Form **PTO-1595** (Rev. 03/05) OMB No. 0651-0027 (exp. 6/30/2005)

U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office

PATENTS ONLY  To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below  1. Name of conveying party(ies)  Meritor Heavy Vehicle Systems, Inc.  Additional name(s) of conveying party(ies) attached? Yes ✓ No  3. Nature of conveyance/Execution Date(s):  Execution Date(s) August 11, 1997  Assignment			
1. Name of conveying party(ies)  Meritor Heavy Vehicle Systems, Inc.  Additional name(s) of conveying party(ies) attached? Yes ✓ No  3. Nature of conveyance/Execution Date(s):  Execution Date(s) August 11, 1997  Assignment Merger  Security Agreement ✓ Change of Name  Joint Research Agreement  Government Interest Assignment  2. Name and address of receiving party(ies)  Name: Meritor Heavy Vehicle Systems, LLC  Internal Address:  Street Address: 2135 West Maple Road  City: Troy  State: MI	PATENTS ONLY		
Meritor Heavy Vehicle Systems, Inc.  Additional name(s) of conveying party(ies) attached? Yes No  3. Nature of conveyance/Execution Date(s):  Execution Date(s) August 11, 1997  Assignment Merger  Security Agreement Change of Name  Joint Research Agreement  Government Interest Assignment  Name: Meritor Heavy Vehicle Systems, LLC  Internal Address:  Street Address: 2135 West Maple Road  City: Troy  State: MI	To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.		
Additional name(s) of conveying party(ies) attached? Yes No  3. Nature of conveyance/Execution Date(s):  Execution Date(s) August 11, 1997  Assignment Merger  Security Agreement V Change of Name Joint Research Agreement  Government Interest Assignment  Internal Address:  Street Address: 2135 West Maple Road  City: Troy  State: MI			
Additional name(s) of conveying party(ies) attached? Yes No  3. Nature of conveyance/Execution Date(s):  Execution Date(s) August 11, 1997  Assignment Merger  Security Agreement V Change of Name  Joint Research Agreement  Government Interest Assignment  Country 49994	<u>·</u>		
3. Nature of conveyance/Execution Date(s):  Execution Date(s) August 11, 1997  ☐ Assignment ☐ Merger ☐ Security Agreement ☐ Change of Name ☐ Joint Research Agreement ☐ Government Interest Assignment ☐ Country 49994			
Execution Date(s) August 11, 1997  ☐ Assignment ☐ Merger ☐ Security Agreement	_		
Assignment Merger   Security Agreement ✓ Change of Name   Joint Research Agreement State: MI    State: MI			
Security Agreement	_		
Joint Research Agreement  Government Interest Assignment  State: MI  Country: 49994			
Government Interest Assignment  Country: 49994			
Country 40004 7:			
Frequitive Order 0424 Confirmatory Licenses   Outling, 40004   Lip.	•		
Executive Order 9424, Commitmatory License			
OtherAdditional name(s) & address(es) attached? Yes   4. Application or patent number(s):  This document is being filed together with a new application.	□Nο		
A. Patent Application No.(s)  B. Patent No.(s)  6276474; 6213264; 5992579; 5951402; 5939978; 5927422; 5924504; 5893434; 5878830; 5875873  Additional numbers attached?   Yes ✓ No			
5. Name and address to whom correspondence concerning document should be mailed:  6. Total number of applications and patents involved: 10			
Name: Karin H. Butchko  7. Total fee (37 CFR 1.21(h) & 3.41) \$ 400.00			
Internal Address: Carlson, Gaskey & Olds. P.C.  Authorized to be charged by credit card			
Authorized to be charged by credit card  Authorized to be charged to deposit account			
Street Address: 400 West Maple, Suite 350			
None required (government interest not affecting	title)		
City: Birmingham 8. Payment Information			
State: MI Zip: 48009 a. Credit Card Last 4 Numbers Expiration Date			
Phone Number: 248-988-8360			
b. Deposit Account Number <u>50-1482</u>			
Email Address: / Authorized User Name Karin H. Butchko			
9. Signature: October 24, 2006	**		
Signature October 24, 2006  Date			
Karin H. Butchko Total number of pages including cover	4		

