

PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT4831793

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	NUNC PRO TUNC ASSIGNMENT	
EFFECTIVE DATE:	11/10/2017	
CONVEYING PARTY DATA		
	Name	Execution Date
	BOSE CORPORATION	12/14/2017
RECEIVING PARTY DATA		
Name:	CLEARMOTION ACQUISITION I LLC	
Street Address:	475 WILDWOOD AVENUE	
City:	WOBURN	
State/Country:	MASSACHUSETTS	
Postal Code:	01801	
PROPERTY NUMBERS Total: 14		
Property Type	Number	
Application Number:	10629243	
Application Number:	11608622	
Application Number:	11670849	
Application Number:	12974190	
Application Number:	13922456	
Application Number:	14543002	
Application Number:	13534808	
Application Number:	14934526	
Application Number:	12055283	
Application Number:	13843266	
Application Number:	11938663	
Application Number:	11624370	
Application Number:	11877530	
Application Number:	12253859	
CORRESPONDENCE DATA		
Fax Number:	(617)646-8646	
<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>		
Email:	mrush@wolfgreenfield.com, patents_NeilF@wolfgreenfield.com	

PATENT

Correspondent Name:	WOLF GREENFIELD & SACKS P.C.
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Address Line 4:	BOSTON, MASSACHUSETTS 02210-2206

ATTORNEY DOCKET NUMBER:	C1551.10000US00-4
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NAME OF SUBMITTER:	NEIL FERRARO
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SIGNATURE:	/Neil P. Ferraro/
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DATE SIGNED:	02/20/2018
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Total Attachments: 14

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CORRECTIVE NUNC PRO TUNC PATENT ASSIGNMENT

THIS CORRECTIVE NUNC PRO TUNC PATENT ASSIGNMENT ("Corrective Patent Assignment"), effective nunc pro tunc as of November 10, 2017 (the "Effective Date"), is by and between Bose Corporation, a corporation organized under the laws of Delaware, with its principal office at The Mountain, Framingham, MA 01701 ("Assignor"), ClearMotion Acquisition I LLC, a corporation organized under the laws of Delaware, with its principal office at 475 Wildwood Avenue, Woburn, MA 01801 ("Assignee") and ClearMotion, Inc., a corporation organized under the laws of Delaware, also with its principal office at 475 Wildwood Avenue, Woburn, MA 01801 (Assignor, Assignee and ClearMotion, Inc. collectively referred to as "Parties").

A. WHEREAS, The Parties entered into an Asset Purchase Agreement dated November 10, 2017 (the "Agreement"), pursuant to which Assignor had agreed to sell and the Assignee had agreed to purchase the Assigned Seller IP;

B. WHEREAS, upon the closing of the Agreement, the Assignor executed a Patent Assignment on November 10, 2017 that erroneously identified ClearMotion, Inc. as the assignee;

C. WHEREAS any assignment to ClearMotion, Inc. was not the intent of the Parties and instead the Parties intended to assign the Assigned Seller IP, pursuant to the Agreement, to ClearMotion Acquisition I LLC;

D. WHEREAS, the Parties wish to revoke the Patent Assignment and correct such error by this Corrective Patent Assignment.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Assignment. The Parties hereby rescind and declare null and void ab initio the Patent Assignment. By this Corrective Patent Assignment, Assignor hereby irrevocably sells, assigns, transfers and sets over nunc pro tunc as of November 10, 2017 to Assignee all of Assignor's right, title and interest for the United States and all foreign countries in and to any and all inventions and designs which are Assigned Seller IP under the Agreement and which are claimed or disclosed in the patents and applications identified in the attached Schedule A (the "Assigned Patents"), and in and to the Assigned Patents and in and to Letters Patent, all corresponding provisional, non-provisional, divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent, utility models, industrial designs or similar intellectual property rights in the Assigned Patents which have been or shall be filed in the United States, internationally, and in any foreign country, including but not limited to China, Japan and Korea, on any such inventions and designs; and in and to all original and reissued patents which have been or shall be issued in the United States or any other jurisdiction on Assignor's rights, title and interest to any and all inventions and designs which are Assigned Seller IP under the Agreement and which are claimed or disclosed in the

Assigned Patents, including the right to apply for patent rights in each foreign country and all rights to priority, including the right to claim priority for China, Japan and Korea; and, subject to any limitations set forth in Section 1.1(h) of the Agreement, the right to, in Assignee's own name, bring all claims to enforce any and all of Assignor's right, title and interest in and to the Assigned Patents and the right to sue and seek and retain damages and any other remedies, injunctive or other equitable relief for past, present and future infringement, misappropriation or other violation of the Assignor's rights, title and interest in the Assigned Patents.

2. Recordation. Assignor authorizes and requests the United States Commissioner of Patents and Trademarks and any other similar government authority to record Assignee as owner of the Assigned Patents and issue any and all patents issued thereon to Assignee, as assignee of the entire right, title and interest in, to and under the same, for the sole use and enjoyment of Assignee and its successors, assigns or other legal representatives. Assignee shall have the right to record this Corrective Patent Assignment with all applicable government authorities and registrars so as to perfect its ownership of the Assigned Patents.

3. Further Assurances; Limited Power of Attorney. Assignor shall provide Assignee, its successors, assigns or other legal representatives, reasonable cooperation and assistance at Assignee's request and expense in connection with perfection of the rights assigned herein, including the preparation, execution, and delivery of all documentation which may be reasonably necessary to further document and record the assignment of the Assigned Patents made herein. If Assignee is unable for any reason, after reasonable effort, to secure the Assignor's signature on any document needed in connection with the assignment of the Assigned Patents, Assignor hereby designates and appoints Assignee and its duly authorized officers and agents as its agent and attorney in fact, which appointment is coupled with an interest, to act for and on its behalf to execute, verify and file any such documents and to do all other lawfully permitted acts to perfect assignment of the Assigned Patents with the same legal force and effect as if executed by the Assignor.

