

# PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

| SUBMISSION TYPE:                                                                                                                                                                                                                                                                                                                                                                 | NEW ASSIGNMENT      |               |                  |                     |                     |                    |             |                |            |              |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------|------------------|---------------------|---------------------|--------------------|-------------|----------------|------------|--------------|-------|
| NATURE OF CONVEYANCE:                                                                                                                                                                                                                                                                                                                                                            | ASSIGNMENT          |               |                  |                     |                     |                    |             |                |            |              |       |
| <b>CONVEYING PARTY DATA</b>                                                                                                                                                                                                                                                                                                                                                      |                     |               |                  |                     |                     |                    |             |                |            |              |       |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Lisa A. Farrell</td> <td>07/09/2009</td> </tr> <tr> <td>Timothy R. Frazier</td> <td>07/08/2009</td> </tr> <tr> <td>Hasan Mohammed</td> <td>09/17/2009</td> </tr> </tbody> </table> |                     | Name          | Execution Date   | Lisa A. Farrell     | 07/09/2009          | Timothy R. Frazier | 07/08/2009  | Hasan Mohammed | 09/17/2009 |              |       |
| Name                                                                                                                                                                                                                                                                                                                                                                             | Execution Date      |               |                  |                     |                     |                    |             |                |            |              |       |
| Lisa A. Farrell                                                                                                                                                                                                                                                                                                                                                                  | 07/09/2009          |               |                  |                     |                     |                    |             |                |            |              |       |
| Timothy R. Frazier                                                                                                                                                                                                                                                                                                                                                               | 07/08/2009          |               |                  |                     |                     |                    |             |                |            |              |       |
| Hasan Mohammed                                                                                                                                                                                                                                                                                                                                                                   | 09/17/2009          |               |                  |                     |                     |                    |             |                |            |              |       |
| <b>RECEIVING PARTY DATA</b>                                                                                                                                                                                                                                                                                                                                                      |                     |               |                  |                     |                     |                    |             |                |            |              |       |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Name:</td> <td>CUMMINS IP, INC.</td> </tr> <tr> <td>Street Address:</td> <td>1400-73rd Avenue NE</td> </tr> <tr> <td>City:</td> <td>Minneapolis</td> </tr> <tr> <td>State/Country:</td> <td>MINNESOTA</td> </tr> <tr> <td>Postal Code:</td> <td>55432</td> </tr> </table>        |                     | Name:         | CUMMINS IP, INC. | Street Address:     | 1400-73rd Avenue NE | City:              | Minneapolis | State/Country: | MINNESOTA  | Postal Code: | 55432 |
| Name:                                                                                                                                                                                                                                                                                                                                                                            | CUMMINS IP, INC.    |               |                  |                     |                     |                    |             |                |            |              |       |
| Street Address:                                                                                                                                                                                                                                                                                                                                                                  | 1400-73rd Avenue NE |               |                  |                     |                     |                    |             |                |            |              |       |
| City:                                                                                                                                                                                                                                                                                                                                                                            | Minneapolis         |               |                  |                     |                     |                    |             |                |            |              |       |
| State/Country:                                                                                                                                                                                                                                                                                                                                                                   | MINNESOTA           |               |                  |                     |                     |                    |             |                |            |              |       |
| Postal Code:                                                                                                                                                                                                                                                                                                                                                                     | 55432               |               |                  |                     |                     |                    |             |                |            |              |       |
| <b>PROPERTY NUMBERS Total: 1</b>                                                                                                                                                                                                                                                                                                                                                 |                     |               |                  |                     |                     |                    |             |                |            |              |       |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Property Type</th> <th style="width: 70%;">Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12433730</td> </tr> </tbody> </table>                                                                                                                |                     | Property Type | Number           | Application Number: | 12433730            |                    |             |                |            |              |       |
| Property Type                                                                                                                                                                                                                                                                                                                                                                    | Number              |               |                  |                     |                     |                    |             |                |            |              |       |
| Application Number:                                                                                                                                                                                                                                                                                                                                                              | 12433730            |               |                  |                     |                     |                    |             |                |            |              |       |
| <b>CORRESPONDENCE DATA</b>                                                                                                                                                                                                                                                                                                                                                       |                     |               |                  |                     |                     |                    |             |                |            |              |       |
| <p>Fax Number: (801)531-1929</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 801-994-4646</p> <p>Email: heather@kmiplaw.com</p> <p>Correspondent Name: Brian C. Kunzler</p> <p>Address Line 1: 8 East Broadway</p> <p>Address Line 2: Suite 600</p> <p>Address Line 4: Salt Lake City, UTAH 84111</p>                  |                     |               |                  |                     |                     |                    |             |                |            |              |       |
| ATTORNEY DOCKET NUMBER:                                                                                                                                                                                                                                                                                                                                                          | 8-02-12985          |               |                  |                     |                     |                    |             |                |            |              |       |
| NAME OF SUBMITTER:                                                                                                                                                                                                                                                                                                                                                               | Brian C. Kunzler    |               |                  |                     |                     |                    |             |                |            |              |       |
| <p>Total Attachments: 3</p> <p>source=8-02-12985-assignment#page1.tif</p>                                                                                                                                                                                                                                                                                                        |                     |               |                  |                     |                     |                    |             |                |            |              |       |

