

PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	RELEASE OF SECURITY INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
BANK OF MONTREAL, AS ADMINISTRATIVE AGENT	04/08/2022
RECEIVING PARTY DATA	
Name:	AMERICAN PRECISION INDUSTRIES, INC.
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State/Country:	CONNECTICUT
Postal Code:	06057
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State/Country:	CONNECTICUT
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State/Country:	NEW YORK
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City:	BRAINTREE

PATENT

State/Country:	MASSACHUSETTS
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Street Address:	449 GARDNER STREET
City:	SOUTH BELOIT
State/Country:	ILLINOIS
Postal Code:	61080

PROPERTY NUMBERS Total: 94

Property Type	Number
Patent Number:	6866017
Patent Number:	6694933
Patent Number:	6854433
Patent Number:	6883492
Patent Number:	7152576
Patent Number:	6827067
Patent Number:	6920868
Patent Number:	7559300
Patent Number:	7059283
Patent Number:	7162996
Patent Number:	7156062
Patent Number:	7069888
Patent Number:	7350502
Patent Number:	7066159
Patent Number:	7905208
Patent Number:	8578901
Patent Number:	7392772
Patent Number:	7237540
Patent Number:	7954465
Patent Number:	7555998
Patent Number:	8453613
Patent Number:	8079338
Patent Number:	7284533
Patent Number:	7600497

Property Type	Number
Patent Number:	7665432
Patent Number:	7793624
Patent Number:	7565896
Patent Number:	7823553
Patent Number:	8528508
Patent Number:	8726863
Patent Number:	8087392
Patent Number:	7789065
Patent Number:	7909017
Patent Number:	8851048
Patent Number:	7712449
Patent Number:	7735466
Patent Number:	7971569
Patent Number:	8151763
Patent Number:	8516984
Patent Number:	8936006
Patent Number:	10851717
Patent Number:	8627791
Patent Number:	8863726
Patent Number:	9234467
Patent Number:	9845713
Application Number:	16689937
Patent Number:	9200541
Patent Number:	9016249
Patent Number:	9410455
Patent Number:	9739184
Patent Number:	9068478
Patent Number:	9347383
Patent Number:	9091184
Patent Number:	9790824
Patent Number:	9512746
Patent Number:	10626763
Patent Number:	9702276
Patent Number:	10077686
Application Number:	16796653
Patent Number:	10711662
Patent Number:	9611767
Patent Number:	10329969

Property Type	Number
Patent Number:	10132247
Patent Number:	10513989
Patent Number:	10184363
Patent Number:	10526936
Patent Number:	10683778
Application Number:	16054701
Patent Number:	10753289
Patent Number:	10774693
Patent Number:	10590810
Patent Number:	10634019
Application Number:	16409614
Patent Number:	11149599
Patent Number:	10851682
Patent Number:	11156135
Application Number:	16566832
Application Number:	16573660
Patent Number:	10883392
Patent Number:	11053819
Patent Number:	11060426
Application Number:	17305165
Application Number:	15929899
Application Number:	17305637
Application Number:	16706701
Application Number:	16706704
Application Number:	16743183
Application Number:	16947239
Patent Number:	11131222
Application Number:	16947505
Application Number:	17247481
Application Number:	17301414
Application Number:	17301419
Application Number:	17302475

CORRESPONDENCE DATA

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DATE SIGNED:	04/14/2022

Total Attachments: 22

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RELEASE OF PATENT SECURITY INTEREST

This RELEASE OF PATENT SECURITY INTEREST (“Release”) is made and effective as of April 8, 2022 by BANK OF MONTREAL (the “Secured Party”), in favor of AMERICAN PRECISION INDUSTRIES, INC., INERTIA DYNAMICS, LLC, JACOBS VEHICLE SYSTEMS, INC., KILIAN MANUFACTURING CORPORATION, KOLLMORGEN CORPORATION, TB WOOD’S INCORPORATED, THOMSON INDUSTRIES, INC., and WARNER ELECTRIC LLC (collectively, the “Grantors”).

