbo Technologies Limited, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; **John BYWATER**, c/o Cummins Ltd, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; **Gareth WILLIAMSON**, c/o Cummins Turbo Technologies Limited, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; **Ross DEACON**, c/o Cummins Turbo Technologies Limited, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom; **Laith AL-KAZAZ**, c/o Cummins Turbo Technologies Limited, St. Andrews Road, Huddersfield, HD1 6RA, United Kingdom (hereinafter collectively called "the Assignors");

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IN WITNESS WHEREOF THE PARTIES HERETO HAVE EXECUTED THIS ASSIGNMENT

EXECUTED ON .....[date]  
FOR AND ON BEHALF OF THE ASSIGNEE BY

.....  
Authorized Officer of Cummins Ltd

Name: ..... Position: .....

IN THE PRESENCE OF

.....  
WITNESS

Name:

.....  
EXECUTED ON .....[date]  
BY ONE OF THE ASSIGNORS

.....  
Robin Daniels

IN THE PRESENCE OF

.....  
WITNESS

Name:

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EXECUTED ON .....[date]  
BY ONE OF THE ASSIGNORS

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Thomas Morton

IN THE PRESENCE OF

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WITNESS

Name:

EXECUTED ON .....[date]  
BY ONE OF THE ASSIGNORS

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**Thomas Roberts**

IN THE PRESENCE OF

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WITNESS

Name:  
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EXECUTED ON .....[date]  
BY ONE OF THE ASSIGNORS

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**Christopher Parry**

IN THE PRESENCE OF

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WITNESS

Name:  
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EXECUTED ON .....[date]  
BY ONE OF THE ASSIGNORS

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**Richard Goodyear**

IN THE PRESENCE OF

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WITNESS

Name:  
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EXECUTED ON .....[date]  
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**Mark R. Holden**

IN THE PRESENCE OF

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WITNESS

Name:  
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EXECUTED ON .....[date]  
BY ONE OF THE ASSIGNORS

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**Jon-Luke Keating**

IN THE PRESENCE OF

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WITNESS

Name:  
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EXECUTED ON .....[date]  
BY ONE OF THE ASSIGNORS

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**Waqas Ali**

IN THE PRESENCE OF

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WITNESS

Name:  
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EXECUTED ON .....[date]  
BY ONE OF THE ASSIGNORS

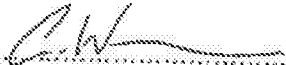
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John Bywater

IN THE PRESENCE OF

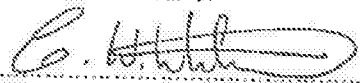
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WITNESS

Name:

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EXECUTED ON ... 22/11/18 .....[date]  
BY ONE OF THE ASSIGNORS

.....  
  
Gareth Williamson

IN THE PRESENCE OF

.....  
  
WITNESS

Name: G. W. WHITEFIELD .

.....  
EXECUTED ON .....[date]  
BY ONE OF THE ASSIGNORS

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Ross Deacon

IN THE PRESENCE OF

.....  
WITNESS

Name:

EXECUTED ON .....[date]  
BY ONE OF THE ASSIGNORS

.....  
Laith Al-Kazaz

IN THE PRESENCE OF

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WITNESS

Name: .....

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