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**PATENT**  
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# ASSIGNMENT

I, identified below as "Inventor", have made certain new and useful improvements in an invention ("Invention"), as set forth in an application for United States Letters Patent executed or about to be executed by me or otherwise in which I am an inventor and bearing the following title and Attorney Docket No. and for which the Attorney of record is hereby authorized to insert the serial number and filing date when ascribed:

Title: Engine System Properties Controller

Atty. Docket No. 8-02-12985

Serial No. 12/433,730

For good and valuable consideration, I do hereby sell, assign, and transfer to Cummins IP, Inc. ("Assignee"), a corporation organized under the laws of the State of Indiana, and located and doing business at 1400-73rd Avenue NE, Minneapolis, MINNESOTA 55432, and to its legal representatives, successors, and assigns, my entire right, title, and interest in and to the Invention and to all United States and foreign patent applications any of whose claims cover all or part of the Invention, to any prior or provisional application, including any application from which priority is claimed, together with all patents resulting from such applications including any continuations, divisions, reissues, re-examinations and extensions thereof and any applications claiming priority therefrom. Assignee shall hold such right, title, and interest as fully and completely as they would have been held by me had this assignment and sale not been made.

I agree, upon Assignee's request, to execute or assent to such United States and foreign patent applications and to execute all separate assignments and other legal documents that Assignee may find necessary or desirable in its exercise of the right, title, and interest assigned above. I also agree to communicate to Assignee any facts relating to the Invention or to any of the patent applications or patents contemplated above that may be useful to Assignee and to testify as to such facts in any interferences or in litigation, if requested to do so. I shall do all these things without additional compensation but at no expense to me.

I hereby request the Commissioner of Patents to issue to Assignee, as the owner of my entire right, title, and interest therein, any Letters Patent of the United States that may be issued for the Invention.

Inventor: Lisa A. Farrell Date: 7/9/2009  
(Signature)

Name typed or printed: Lisa A. Farrell  
Address: 12835 East 100 North  
Columbus, IN 47203

State of INDIANA )

County of BARTHOLOMEW ) ss

On this 9<sup>th</sup> day of JULY, 2009, before me personally appeared said Lisa A. Farrell, known to me to be the person who executed the above instrument and acknowledged to me that he or she executed the same for the uses and purposes therein set forth.

SEAL

[Signature]  
Notary Public

My Commission expires: 18-APR-2012

Title: Engine System Properties Controller

Atty. Docket No. 8-02-12985

Serial No. 12/433,730

Inventor: Timothy R. Frazier  
(Signature)

Date: 7/8/2009

Name typed or printed: Timothy R. Frazier  
Address: 4276 W. Reece Lane  
Columbus, IN 47201

State of INDIANA

County of BARTHOLOMEW ) ss.

On this 8<sup>th</sup> day of JULY, 2009, before me personally appeared said Timothy R. Frazier, known to me to be the person who executed the above instrument and acknowledged to me that he or she executed the same for the uses and purposes therein set forth.

SEAL

[Signature]  
Notary Public  
My Commission expires: 18-APR-2012

Inventor: \_\_\_\_\_ Date: \_\_\_\_\_  
(Signature)

Name typed or printed: Hasan Mohammed  
Address: 3365 John Hinkle Place  
Bloomington, IN 47408

State of \_\_\_\_\_ )

) ss.

County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 2009, before me personally appeared said Hasan Mohammed, known to me to be the person who executed the above instrument and acknowledged to me that he or she executed the same for the uses and purposes therein set forth.

SEAL

\_\_\_\_\_  
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Atty. Docket No. 8-02-12985

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Inventor: \_\_\_\_\_ Date: \_\_\_\_\_  
(Signature)

Name typed or printed: Timothy R. Frazier  
Address: 4276 W. Reece Lane  
Columbus, IN 47201

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) ss

On this \_\_\_\_\_ day of \_\_\_\_\_, 2009, before me personally appeared said Timothy R. Frazier, known to me to be the person who executed the above instrument and acknowledged to me that he or she executed the same for the uses and purposes therein set forth.

SEAL

Notary Public  
My Commission expires: \_\_\_\_\_

Inventor: \_\_\_\_\_ Date: September 17<sup>th</sup>, 2009  
(Signature)

Name typed or printed: Hasan Mohammed  
Address: 3365 John Hinkle Place  
Bloomington, IN 47408

State of INDIANA )  
County of Monroe ) ss

On this 17<sup>th</sup> day of SEPTEMBER, 2009, before me personally appeared said Hasan Mohammed, known to me to be the person who executed the above instrument and acknowledged to me that he or she executed the same for the uses and purposes therein set forth.

SEAL

Notary Public  
My Commission expires: 18-APR-2012