WHEREAS, Grantors have pledged and granted to the Secured Party a security interest in and to all of the right, title and interest of Grantors in, to and under the Patent Collateral (as defined below) of record with the United States Patent and Trademark Office at Reel 031139, Frame 0134 on August 6, 2013 and at Reel 058214, Frame 0832 on November 19, 2021; and

WHEREAS, the Grantors have requested that the Secured Party enter into this Release in order to effectuate, evidence and record the release and reassignment to the Grantors of any and all right, title and interest the Secured Party has in the Patent Collateral.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Secured Party hereby states as follows:

1. Release of Security Interest. Secured Party hereby terminates, releases and discharges any and all security interests that it has in any and all right, title and interest of the Grantors, and reassigns to the Grantors, any and all right, title and interest that it may have, in, to and under the following (collectively, the “Patent Collateral”):

(a) the letters patents of the United States or the equivalent thereof in any other country, all registrations and recordings thereof, and all applications for letters patent of the United States or the equivalent thereof in any other country, including registrations, recordings and pending applications in the United States Patent and Trademark Office (or any successor or any similar offices in any other country) including those listed in Schedule 1 attached hereto, and all reissues, divisions, continuations, continuations-in-part, renewals, extensions and reexaminations thereof and amendments thereto and the inventions disclosed or claimed therein, including the right to make, use and/or sell the inventions disclosed or claimed therein (the “Patents”);

(b) all rights of any kind whatsoever of such Grantor accruing under any of the foregoing provided by applicable law of any jurisdiction, by international treaties and conventions and otherwise throughout the world;

(c) any and all royalties, fees, income, payments and other proceeds now or hereafter due or payable with respect to any and all of the foregoing; and

(d) any and all claims and causes of action and rights to sue, with respect to any of the foregoing, whether occurring before, on or after the date hereof, including all rights to and claims for damages, restitution and injunctive and other legal and equitable relief for past, present and future infringement, misappropriation, misuse, breach or default or other violation, with the

right but no obligation to sue for such legal and equitable relief and to collect, or otherwise recover, any such damages.

2. Secured Party hereby authorizes the recordation of this Release of Patent Security Interest with the United States Patent and Trademark Office.

IN WITNESS WHEREOF, Secured Party has caused this Release to be duly executed and delivered by its officer thereunto duly authorized as of the date first above written.

BANK OF MONTREAL, as Agent

By: *Matt Gerber*
Name: Matthew Gerber
Title: Managing Director

Schedule 1

PATENTS AND PATENT APPLICATIONS

Owner	Country	Title	Application No.	Filing Date	Patent No.	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	Method and System for Engine Braking in an Internal Combustion Engine Using a Stroke Limited High Pressure Engine Brake	10/101,629	03/21/2002	6,866,017	03/15/2005	06/08/2022
Jacobs Vehicle Systems, Inc.	United States	Lost Motion System and Method for Fixed-Time Valve Actuation	10/246,670	09/19/2002	6,694,933	02/24/2004	09/19/2022
Jacobs Vehicle Systems, Inc.	United States	Integrated Primary and Auxiliary Valve Actuation System	10/342,178	01/15/2003	6,854,433	02/15/2005	01/21/2023
Jacobs Vehicle Systems, Inc.	United States	Compact Lost Motion System for Variable Valve Actuation	10/408,254	04/08/2003	6,883,492	04/26/2005	04/24/2023
Jacobs Vehicle Systems, Inc.	United States	Compact Lost Motion System for Variable Valve Actuation	11/102,804	04/11/2005	7,152,576	12/26/2006	06/19/2023

Owner	Country	Title	Application No	Filing Date	Patent No	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	System and Method for Internal Exhaust Gas Recirculation	10/660,508	09/12/2003	6,827,067	12/07/2004	09/12/2023
Jacobs Vehicle Systems, Inc.	United States	System and Method for Modifying Engine Valve Lift	10/816,828	04/05/2004	6,920,868	07/26/2005	09/12/2023
Jacobs Vehicle Systems, Inc.	United States	Multiple Slave Piston Valve Actuation System	10/733,516	12/12/2003	7,559,300	07/14/2009	05/25/2026
Jacobs Vehicle Systems, Inc.	United States	System and Method of Retaining Hydraulic Fluid in a Hydraulic Valve Actuation System	10/737,932	12/18/2003	7,059,283	06/13/2006	12/18/2023
Jacobs Vehicle Systems, Inc.	United States	Engine Braking Method and Apparatus	10/739,098	12/19/2003	7,162,996	01/16/2007	06/02/2024
Jacobs Vehicle Systems, Inc.	United States	Valve Actuation System With Valve Seating Control	10/826,404	04/19/2004	7,156,062	01/02/2007	04/19/2024