4. Counterparts. This Corrective Patent Assignment may be executed in one or more counterparts, and by the different parties hereto in separate counterparts, each of which when executed will be deemed to be an original but all of which taken together will constitute one and the same agreement. Delivery of an executed counterpart of a signature page to this Corrective Patent Assignment by telecopy or by electronic delivery in Adobe Portable Document Format will be effective as delivery of a manually executed counterpart of this Corrective Patent Assignment.

5. Governing Law. This Corrective Patent Assignment is governed by the laws of the State of Delaware applicable to contracts made and performed entirely in such state, without regard to any principle of conflict or choice of laws that would cause the application of the laws of any other jurisdiction. Despite the above, the substantive law of the country of each respective Assigned Patent governs the validity and enforceability of the subject Assigned Patent.

6. Jurisdiction. By execution and delivery of this Corrective Patent Assignment, each Party irrevocably and unconditionally submits and consents, for itself and its property, to the exclusive jurisdiction of the courts in Suffolk County of the Commonwealth of Massachusetts and any appellate court from any such jurisdiction, in any action or proceeding arising out of or relating to this Corrective Patent Assignment or for recognition or enforcement of any judgment relating thereto, and each of the parties hereby irrevocably and unconditionally (i) agrees not to commence any such action or proceeding except in such courts, (ii) waives, to the fullest extent it may legally and effectively do so, any objection which it may now or hereafter have to the laying of venue of any such action or proceeding in any such courts and (iii) waives, to the fullest extent it may legally and effectively do so, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such courts.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

<Signature pages follow>

IN WITNESS WHEREOF, the undersigned Assignor has caused this Corrective Patent Assignment to be executed, nunc pro tunc, as of the Effective Date.

Bose Corporation

By: [Signature]

Title: VP, Marketing

Date: December 14, 2017

THE COMMONWEALTH OF MASSACHUSETTS

County of Middlesex

On this 14th day of December, 2017, before me, Janet Mary LeDuc Notary Public, personally appeared Mark Marshall, personally known to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument of Bose Corporation, executed the instrument.

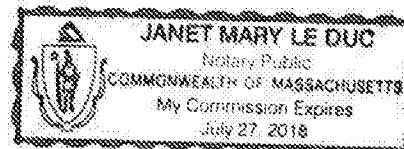
WITNESS my hand and official seal

Signature

Janet Mary LeDuc (Seal)

Notary Public in and for
The Commonwealth of Massachusetts

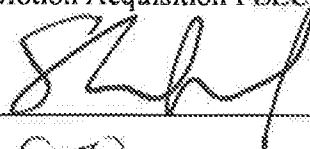
Janet Mary LeDuc
Printed or Typed Name of Notary



My commission expires July 27, 2018

Acknowledged, agreed and accepted by:

ClearMotion Acquisition I LLC

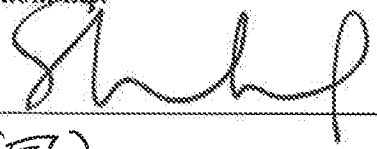
By: 

Title: CEO

Date: December 14, 2017

Acknowledged, agreed and accepted by:

ClearMotion, Inc.

By: 

Title: CEO

Date: December 14, 2017

SCHEDULE A

App. No.	CC	Title	Patent No. (Pub No. if no Patent)	Priority Date	Filing Date	Issue Date
11/624370	US	Detent Force Correcting	8067863	1/18/2007	1/18/2007	11/29/2011
200980109157	CN	Position Measurement Using Magnetic Fields	CN200980109157.5	3/25/2008	3/12/2009	3/6/2013
2011501893	JP	Position Measurement Using Magnetic Fields	JP5264988	3/25/2008	3/12/2009	5/10/2013
12/055283	US	Position Measurement Using Magnetic Fields	7804210	3/25/2008	3/25/2008	9/28/2010
200880112811.3	CN	Methods And Apparatus For Securing An Active Vehicle Seat	CN 101835655 A	10/23/2007		10/10/2012
08841413.1	DE	Methods And Apparatus For Securing An Active Vehicle Seat	2212151	10/23/2007		9/12/2012
08841413.1	EP	Methods And Apparatus For Securing An Active Vehicle Seat	2212151	10/23/2007		9/12/2012
08841413.1	FR	Methods And Apparatus For Securing An Active Vehicle Seat	2212151	10/23/2007		
08841413.1	GB	Methods And Apparatus For Securing An Active Vehicle Seat	2212151	10/23/2007		
HK10110997.0	HK	Methods And Apparatus For Securing An Active Vehicle Seat	11444148	10/23/2007		
2010-528035	JP	Methods And Apparatus For Securing An Active Vehicle Seat	5204236	10/23/2007		
11877530	US	Methods And Apparatus For Securing An Active Vehicle Seat	7818109	10/23/2007	10/23/2007	10/19/2010
200880114893	CN	Vehicle Suspension	CN10184819	11/12/2007	11/5/2008	10/10/2012
20080849286	EP	Vehicle Suspension	EP2212131	11/12/2007	11/5/2008	
	HK	Vehicle Suspension	HKviaEP	11/12/2007		
2010533197	JP	Vehicle Suspension	JP5225386	11/12/2007	11/5/2008	3/22/2013
11/938663	US	Vehicle Suspension	7962261	11/12/2007	11/12/2007	6/14/2011
2740711	CA	System And Method For Controlling Power Balance In An Electrical/Mechanical System	CA2740711	10/17/2008	10/15/2009	7/8/2014
20090737512	DE	System And Method For Controlling Power Balance In An Electrical/Mechanical System	DE2345147	10/17/2008	10/15/2009	9/5/2012
HK1162221B	HK	System And Method For Controlling Power Balance In An Electrical/Mechanical System	HK1162221B	10/17/2008		3/13/2015
12/253859	US	System And Method For Controlling Power Balance In An Electrical/Mechanical System	8076877	10/17/2008	10/17/2008	12/13/2011
62084272	US	Actively Suspended Seat With Bass Loudspeakers		11/25/2014	11/25/2014	
14952889	US	Actively Suspended Seat With Bass Loudspeakers	9729961	11/25/2014	11/25/2015	8/8/2017
14934503	US	Lean-In Cornering Platform For A Moving Vehicle	unpublished	11/6/2015	11/6/2015	
PCT/US16/60132	WO	Lean-In Cornering Platform For A Moving Vehicle		11/6/2015	11/2/2016	
14934465	US	Vehicle Seat With Angle Trajectory Planning During Large Events	unpublished	11/6/2015	11/6/2015	
PCT/US16/60112	WO	Vehicle Seat With Angle Trajectory Planning During Large Events		11/6/2015	11/2/2016	
14938566	US	Audio System	unpublished	11/11/2015	11/11/2015	