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

PATENT

10/19/06 3:37

PAGE 003/008 Fax Server

# 10/04/2006 700290342

OMB No. 0651-0027 (exp. 6/30/2005)	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office	
RECORDATION FORM COVER SHEET		
PATENTS ONLY		
To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.		
Name of conveying party(ies)	2. Name and address of receiving party(ies)	
Meritor Heavy Vehicle Systems, Inc.	Name: Meritor Heavy Vehicle Systems, LLC	
	Internal Address:	
A SELECTION OF THE PROPERTY OF		
Additional name(s) of conveying party(les) attached? Yes / No 3. Nature of conveyance/Execution Date(s):	Street Address: 2135 West Maple Road	
Execution Date(s)	Oligat Addiass. Zios westimahia unad	
Assignment Merger		
Security Agreement	City: <u>Troy</u>	
☐ Joint Research Agreement	State: MI	
Government Interest Assignment	State. imi	
Executive Order 9424, Confirmatory License	Country: 48084 Zip:	
Other	Additional name(s) & address(es) attached? Yes Vo	
4. Application or patent number(s): This document is being filed together with a new application.		
A. Patent Application No.(s)	B. Patent No.(s)	
	6276474; 6213264; 5992579; 5951402; 5939978;	
	5927422; 5924504; 5893434; 5878830; 5875873	
Additional numbers attached? Yes / No		
5. Name and address to whom correspondence 6. Total number of applications and patents		
concerning document should be mailed:	Involved: 10	
Name: Karin H. Butchko	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 400.00	
Internal Address: Carlson, Gaskev & Olds, P.C.	Authorized to be charged by credit card	
	✓ Authorized to be charged to deposit account	
Street Address: 400 West Maple, Suite 350	☐ Enclosed	
	None required (government interest not affecting title)	
City: Birmingham	8. Payment Information	
	a. Credit Card Last 4 Numbers	
	Expiration Date	
Phone Number: <u>248-988-8360</u> Fax Number: <u>248-988-8363</u>	b. Deposit Account Number <u>50-1482</u>	
rax Number: 248-988-8363 Email Address:	Authorized User Name Karin H. Butchko	
3 7	A.	
9. Signature: NWW Parkette	October 4, 2006	
Signature Kerin H. Butahka	Date	
Karin H. Butchko Name of Person Signing	Total number of pages including cover sheet, attachments, and documents:	

Documents to be recorded (including cover sheet) should be faxed to (703) 386-5995, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1459, Alexandria, V.A. 22313-1459

**REEL: 018420 FRAME: 0935** 



# The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED ARE TRUE AND CORRECT COPIES OF ALL DOCUMENTS ON FILE OF "MERITOR HEAVY VEHICLE SYSTEMS, LLC" AS RECEIVED AND FILED IN THIS OFFICE.

THE FOLLOWING DOCUMENTS HAVE BEEN CERTIFIED:

CERTIFICATE OF FORMATION, FILED THE TENTH DAY OF SEPTEMBER,

A.D. 1997, AT 9 O'CLOCK A.M.

CERTIFICATE OF MERGER, FILED THE SIXTEENTH DAY OF SEPTEMBER, A.D. 1997, AT 10 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CERTIFICATES ARE THE ONLY CERTIFICATES ON RECORD OF THE AFORESAID LIMITED LIABILITY COMPANY, "MERITOR HEAVY VEHICLE SYSTEMS, LLC".

2794515 8100H

060516135

Harriet Smith Windsor, Secretary of State AUTHENTICATION: 4781261

DATE: 05-30-06

### Certificate of Formation

## MERITOR HEAVY VEHICLE SYSTEMS, LLC

This Certificate of Formation is being executed as of September 9, 1997, for the purpose of forming a limited liability company pursuant to the Delaware Limited Liability Company Act.

The undersigned, being duly authorized to execute and file this Certificate of Formation, does hereby certify as follows:

- 1. The name of the limited liability company is Meritor Heavy Vehicle Systems, LLC (the "Company").
- 2. The Company's registered office in the State of Delaware is located at The Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801. The registered agent of the Company for service of process at such address is The Corporation Trust Company.

IN WITNESS WHEREOF, the undersigned has duly executed this Certificate of Formation as of the day and year first above written.

MERITOR AUTOMOTIVE, INC.

David W. Greenfield
Senior Vice President General

Counsel and Secretary

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 09:00 AM 09/10/1997 971301227 - 2794515

MAS: \$200 Jaros

PAGE 1

# State of Delaware Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"MERITOR HEAVY VEHICLE SYSTEMS, INC.", A DELAWARE CORPORATION,

WITH AND INTO "MERITOR HEAVY VEHICLE SYSTEMS, LLC" UNDER THE NAME OF "MERITOR HEAVY VEHICLE SYSTEMS, LLC", A LIMITED LIABILITY COMPANY ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE SIXTEENTH DAY OF SEPTEMBER, A.D. 1997, AT 10 O'CLOCK A.M.

A CERTIFIED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS FOR RECORDING.