Owner	Country	Title	Application No	Filing Date	Patent No	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	System and Method for Valve Actuation	11/012,324	12/16/2004	7,069,888	07/04/2006	12/16/2024
Jacobs Vehicle Systems, Inc.	United States	Apparatus and Method for Controlling Exhaust Pressure	11/030,895	01/10/2005	7,350,502	04/01/2008	01/10/2025
Jacobs Vehicle Systems, Inc.	United States	System and Method for Multi-Lift Valve Actuation	11/059,378	02/17/2005	7,066,159	06/27/2006	02/17/2025
Jacobs Vehicle Systems, Inc.	United States	Valve Bridge With Integrated Lost Motion System	11/079,249	03/15/2005	7,905,208	03/15/2011	02/16/2026
Jacobs Vehicle Systems, Inc.	United States	Valve Bridge With Integrated Lost Motion System	13/004,695	01/11/2011	8,578,901	11/12/2013	04/01/2025
Jacobs Vehicle Systems, Inc.	United States	Primary and Offset Actuator Rocker Arms for Engine Valve Actuation	11/123,063	05/06/2005	7,392,772	07/01/2008	05/06/2025

Owner	Country	Title	Application No	Filing Date	Patent No	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	Method of Modifying Exhaust Valve Timing to Improve Engine Performance	11/159,275	06/23/2005	7,237,540	07/03/2007	12/22/2023
Jacobs Vehicle Systems, Inc.	United States	Combined Exhaust Restriction and Variable Valve Actuation	11/202,201	08/12/2005	7,954,465	06/07/2011	03/17/2028
Jacobs Vehicle Systems, Inc.	United States	System and Method for Hydraulic Valve Actuation	11/290,518	12/01/2005	7,555,998	07/07/2009	12/01/2025
Jacobs Vehicle Systems, Inc.	United States	Valve Actuation System With Valve Seating Control	11/401,260	04/11/2006	8,453,613	06/04/2013	02/04/2031
Jacobs Vehicle Systems, Inc.	United States	Self-Adjusting Valve Catch With Valve Seating Control	12/233,312	09/18/2008	8,079,338	12/20/2011	11/29/2027
Jacobs Vehicle Systems, Inc.	United States	Method of Operating an Engine Brake	11/429,225	05/08/2006	7,284,533	10/23/2007	05/08/2026

Owner	Country	Title	Application No.	Filing Date	Patent No.	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	Finger Follower Lost Motion Valve Actuation System With Locating Link	11/524,292	09/21/2006	7,600,497	10/13/2009	11/14/2027
Jacobs Vehicle Systems, Inc.	United States	Valve Actuation System and Method of Driving Two Slave Pistons With One Master Piston	11/637,047	12/12/2006	7,665,432	02/23/2010	03/09/2027
Jacobs Vehicle Systems, Inc.	United States	Engine Brake Apparatus	11/976,793	10/29/2007	7,793,624	09/14/2010	02/14/2028
Jacobs Vehicle Systems, Inc.	United States	Method for Variable Valve Actuation to Provide Positive Power and Engine Braking	12/073,020	02/28/2008	7,565,896	07/28/2009	02/28/2028
Jacobs Vehicle Systems, Inc.	United States	Engine Brake Having an Articulated Rocker Arm and a Rocker Shaft Mounted Housing	12/076,173	03/14/2008	7,823,553	11/02/2010	04/27/2029
Jacobs Vehicle Systems, Inc.	United States	Individua Rocker Shaft and Pedestal Mounted Engine Brake	12/754,346	04/05/2010	8,528,508	09/10/2013	04/27/2029

Owner	Country	Title	Application No	Filing Date	Patent No	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	Rocker Shaft Pedestal Incorporating an Engine Valve Actuation System or Engine Brake	13/080,497	04/05/2011	8,726,863	05/20/2014	11/24/2028
Jacobs Vehicle Systems, Inc.	United States	Variable Valve Actuation System	12/155,243	05/30/2008	8,087,392	01/03/2012	05/01/2030
Jacobs Vehicle Systems, Inc.	United States	Engine braking apparatus with mechanical linkage and lash adjustment	12/217,813	07/09/2008	7,789,065	09/07/2010	12/30/2028
Jacobs Vehicle Systems, Inc.	United States	Engine braking apparatus with mechanical linkage and lash adjustment	12/854,716	08/11/2010	7,909,017	03/22/2011	07/09/2028
Jacobs Vehicle Systems, Inc.	United States	Dedicated Rocker Arm Engine Brake	13/257,240	04/27/2009	8,851,048	10/07/2014	12/13/2030
Jacobs Vehicle Systems, Inc.	United States	Lost Motion Variable Valve Actuation System for Engine Braking and Early Exhaust Opening	12/436,573	05/06/2009	7,712,449	05/11/2010	05/06/2029