App. No.	CC	Title	Patent No. (Pub No. If no Patent)	Priority Date	Filing Date	Issue Date
14934474	US	Variable Gain Control In Roll Compensating Seat	9758073	11/6/2015	11/6/2015	9/12/2017
15700798	US	Variable Gain Control In Roll Compensating Seat		11/6/2015	9/11/2017	
PCT/US16/60086	WO	Variable Gain Control In Roll Compensating Seat		11/6/2015	11/2/2016	
14822696	US	Encoder For A Rotary Motor	US20170047823	8/10/2015	8/10/2015	
62181829	US	Stator		6/19/2015	6/19/2015	
15176886	US	Stator	US20160372984	6/19/2015	6/8/2016	
PCT/US16/60159	WO	Method To Control An Active Isolation Platform In A Moving Vehicle		11/6/2015	11/2/2016	
14934526	US	Controlling Active Isolation Platform In A Moving Vehicle	unpublished	11/6/2015	11/6/2015	
15476914	US	Seat System For A Vehicle (Cip Of R-12-135-Us)	9783086	4/23/2013	3/31/2017	10/10/2017
62409020	US	Active Vibration Isolation System	unpublished	10/17/2016	10/17/2016	
62440579	US	Active Vibration Isolation System	unpublished	10/17/2016	12/30/2016	
62477967	US	Active Vibration Isolation System	unpublished	10/17/2016	3/28/2017	
15725733	US	Active Vibration Isolation System	unpublished	10/17/2016	10/5/2017	
PCT/US17/55336	US	Active Vibration Isolation System	unpublished	10/17/2016	10/5/2017	
11/213099	US	Vehicle Suspension Testing	7302825	8/26/2005	8/26/2005	12/4/2007
2008528154	JP	Vehicle Testing	JP4885222	8/24/2006	8/24/2006	12/16/2011
11/464156	US	Vehicle Testing	7401520	8/26/2005	8/11/2006	7/22/2008
CN0610172899.0	CN	Active Vehicle Suspension System		11/29/2005		2/17/2016
EP20060124956	DE	Active Vehicle Suspension System	CN1974240			
			EP1790505	11/29/2005		1/9/2013
EP20060124956	GB	Active Vehicle Suspension System		11/29/2005		1/9/2013
			EP1790505			
KR101307057	KR	Active Vehicle Suspension System	KR101307057	11/29/2005		9/11/2013
RU2412068	RU	Active Vehicle Suspension System	RU2412068	11/29/2005		8/13/2010
11/289838	US	Active Vehicle Suspension System	7810818	11/29/2005	11/29/2005	10/12/2010
11/561242	US	Active Vehicle Suspension System	7823891	11/29/2005	11/17/2006	11/2/2010
09/140937	US	Wheel Damping	6364078	8/27/1998	8/27/1998	4/2/2002
200880125303.9	CN	Suspended Seat Autolocking		2/5/2008	7/21/2010	
08872218.6	EP	Suspended Seat Autolocking	EP2242666	2/5/2008	6/21/2010	2/17/2016
08872218.6	FR	Suspended Seat Autolocking	EP2242666	2/5/2008	6/21/2010	2/17/2016
08872218.6	GB	Suspended Seat Autolocking	EP2242666	2/5/2008	6/21/2010	2/17/2016
11102166.1	HK	Suspended Seat Autolocking	1147977B	2/5/2008	3/3/2011	3/31/2017
12026062	US	Suspended Seat Autolocking	0198419	2/5/2008	2/5/2008	
PCT/US2008/084533	WO	Suspended Seat Autolocking	WO2009/099475	2/5/2008	11/24/2008	
08872218.6	DE	Suspended Seat Autolocking	EP2242666	2/5/2008	6/21/2010	2/17/2016
200880126576.5	CN	Plant Suspension System With Weight Compensation	CN 101945777 A	2/28/2008	8/11/2010	
08872861.3	EP	Plant Suspension System With Weight Compensation	2250045	2/28/2008	7/8/2010	5/2/2012
08872861.3	FR	Plant Suspension System With Weight Compensation	2250045	2/28/2008	7/8/2010	5/2/2012
08872861.3	GB	Plant Suspension System With Weight Compensation	2250045	2/28/2008	7/8/2010	5/2/2012
12039139	US	Plant Suspension System With Weight Compensation	20090218867	2/28/2008	2/28/2008	
PCT/US2008/084636	WO	Plant Suspension System With Weight Compensation	WO2009/108234	2/28/2008	11/25/2008	
08872861.3	DE	Plant Suspension System With Weight Compensation	2250045	2/28/2008	7/8/2010	5/2/2012
10111430.3	HK	Plant Suspension System With Weight Compensation	1144801B	2/28/2008	12/9/2010	11/30/2012
09727989.7	EP	Loading And Unloading Stabilization In An Active Suspension System	2274180	3/31/2008	10/26/2010	1/13/2016