Edward I. Freel, Secretary of State

AUTHENTICATION:

B652744

REEL: 018420 FRAME: 093

CERTIFICATE OF MERGER

#### MERGING

MERITOR HEAVY VEHICLE SYSTEMS, INC. (a Delaware corporation)

#### INTO

MERITOR HEAVY VEHICLE SYSTEMS, LLC (a Delaware limited liability company)

Pursuant to Section 18-209 of the Delaware Limited Liability Company Act and Section 264 of the Delaware General Corporation Law

MERITOR HEAVY VEHICLE SYSTEMS, LLC, a limited liability company formed and existing under and by virtue of the Delaware Limited Liability Company Act ("HVS LLC"), DOES HEREBY CERTIFY that:

FIRST: HVS LLC is a limited liability company formed and existing under the laws of the State of Delaware. Meritor Heavy Vehicle Systems, Inc. ("HVS Inc.") is a corporation organized and existing under the laws of the State of Delaware.

SECOND: An Agreement and Plan of Merger between HVS LLC and HVS Inc. providing for the merger of HVS Inc. with and into HVS LLC has been approved, adopted, certified, executed and acknowledged by each of HVS LLC and HVS Inc. in accordance with the requirements of Section 18-209 of the

NYZ: 150427.01

Delaware Limited Liability Company Act and Section 264 of the Delaware General Corporation Law.

THIRD: The name of the surviving limited liability company is Meritor Heavy Vehicle Systems, LLC.

FOURTH: The merger shall be effective upon the filing of this Certificate of Merger in the office of the Secretary of State of the State of Delaware.

FIFTH: The executed Agreement and Plan of Merger is on file at the principal place of business of HVS LLC. The address of the principal place of business of HVS LLC is 2135 West Maple Road, Troy, Michigan 98084.

SIXTH: A copy of the Agreement and Plan of Merger will be furnished by HVS LLC, on request and without cost, to any member of HVS LLC and any stockholder of HVS Inc.

IN WITNESS WHEREOF, MERITOR HEAVY VEHICLE SYSTEMS, LLC has caused this Certificate of Merger to be duly executed on this Landay of September, 1997.

MERITOR HEAVY VEHICLE SYSTEMS. LLC

Brent E. Reed

Vice President

10/19/06 3:37 PAGE 004/008 Fax Server



# The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAMARE, DO BERESY CERTIFY THE ATTACHED ARE TRUE AND CORRECT COPIES OF ALL DOCUMENTS ON FILE OF "MERITOR HEAVY VEHICLE SYSTEMS, LLC" AS RECEIVED AND FILED IN THIS OFFICE.

THE FOLLOWING DOCUMENTS HAVE BEEN CERTIFIED:

CERTIFICATE OF FORMATION, FILED THE TENTH DAY OF SEPTEMBER,

A.D. 1997, AT 9 O'CLOCK A.M.

CERTIFICATE OF MEAGER, FILED THR SIXTEENTH DAY OF SEPTEMBER, A.D. 1997, AT 10 O'CLOCK A.M.

AND I DO HEREBY PURTHER CERTIFY THAT THE AFORESAID CERTIFICATES ARE THE ONLY CERTIFICATES ON RECORD OF THE AFORESAID LIMITED LIABILITY COMPANY, "MERITOR HEAVY VEHICLE Systems, LLC".

2794515 8100H 060516135

AUTHENTICATION: 4781261

DATE: 05-30-06

10/19/06 3:37 PAGE 005/008

Fax Server

## Certificate of Formation

## MERITOR HEAVY VEHICLE SYSTEMS, LLC

This Certificate of Formation is being executed as of September 9, 1997, for the purpose of forming a limited liability company pursuant to the Delaware Limited Liability Company Act.

The undersigned, being duly authorized to execute and file this Certificate of Formation, does hereby certify as follows:

- 1. The name of the limited liability company is Meritor Heavy Vehicle Systems, LLC (the "Company").
- 2. The Company's registered office in the State of Delaware is located at the Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19891. The registered agent of the Company for service of process at such address is The Corporation Trust Company.

IN WITNESS WHEREOF, the undersigned has duly executed this Certificate of Formation as of the day and year first above written.

MERITOR AUTOMOTIVE, INC.