Owner	Country	Title	Application No	Filing Date	Patent No	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	Exhaust Brake	12/483,854	06/12/2009	7,735,466	06/15/2010	06/12/2029
Jacobs Vehicle Systems, Inc.	United States	Bias System for Dedicated Engine Braking Rocker Arm in a Lost Motion System	12/533,702	07/31/2009	7,971,569	07/05/2011	12/30/2029
Jacobs Vehicle Systems, Inc.	United States	Bias System for Dedicated Engine Braking Rocker Arm in a Lost Motion System	13/160,112	06/14/2011	8,151,763	04/10/2012	07/31/2029
Jacobs Vehicle Systems, Inc.	United States	Lost Motion Variable Valve Actuation System With Valve Catch Piston	12/852,115	08/06/2010	8,516,984	08/27/2013	03/10/2031
Jacobs Vehicle Systems, Inc.	United States	Combined Engine Braking and Positive Power Engine Lost Motion Valve Actuation System	13/192,330	07/27/2011	8,936,006	01/20/2015	01/17/2033
Jacobs Vehicle Systems, Inc.	United States	Combined Engine Braking and Positive Power Engine Lost Motion Valve Actuation System	14/274,899	05/12/2014	10,851,717	12/01/2020	12/22/2031

Owner	Country	Title	Application No	Filing Date	Patent No	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	Combined Engine Braking and Positive Power Engine Lost Motion Valve Actuation System	16/689,937	11/20/2019			
Jacobs Vehicle Systems, Inc.	United States	Primary and Auxiliary Rocker Arm Assembly for Engine Valve Actuation	13/481,026	05/25/2012	8,627,791	01/14/2014	05/25/2032
Jacobs Vehicle Systems, Inc.	United States	Method and System for Engine Cylinder Decompression	13/624,478	09/21/2012	8,863,726	10/21/2014	09/21/2032
Jacobs Vehicle Systems, Inc.	United States	Engine System and Operation Method Using Engine Braking Mechanisms for Early Exhaust Valve Opening	14/008,811	02/25/2013	9,234,467	01/12/2016	02/25/2033
Jacobs Vehicle Systems, Inc.	United States	Engine System and Operation Method Using Engine Braking Mechanisms for Early Exhaust Valve Opening	14/954,413	11/30/2015	9,845,713	12/19/2017	02/25/2033

Owner	Country	Title	Application No	Filing Date	Patent No	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	Systems and Methods for Hydraulic Lash Adjustment in an Internal Combustion Engine	13/946,860	07/19/2013	9,200,541	12/01/2015	07/19/2033
Jacobs Vehicle Systems, Inc.	United States	Integrated Lost Motion Rocker Brake With Automatic Reset	14/035,707	09/24/2013	9,016,249	04/28/2015	12/05/2033
Jacobs Vehicle Systems, Inc.	United States	Rocker Latch for Controlling Engine Valve Actuation	14/133,090	12/18/2013	9,410,455	08/09/2016	08/12/2034
Jacobs Vehicle Systems, Inc.	United States	Start of an Internal Combustion Engine With at Least One Engine Valve in an Open State During Cranking	15/184,904	06/16/2016	9,739,184	08/22/2017	12/18/2033
Jacobs Vehicle Systems, Inc.	United States	Apparatus and System Comprising Integrated Master-Slave Pistons for Actuating Engine Valves	14/188,867	02/25/2014	9,068,478	06/30/2015	02/25/2034