App. No.	CC	Title	Patent No. (Pub No. if no Patent)	Priority Date	Filing Date	Issue Date
HK11107126.9	HK	Loading And Unloading Stabilization In An Active Suspension System	1153176	3/31/2008	7/11/2011	1/27/2017
2011-503000	JP	Loading And Unloading Stabilization In An Active Suspension System	5341981	3/31/2008	9/29/2010	8/16/2013
12059336	US	Loading And Unloading Stabilization In An Active Suspension System	8112198	3/31/2008	3/31/2008	2/7/2012
PCT/US2009/033654	WO	Loading And Unloading Stabilization In An Active Suspension System	WO2009/123792	3/31/2008	2/10/2009	
200980112213.0	CN	Loading And Unloading Stabilization In An Active Suspension System	CN101983140	3/31/2008	9/30/2010	3/20/2013
09727989.7	DE	Loading And Unloading Stabilization In An Active Suspension System	2274180	3/31/2008	10/26/2010	1/13/2016
09727989.7	FR	Loading And Unloading Stabilization In An Active Suspension System	2274180	3/31/2008	10/26/2010	1/13/2016
09727989.7	GB	Loading And Unloading Stabilization In An Active Suspension System	2274180	3/31/2008	10/26/2010	1/13/2016
200980134208	CN	Linear Motor With Patterned Magnet Arrays	CN102138273	9/3/2008	8/24/2009	11/6/2013
20090791844	EP	Linear Motor With Patterned Magnet Arrays	2335340	9/3/2008	8/24/2009	
12/203523	US	Linear Motor With Patterned Magnet Arrays	7965010	9/3/2008	9/3/2008	6/21/2011
12/055280	US	Position Measurement Using Magnetic Fields	7994742	3/25/2008	3/25/2008	8/9/2011
2771422	CA	Incremental Magnetoresistive Position Sensor	2771422	8/17/2009	2/15/2012	3/31/2015
201080036162.0	CN	Incremental Magnetoresistive Position Sensor	201080036162.0	8/17/2009	2/14/2012	1/21/2015
10742654.6	EP	Incremental Magnetoresistive Position Sensor		8/17/2009	1/27/2012	
HK12111142.0	HK	Incremental Magnetoresistive Position Sensor	11705628	8/17/2009	11/6/2012	11/13/2015
61234508	US	Incremental Magnetoresistive Position Sensor		8/17/2009	8/17/2009	
PCT/US10/43874	WO	Absolute Position Sensing	2011/022190	8/17/2009	7/30/2010	
12731690	US	Absolute Position Sensing	7932684	8/17/2009	3/25/2010	4/26/2011
AU2009288448	AU	Counter-Rotating Motors With Linear Output	AU2009288448	9/8/2008	5/28/2008	3/14/2013
2728835	CA	Counter-Rotating Motors With Linear Output	CA2728835	9/8/2008	8/21/2009	7/23/2013
200980125302	CN	Counter-Rotating Motors With Linear Output	102076990	9/8/2008	8/21/2009	12/11/2013
DE2334947	DE	Counter-Rotating Motors With Linear Output	DE2334947	9/8/2008	8/21/2009	2/1/2012
FR2334947	FR	Counter-Rotating Motors With Linear Output	FR2334947	9/8/2008	8/21/2009	2/1/2012
GB2334947	GB	Counter-Rotating Motors With Linear Output	GB2334947	9/8/2008	8/21/2009	2/1/2012
HK1159030B	HK	Counter-Rotating Motors With Linear Output	HK1159030B	9/8/2008	8/21/2009	11/20/2012
IT2334947	IT	Counter-Rotating Motors With Linear Output	IT2334947	9/8/2008	8/21/2009	2/1/2012
2011524024	JP	Counter-Rotating Motors With Linear Output	JP5628811	9/8/2008	8/21/2009	10/10/2014
MX2011002485	MX	Counter-Rotating Motors With Linear Output	MX2011002485	9/8/2008	8/21/2009	9/30/2014
2011103195	RU	Counter-Rotating Motors With Linear Output	RU2471646	9/8/2008	8/21/2009	1/10/2013
12/206247	US	Counter-Rotating Motors With Linear Output	7963529	9/8/2008	9/8/2008	6/21/2011