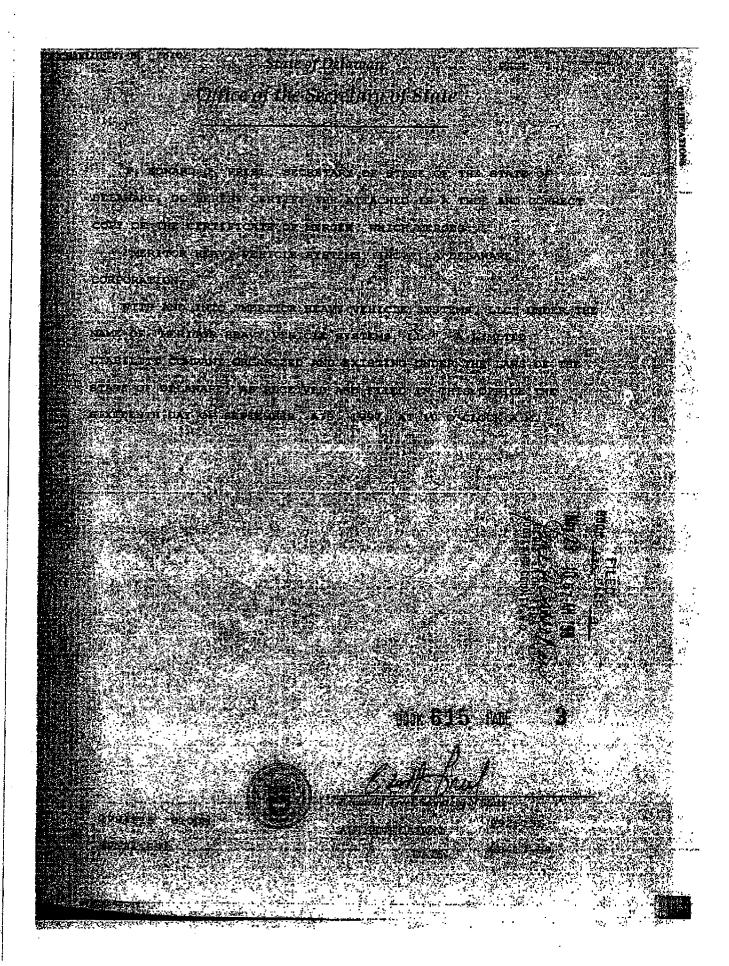
David W. Greenfield

Senior Vice President; General

Counsel and Secretary

STATE OF LECLIMARE
SECRETARY OF STATE
DIVISION OF CORPORATIONS
FILED 09:00 AM 09/10/1997
971301227 - 2704515

MAD HOMES



RightFax

10/19/06 3:37 PAGE 007/008 Fax Server

FROM CORPORATION TRUST CO. 1-802-555-5049 550-15-1550 CA-6-

(TUE) 09. 16' 97 13:04/8T. 12:5574E 350627655EP DIVISION OF CORPORATIONS PILED 10:00 AM 09/16/1997 971308471 - 2794515 013/014

#### CERTIFICATE OF MERGER

#### MERGING

MERITOR HEAVY VEHICLE SYSTEMS, INC. (a Delaware Corporation)

INTO

MEXITOR HEAVY VEHICLE SYSTEMS, LLC (a Delaware limited Liability company)

Porquent to Section 18-209 of the Delaware Limited Liability Company Act and Section 264 of the Delaware General Corporation Law

MERITOR HEAVY VEHICLE SYSTEMS, LLC, a limited liability company formed and existing under and by virtue of the Delaware Limited Liability Company Act ("MVS LLC"), DOES HEREBY CERTIFY that:

HVS LLC is a limited liability company FIRST: formed and existing under the laws of the State of Delaware. Meritor Heavy Vehicle Systems, Inc. ("XVS Inc.") is a corporation organised and existing under the laws of the State of Delaware.

SECOND: An Agreement and Plan of Merger between HVS LLC and HVS Inc. providing for the merger of HVS Inc. with and into MVS TAC has been approved, adopted, curtified, executed and acknowledged by each of MVS LLC and HVS Inc. in accordance with the requirements of Section 18-209 of the

MC. FEREL .534

10/19/06 3:43

PAGE 009/009

Fax Server

FROM CORPORATION TRUST CO. 1-202-855-5049

(TUZ) 09. 16' 97 13:04/ST. 12:51/NO. 3560228589 P 8/3

Delaware Limited Liability Company Act and Section 264 of the Delaware General Corporation Law.

TYIRD. The name of the surviving limited liability company is Meritor Bésvy Vehicle Systems, LLC.

FOURTH: The mergar shall be effective upon the filing of this Certificate of Merger in the office of the Sacretary of State of the State of Delaware.

WIFTH: The executed Agreement and Plan of Merger is on file at the principal place of business of MVS LLC. The address of the principal place of business of MVS LLC is 2135 West Maple Road, Troy, Michigan 98064.

SIXTE: A cupy of the Agreement and Plan of Merger will be furnished by RVS LLC, on request and without cost, to any member of HVS LLC and any stockholder of AVS Inc.

IN WITHESS WHEREOF, MERITOR HEAVY VEHICLE SYSTEMS.

LLC has caused this Certificate of Nerger to be duly
executed on this Many of September, 1997.

MERITOR HEAVY VERICLE SYSTEMS, LLC

Stent E. Reed

Vice President

KYZ PRODZANI

TUTAL, P. GA

PATENT REEL: 018420 FRAME: 0945

**RECORDED: 10/04/2006**