Owner	Country	Title	Application No.	Filing Date	Patent No.	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	Intra-Cylinder Auxiliary Actuation of Engine Valves Through Selective Discontinuation of Main Valve Events	14/190,540	02/26/2014	9,347,383	05/24/2016	09/03/2034
Jacobs Vehicle Systems, Inc.	United States	Controlling Motion of a Movable Part	14/227,122	03/27/2014	9,091,184	07/28/2015	03/27/2034
Jacobs Vehicle Systems, Inc.	United States	Lost Motion Valve Actuation Systems With Locking Elements Including Wedge Locking Elements	14/331,982	07/15/2014	9,790,824	10/17/2017	10/25/2031
Jacobs Vehicle Systems, Inc.	United States	Apparatus and System Comprising Collapsing and Extending Mechanisms for Actuating Engine Valves	14/561,908	12/05/2014	9,512,746	12/06/2016	03/16/2035

Owner	Country	Title	Application No	Filing Date	Patent No	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	Linkage Between an Auxiliary Motion Source and a Main Motion Load Path in an Internal Combustion Engine	14/735,247	06/10/2015	10,626,763	04/21/2020	09/16/2037
Jacobs Vehicle Systems, Inc.	United States	Linkage Between an Auxiliary Motion Source and a Main Motion Load Path in an Internal Combustion Engine	16/796,653	02/20/2020			
Jacobs Vehicle Systems, Inc.	United States	System Comprising an Accumulator Upstream of a Lost Motion Component in a Valve Bridge	14/799,837	07/15/2015	9,702,276	07/11/2017	09/08/2035
Jacobs Vehicle Systems, Inc.	United States	Pushrod Assembly	14/800,092	07/15/2015	10,077,686	09/18/2018	09/16/2035

Owner	Country	Title	Application No	Filing Date	Patent No	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	System Comprising a Pumping Assembly Operatively Connected to a Valve Actuation Motion Source or Valve Train Component	14/846,098	09/04/2015	10,711,662	07/14/2020	09/04/2035
Jacobs Vehicle Systems, Inc.	United States	Lost Motion Assembly in a Valve Bridge for Use with a Valve Train Comprising a Hydraulic Lash Adjuster	14/858,644	09/18/2015	9,611,767	04/04/2017	10/01/2035
Jacobs Vehicle Systems, Inc.	United States	System and Method of Adjusting Actuating Timing of Valves in a Piston Engine	15/522,529	10/23/2015	10,329,969	06/25/2019	11/05/2035
Jacobs Vehicle Systems, Inc.	United States	Method and Apparatus for Combine Exhaust and Compression Release Engine Braking	15/253,708	08/31/2016	10,132,247	11/20/2018	10/14/2036

Owner	Country	Title	Application No.	Filing Date	Patent No.	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	Method and Apparatus for Determining Exhaust Brake Failure	15/390,512	12/25/2016	10,513,989	10/24/2019	10/14/2036
Jacobs Vehicle Systems, Inc.	United States	Lost Motion Differential Valve Actuation	15/272,986	09/22/2016	10,184,363	01/22/2019	09/22/2036
Jacobs Vehicle Systems, Inc.	United States	System for Engine Valve Actuation Comprising Lash-Prevention Valve Actuation Motion	15/280,063	09/29/2016	10,526,936	01/07/2020	11/12/2036
Jacobs Vehicle Systems, Inc.	United States	Removable Valve Bridges and Valve Actuation Systems Including the Same	15/692,773	08/31/2017	10,683,778	06/16/2020	08/31/2037
Jacobs Vehicle Systems, Inc.	United States	Systems and Methods for Counter Flow Management and Valve Motion Sequencing in Enhanced Engine Braking	16/054,701	08/03/2018			

Owner	Country	Title	Application No	Filing Date	Patent No	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	Systems and Methods for Counter Flow Management and Valve Motion Sequencing in Enhanced Engine Braking	16/054,721	08/03/2018	10,753,289	08/25/2020	10/29/2038
Jacobs Vehicle Systems, Inc.	United States	Variable Length Piston Assemblies for Engine Valve Actuation Systems	16/151,803	10/04/2018	10,774,693	09/15/2020	10/04/2038
Jacobs Vehicle Systems, Inc.	United States	Rocker Arm With Lost Motion Assembly	16/186,500	11/10/2018	10,590,810	03/17/2020	11/10/2038
Jacobs Vehicle Systems, Inc.	United States	Lash Adjustment in Lost Motion Engine Systems	16/409,614	05/10/2019			
Jacobs Vehicle Systems, Inc.	United States	Lash Adjuster Control in Engine Valve Actuation Systems	16/295,637	03/07/2019	10,634,019	04/28/2020	03/07/2039
Jacobs Vehicle Systems, Inc.	United States	Rocker Arm Control System					