App. No.	CC	Title	Patent No. (Pub No. if no Patent)	Priority Date	Filing Date	Issue Date
13/088075	US	Counter-Rotating Motors With Linear Output	8113522	9/8/2008	4/15/2011	2/14/2012
2783795	CA	Motion Control System Self Calibrating	2783795	12/23/2009	6/8/2012	11/24/2015
201080059108.8	CN	Motion Control System Self Calibrating	CN102666189	12/23/2009	6/21/2012	1/14/2015
10795160.0	DE	Motion Control System Self Calibrating	2516208	12/23/2009	6/6/2012	8/16/2017
10795160	EP	Motion Control System Self Calibrating	2516208	12/23/2009	6/6/2012	8/16/2017
10795160.0	FR	Motion Control System Self Calibrating	2516208	12/23/2009	6/6/2012	8/16/2017
10795160.0	GB	Motion Control System Self Calibrating	2516208	12/23/2009	6/6/2012	8/16/2017
12111148.4	HK	Motion Control System Self Calibrating	1170457B	12/23/2009	11/6/2012	8/14/2015
12646371	US	Motion Control System Self Calibrating	8466639	12/23/2009	12/23/2009	6/18/2013
PCT/US2010/059710	WO	Motion Control System Self-Calibrating		12/23/2009	12/9/2010	
13103495.9	HK	Actuator Including Mechanism For Converting Rotary Motion To Linear Motion	1176391B	3/15/2011	3/20/2013	11/20/2015
2012-555214	JP	Actuator Including Mechanism For Converting Rotary Motion To Linear Motion	2013-521443	3/15/2011	8/28/2012	
12732321	US	Actuator Including Mechanism For Converting Rotary Motion To Linear Motion	8360387	3/15/2011	3/26/2010	1/29/2013
PCT/US2011/028451	WO	Actuator Including Mechanism For Converting Rotary Motion To Linear Motion		3/15/2011	3/15/2011	
2790055	CA	Actuator Including Mechanism For Converting Rotary Motion To Linear Motion	2790055	3/15/2011	8/15/2012	8/19/2014
201180016106.5	CN	Actuator Including Mechanism For Converting Rotary Motion To Linear Motion	CN102822560	3/15/2011	9/25/2012	3/4/2015
11710621.1	EP	Actuator Including Mechanism For Converting Rotary Motion To Linear Motion		3/15/2011	9/10/2012	
2014-156577	JP	Actuator Including Mechanism For Converting Rotary Motion To Linear Motion		3/15/2011	7/31/2014	
13707973	US	Actuator Including Mechanism For Converting Rotary Motion To Linear Motion	8973886	3/15/2011	12/7/2012	3/10/2015
13209/2009	AU	Vehicle Seat	327601	3/12/2009	8/19/2009	9/14/2009
200930007006.1	CN	Vehicle Seat	CN301373179	3/12/2009	8/28/2009	8/19/2010
001161145	EM	Vehicle Seat	001161145-0001 001161145-0002	3/12/2009	8/24/2009	9/16/2009
29333655	US	Vehicle Seat	D605420	3/12/2009	3/12/2009	12/8/2009
13210/2009	AU	Vehicle Seat Base	327602	3/12/2009	8/19/2009	9/14/2009
29333652	US	Vehicle Seat Base	D605879	3/12/2009	3/12/2009	12/15/2009
12693912	US	Active Suspension Seat Floor Plate	8282149	1/26/2010	1/26/2010	10/9/2012
201280016550	CN	Rate Limited Common Mode Control For Pulse-Width Modulation Drives	CN103460576B	3/30/2011		7/22/2016
20120716138	DE	Rate Limited Common Mode Control For Pulse-Width Modulation Drives	DE2692045	3/30/2011		1/28/2015
13/075376	US	Rate Limited Common Mode Control For Pulse-Width Modulation Drives	8766588	3/30/2011	3/30/2011	7/1/2014

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11702351.5	EP	Active Suspension Seat Skirt	EP2528772	1/26/2010	6/8/2012	8/13/2014
11702351.5	FR	Active Suspension Seat Skirt	EP2528772	1/26/2010	6/8/2012	8/13/2014
11702351.5	GB	Active Suspension Seat Skirt	EP2528772	1/26/2010	6/8/2012	8/13/2014
12693929	US	Active Suspension Seat Skirt	8356861	1/26/2010	1/26/2010	1/22/2013
PCT/US2011/022362	WO	Active Suspension Seat Skirt		1/26/2010	1/25/2011	
11702351.5	DE	Active Suspension Seat Skirt	EP2528772	1/26/2010	6/8/2012	8/13/2014
EP12198203.7	EP	Active Suspension Seat Skirt		1/26/2010	12/19/2012	
13106667.4	HK	Active Suspension Seat Skirt	11795768	1/26/2010	6/5/2013	11/7/2014
13732773.0	DE	Anti-Causal Vehicle Suspension	2867040	6/27/2012	12/17/2014	10/5/2016
13732773.0	EP	Anti-Causal Vehicle Suspension	2867040	6/27/2012	12/17/2014	10/5/2016
13732773.0	FR	Anti-Causal Vehicle Suspension	2867040	6/27/2012	12/17/2014	10/5/2016
13732773.0	GB	Anti-Causal Vehicle Suspension	2867040	6/27/2012	12/17/2014	10/5/2016
13534800	US	Anti-Causal Vehicle Suspension	9102209	6/27/2012	6/27/2012	8/11/2015
14790070	US	Anti-Causal Vehicle Suspension	9446651	6/27/2012	7/2/2015	9/20/2016
PCT/US13/45825	WO	Anti-Causal Vehicle Suspension		6/27/2012	6/14/2013	
20130732043	EP	Active Wheel Damping	EP2867039	6/27/2012	6/14/2013	
13/534808	US	Active Wheel Damping	8938333	6/27/2012	6/27/2012	1/20/2015
13/411060	US	Cartridge Ball Nut	8941276	3/2/2012	3/2/2012	1/27/2015
2900294	CA	Rotary Actuator Driven Vibration Isolation		3/15/2013	8/4/2015	
PCT/US14/26992	WO	Rotary Actuator Driven Vibration Isolation		3/15/2013	3/14/2014	
201480013431X	CN	Rotary Actuator Driven Vibration Isolation		3/15/2013	9/9/2015	
14717607.7	EP	Rotary Actuator Driven Vibration Isolation		3/15/2013	7/27/2015	
2016-502304	JP	Rotary Actuator Driven Vibration Isolation		3/15/2013	9/11/2015	
2017-170980	JP	Rotary Actuator Driven Vibration Isolation		3/15/2013	9/6/2017	
13843162	US	Rotary Actuator Driven Vibration Isolation	US20140263932	3/15/2013	3/15/2013	
PCT/US16/24758	WO	Retrieving Pre-Determined Controller Parameters To Isolate Vibrations In An Authorized Payload		3/31/2015	3/29/2016	
14674446	US	Retrieving Pre-Determined Controller Parameters To Isolate Vibrations In An Authorized Payload	US20160291574	3/31/2015	3/31/2015	
16717507.4	EP	Retrieving Pre-Determined Controller Parameters To Isolate Vibrations In An Authorized Payload		3/31/2015	9/29/2017	
201380027627X	CN	Active Suspension Seat And Vehicle Operation Interlocks		4/21/2014	11/26/2014	6/27/2017
13718021.2	EP	Active Suspension Seat And Vehicle Operation Interlocks		4/21/2014	10/17/2014	
PCT/US13/36318	WO	Active Suspension Seat And Vehicle Operation Interlocks		4/21/2014	4/12/2013	
14257153	US	Active Suspension Seat And Vehicle Operation Interlocks	8954240	4/21/2014	4/21/2014	2/10/2015
13448528	US	Active Suspension Seat And Vehicle Operation Interlocks	8744694	4/21/2014	4/17/2012	6/3/2014
13/533004	US	Tuned Vibration Absorber For Active Vehicle Suspension	8783430	6/26/2012	6/26/2012	7/22/2014
13/405883	US	Actuator Assembly	8641053	2/27/2012	2/27/2012	2/4/2014
201580024850.8	CN	System Failsafe Operation - Detection - Closed Loop Sensor Testing		3/31/2014	11/11/2016	
14231566	US	Method And System For Detecting Integrity Of A Control Loop Of A Physical System	US20150277390	3/31/2014	3/31/2014	

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PCT/US15/23504	WO	Method And System For Detecting Integrity Of A Control Loop Of A Physical System	WO2015153555	3/31/2014	3/31/2015	
2943527	CA	System Failsafe Operation - Detection - Closed Loop Sensor Testing		3/31/2014	9/21/2016	
15718030.8	EP	System Failsafe Operation - Detection - Closed Loop Sensor Testing		3/31/2014	10/4/2016	
13676582	US	Accelerometer Leveling	9316667	11/14/2012	11/14/2012	4/19/2016
14957733	US	Accelerometer Leveling	US20160091530	11/14/2012	12/3/2015	
13/427382	US	Actuator Assembly With Preloaded Ball Screws	8890461	3/22/2012	3/22/2012	11/18/2014
PCT/US13/67545	WO	Active Suspension System		10/31/2012	10/30/2013	
2890244	CA	Active Suspension System		10/31/2012	4/27/2015	
2013800649665	CN	Active Suspension System		10/31/2012	6/11/2015	
13786882.4	EP	Active Suspension System		10/31/2012	4/27/2015	
13664540	US	Shut Off Criteria	8725351	10/31/2012	10/31/2012	5/13/2014
12533/2013	AU	Vehicle Seat Suspension Base	349868	12/21/2012	5/30/2013	7/24/2013
151444	CA	Vehicle Seat Suspension Base	151444	12/21/2012	5/30/2013	5/5/2014
201330266174.9	CN	Vehicle Seat Suspension Base	CN302625631	12/21/2012	6/18/2013	11/6/2013
002249136	EM	Vehicle Seat Suspension Base	002249136-0001	12/21/2012	6/4/2013	6/17/2013
2013-014055	JP	Vehicle Seat Suspension Base	1497366	12/21/2012	6/21/2013	4/11/2014
29440464	US	Vehicle Seat Suspension Base	D695558	12/21/2012	12/21/2012	12/17/2013
2014257291	AU	Seat System For A Vehicle		4/23/2013	10/14/2015	
2017202391	AU	Seat System For A Vehicle	2017202391			
14724619.3	EP	Seat System For A Vehicle		4/23/2013	10/28/2015	
13868741	US	Seat System For A Vehicle	US20140316661	4/23/2013	4/23/2013	
PCT/US14/34664	WO	Seat System For A Vehicle		4/23/2013	4/18/2014	
2908840	CA	Seat System For A Vehicle		4/23/2013	10/6/2015	
201480029796.1	CN	Seat System For A Vehicle		4/23/2013	11/23/2015	
2014800072690	CN	Demonstrating An Active Vibration Isolation System		2/4/2013	8/3/2015	
13758975	US	Demonstrating An Active Vibration Isolation System	9349304	2/4/2013	2/4/2013	5/24/2016
PCT/US14/14071	WO	Demonstrating An Active Vibration Isolation System		2/4/2013	1/31/2014	
14704991.0	EP	Demonstrating An Active Vibration Isolation System		2/4/2013	7/6/2015	
15086999	US	Demonstrating An Active Vibration Isolation System	US20160275821	2/4/2013	3/31/2016	
15087156	US	Demonstrating An Active Vibration Isolation System	US20160272094	2/4/2013	3/31/2016	
13843266	US	Rotary Actuator Driven Vibration Isolation	9291300	3/15/2013	3/15/2013	3/22/2016
PCT/US14/27209	WO	Rotary Actuator Driven Vibration Isolation		3/15/2013	3/14/2014	
2900980	CA	Rotary Actuator Driven Vibration Isolation		3/15/2013	8/11/2015	
2014800152568	CN	Rotary Actuator Driven Vibration Isolation		3/15/2013	9/14/2015	5/31/2017
14715195.5	EP	Rotary Actuator Driven Vibration Isolation		3/15/2013	7/29/2015	
14733898.2	EP	Active Suspension Of A Motor Vehicle Passenger Seat		6/4/2013	11/25/2015	
61830936	US	Active Suspension Of A Motor Vehicle Passenger Seat		6/4/2013	6/4/2013	
PCT/US14/40229	WO	Active Suspension Of A Motor Vehicle Passenger Seat		6/4/2013	5/30/2014	