Owner	Country	Title	Application No	Filing Date	Patent No	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	Systems and Methods for IEGR Using Secondary Intake Valve Motion and Lost-Motion Reset	16/364,355	03/26/2019	11,149,599	10/19/2021	03/26/2039
Jacobs Vehicle Systems, Inc.	United States	Engine Valve Actuation Systems With Lost Motion Valve Train Components Including Collapsing Valve Bridges With Locking Pin	16/455,248	06/27/2019	10,851,682	12/01/2020	06/07/2039
Jacobs Vehicle Systems, Inc.	United States	Systems and Methods for Combined Engine Braking and Lost Motion Exhaust Valve Opening	16/513,608	07/16/2019	11,156,135	10/26/2021	09/10/2039
Jacobs Vehicle Systems, Inc.	United States	Lost Motion Variable Valve Actuation Systems and Methods	16/566,832	09/10/2019			
Jacobs Vehicle Systems, Inc.	United States	Response Time in Lost Motion Valve Trains	16/573,660	09/17/2019			

Owner	Country	Title	Application No	Filing Date	Patent No	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	Valve Bridge Systems Comprising Valve Bridge Guide	16/676,140	11/06/2019	10,883,392	01/05/2021	11/06/2039
Jacobs Vehicle Systems, Inc.	United States	Valve Bridge Systems Comprising Valve Bridge Guide	15/929,504	05/06/2020	11,053,819	07/06/2021	11/06/2039
Jacobs Vehicle Systems, Inc.	United States	Valve Bridge Comprising Concave Chambers	17/305,165	07/01/2021			
Jacobs Vehicle Systems, Inc.	United States	Finger Follower for Lobe Switching and Single Source Lost Motion	16/706,226	12/06/2019	11,060,426	07/13/2021	12/06/2039
Jacobs Vehicle Systems, Inc.	United States	Finger Follower for Lobe Switching and Single Source Lost Motion	15/929,899	05/28/2020			
Jacobs Vehicle Systems, Inc.	United States	Valve Actuation System Comprising Finger Follower for Lobe Switching and Single Source Lost Motion	17/305,637	07/12/2021			

Owner	Country	Title	Application No	Filing Date	Patent No	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	Valve Actuation System Comprising Two Rocker Arms and a Collapsing Mechanism	16/706,701	12/07/2019			
Jacobs Vehicle Systems, Inc.	United States	Valve Actuation System Comprising at Least Two Rocker Arms and a One-Way Coupling Mechanism	16/706,704	12/07/2019			
Jacobs Vehicle Systems, Inc.	United States	Selective Resetting Lost Motion Engine Valve Train Components	16/743,183	01/15/2020			
Jacobs Vehicle Systems, Inc.	United States	Systems Having Deactivator Controller Operatively Connected to Deactivators for at Least Two Cylinders and Methods for Cylinder Deactivation	16/947,239	07/24/2020			

Owner	Country	Title	Application No	Filing Date	Patent No	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	Combined Positive Power and Cylinder Deactivation Operation With Secondary Valve Event	16/947,505	08/04/2020			
Jacobs Vehicle Systems, Inc.	United States	Valve Actuation System Comprising in-Series Lost Motion Components for Use in Cylinder Deactivation and Auxillary Valve Actuations	17/247,481	12/12/2020			
Jacobs Vehicle Systems, Inc.	United States	Engine Valve Actuation With Handoff Control Between Cooperative Valve Actuation Motions	17/249,090	02/19/2021	11,131,222	09/28/2021	02/19/2041
Jacobs Vehicle Systems, Inc.	United States	Single Actuator Valve Sequencing in Cylinder Deactivation and High-Power Density (HPD) Braking Engine Environments	17/301,414	04/01/2021			

Owner	Country	Title	Application No.	Filing Date	Patent No.	Issue Date	Expiration Date
Jacobs Vehicle Systems, Inc.	United States	Valve Actuation and Sequencing for Cylinder Deactivation and High-Power Density (HPD) Braking	17/301,419	04/02/2021			
Jacobs Vehicle Systems, Inc.	United States	Valve Actuation System Comprising Lost Motion and High Lift Transfer Components in a Main Motion Load Path	17/302,475	05/04/2021			