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2912865	CA	Active Suspension Of A Motor Vehicle Passenger Seat	2912865	6/4/2013	11/18/2015	
13927900	US	Active Suspension Of A Motor Vehicle Passenger Seat	9199563	6/4/2013	6/26/2013	12/1/2015
14936625	US	Active Suspension Of A Motor Vehicle Passenger Seat	9358910	6/4/2013	11/9/2015	6/7/2016
15174474	US	Active Suspension Of A Motor Vehicle Passenger Seat	9527415	6/4/2013	6/6/2016	12/27/2016
15059010	US	Vehicle Plant Active Suspension Control Based On Vehicle Position	unpublished	3/2/2016	3/2/2016	
PCT/US17/20120	WO	Vehicle Plant Active Suspension Control Based On Vehicle Position		3/2/2016	3/1/2017	
14504525	US	Seat Suspension	9718382	10/2/2014	10/2/2014	8/1/2017
PCT/US15/59700	WO	Variable Tracking Active Suspension System		11/10/2014	11/9/2015	
20150797548	EP	Variable Tracking Active Suspension System		11/10/2014	11/9/2015	
14537261	US	Variable Tracking Active Suspension System	9643467	11/10/2014	11/10/2014	5/9/2017
15476869	US	Variable Tracking Active Suspension System	unpublished	11/10/2014	3/31/2017	
01301287.7	EP	Surface Vehicle Vertical Trajectory Planning	1138530	3/27/2000	2/13/2001	11/6/2013
01301287.7	FR	Surface Vehicle Vertical Trajectory Planning	1138530	3/27/2000	2/13/2001	11/6/2013
2001-90037	JP	Surface Vehicle Vertical Trajectory Planning	4917209	3/27/2000	3/27/2001	2/3/2012
09535849	US	Surface Vehicle Vertical Trajectory Planning		3/27/2000	3/27/2000	
10005418.8	CN	Surface Vehicle Vertical Trajectory Planning		3/27/2000	2/18/2004	
200810081174.X	CN	Surface Vehicle Vertical Trajectory Planning	200810081174.X	3/27/2000	2/18/2004	7/25/2012
200810081173.5	CN	Surface Vehicle Vertical Trajectory Planning	ZL200810081173.5	3/27/2000	2/18/2004	3/23/2011
200810081175.4	CN	Surface Vehicle Vertical Trajectory Planning	200810081175.4	3/27/2000	2/18/2004	10/13/2010
01301287.7	DE	Surface Vehicle Vertical Trajectory Planning	1138530	3/27/2000	2/13/2001	11/6/2013
04100619.8	DE	Surface Vehicle Vertical Trajectory Planning	1449688	3/27/2000	2/17/2004	6/11/2014
10178610.1	DE	Surface Vehicle Vertical Trajectory Planning	2277725	3/27/2000	2/13/2001	4/8/2015
04100619.8	EP	Surface Vehicle Vertical Trajectory Planning	1449688	3/27/2000	2/17/2004	6/11/2014
10178610.1	EP	Surface Vehicle Vertical Trajectory Planning	2277725	3/27/2000	2/13/2001	4/8/2015
11160772.7	EP	Surface Vehicle Vertical Trajectory Planning	2351658	3/27/2000	4/1/2011	
EP14197872.6	EP	Surface Vehicle Vertical Trajectory Planning	2862735	3/27/2000	12/15/2014	4/5/2017
04100619.8	GB	Surface Vehicle Vertical Trajectory Planning	1449688	3/27/2000	2/17/2004	6/11/2014
05101589.0	HK	Surface Vehicle Vertical Trajectory Planning	HK1068012	3/27/2000	2/17/2004	4/22/2005
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08112558.1	HK	Surface Vehicle Vertical Trajectory Planning	11187688	3/27/2000	11/17/2008	7/22/2011

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10368187	US	Surface Vehicle Vertical Trajectory Planning	0046335	3/27/2000	2/18/2003	
10629243	US	Surface Vehicle Vertical Trajectory Planning	7195250	3/27/2000	7/28/2003	3/27/2007
11608622	US	Surface Vehicle Vertical Trajectory Planning	7434816	3/27/2000	12/8/2006	10/14/2008
11670849	US	Surface Vehicle Vertical Trajectory Planning	7878510	3/27/2000	2/2/2007	2/1/2011
12974190	US	Surface Vehicle Vertical Trajectory Planning	8517395	3/27/2000	12/21/2010	8/27/2013
13922456	US	Surface Vehicle Vertical Trajectory Planning	8948968	3/27/2000	6/20/2013	2/3/2015
14543002	US	Surface Vehicle Vertical Trajectory Planning	9417075	3/27/2000	11/13/2014	8/16/2016
200410076871	CN	Failsafe Operation Of Active Vehicle Suspension	1593963	9/8/2003		4/21/2010
200460024479	DE	Failsafe Operation Of Active Vehicle Suspension	EP1512559	9/8/2003		12/9/2009
04104293.8	GB	Failsafe Operation Of Active Vehicle Suspension	EP1512559	9/8/2003		12/9/2009
HK10725848	HK	Failsafe Operation Of Active Vehicle Suspension	HK10725848	9/8/2003		8/13/2010
JP2004260804A	JP	Failsafe Operation Of Active Vehicle Suspension	JP4954455	9/8/2003		3/23/2012
10/657496	US	Failsafe Operation Of Active Vehicle Suspension	US20050052150	9/8/2003	9/8/2003	
CN200410047842.9	CN	Electromagnetic Interference Filter	CN200410047842.9	6/2/2003		8/6/2008
DE1484201	DE	Electromagnetic Interference Filter	DE1484201	6/2/2003		8/13/2008
2004164842	JP	Electromagnetic Interference Filter	JP4800592	6/2/2003		8/12/2011
10/453359	US	Electromagnetic Interference Filter	6926288	6/2/2003	6/2/2003	8/9/2005
EP2233330	DE	Vehicle Suspension	EP2233330	1/21/2003		2/13/2013
20040102426	GB	Vehicle Suspension	EP1440826	1/21/2003		11/10/2010
HK11449258	HK	Vehicle Suspension	HK11449258	1/21/2003		6/17/2014
10/347941	US	Vehicle Suspension	6945541	1/21/2003	1/21/2003	9/20/2005
CN200510078397.7	CN	Electromechanical Transducing	CN200510078397.7	6/18/2004		3/2/2011
JP4602846	JP	Electromechanical Transducing	JP4602846	6/18/2004		10/8/2010
10/871230	US	Electromechanical Transducing	7654540	6/18/2004	6/18/2004	2/2/2010
CN200510078390.5	CN	Active Vehicle Suspension	CN200510078390.5	6/18/2004		10/6/2010
DE1607251	DE	Active Vehicle Suspension	DE1607251	6/18/2004		4/22/2009
10/871231	US	Active Vehicle Suspension	7427072	6/18/2004	6/18/2004	9/23/2008
10/871796	US	Active Suspension Controller	7421954	6/18/2004	6/18/2004	9/9/2008
CN10076353.0	CN	Self Cooling Actuator	CN100503289	6/17/2004		6/24/2009
DE1607250	DE	Self Cooling Actuator	DE1607250	6/17/2004		1/13/2010
10/870521	US	Self Cooling Actuator	7202577	6/17/2004	6/17/2004	4/10/2007
200510118494.4	CN	Active Suspending	200510118494.4	10/29/2004	10/27/2005	7/4/2012
05109550.3	EP	Active Suspending	1652724	10/29/2004	10/13/2005	1/9/2008
05109550.3	GB	Active Suspending	1652724	10/29/2004	10/13/2005	1/9/2008
06108895.3	HK	Active Suspending	10886508	10/29/2004	10/27/2005	11/16/2012
2660/DEL/2005	IN	Active Suspending	270396	10/29/2004	10/5/2005	12/17/2015
2005-306373	JP	Active Suspending	5273901	10/29/2004	10/20/2005	5/24/2013
10978105	US	Active Suspending	7983813	10/29/2004	10/29/2004	7/19/2011
200710102263.3	CN	Active Suspending	200710102263.3	10/29/2004	5/8/2007	7/4/2012
201210129766.0	CN	Active Suspending		10/29/2004	5/8/2012	
201210155388.3	CN	Active Suspending	201210155388.3	10/29/2004	5/15/2012	1/28/2015
05109550.3	DE	Active Suspending	1652724	10/29/2004	10/13/2005	1/9/2008

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07107215.1	DE	Active Suspending	1852302	10/29/2004	4/30/2007	8/12/2015
10153741.3	DE	Active Suspending	2189330	10/29/2004	2/16/2010	2/29/2012
07101543.2	EP	Active Suspending	1782996	10/29/2004	10/13/2005	3/17/2010
07107215.1	EP	Active Suspending	1852302	10/29/2004	4/30/2007	8/12/2015
10153741.3	EP	Active Suspending	2189330	10/29/2004	2/16/2010	2/29/2012
07107215.1	FR	Active Suspending	1852302	10/29/2004	4/30/2007	8/12/2015
07108444.8	HK	Active Suspending	1101102	10/29/2004	8/2/2007	7/2/2010
10107050.0	HK	Active Suspending	11407308	10/29/2004	7/21/2010	11/30/2012
HK12112895.7	HK	Active Suspending	11719928	10/29/2004	12/13/2012	11/20/2015
942/DEL/2007	IN	Active Suspending	270380	10/29/2004	5/1/2007	12/16/2015
2007-121905	JP	Active Suspending	5259979	10/29/2004	5/2/2007	5/2/2013
07101543.2	GB	Active Suspending	1782996	10/29/2004	2/1/2007	3/17/2010
07107215.1	GB	Active Suspending	1852302	10/29/2004	4/30/2007	8/12/2015
10153741.3	GB	Active Suspending	2189330	10/29/2004	2/16/2010	2/29/2012
11418345	US	Active Suspending	8095268	10/29/2004	5/3/2006	1/10/2012
12874264	US	Active Suspending	8548678	10/29/2004	9/2/2010	10/1/2013
13972496	US	Active Suspending	8781681	10/29/2004	8/21/2013	7/15/2014
PCT/US2008/077418	WO	Methods And Apparatus For Securing An Active Vehicle Seat	2009055180	10/23/2007	9/24/2008	
PCT/US2008/051278	WO	Linear Electromagnetic Actuator With Reduced Detend Force	2008089311	1/18/2007	1/17/2008	
PCT/US2009/036898	WO	Position Measurement Using Magnetic Fields	2009120507	3/25/2008	3/12/2009	
PCT/US2008/082434	WO	Active Vehicle Suspension With Linear And Rotary Electromagnetic Actuators	2009064640	11/12/2007	11/5/2008	
20090737512	EP		2345147	10/17/2008	10/15/2009	9/5/2012
PCT/US2009/060821	WO	System And Method For Controlling Power Balance In An Electrical/Mechanical System	2010045443	10/17/2008	10/15/2009	
PCT/US2006/033102	WO	Vehicle Testing	2007025054	8/26/2005	8/24/2006	