

PATENT ASSIGNMENT

Electronic Version v1.1
Stylesheet Version v1.1

SUBMISSION TYPE:

NEW ASSIGNMENT

NATURE OF CONVEYANCE:

First Lien Security Interest

CONVEYING PARTY DATA

Name	Execution Date
Metaldyne, LLC	10/16/2009
Metaldyne Chassis Products, LLC	10/16/2009
Metaldyne Tubular Components, LLC	10/16/2009
Metaldyne BSM, LLC	10/16/2009

RECEIVING PARTY DATA

Name:	Wilmington Trust FSB, as Collateral Agent
Street Address:	50 South Sixth Street, Suite 1290
City:	Minneapolis
State/Country:	MINNESOTA
Postal Code:	55402

PROPERTY NUMBERS Total: 74

Property Type	Number
Application Number:	61208102
Application Number:	61128357
Application Number:	61198726
Application Number:	61089507
Application Number:	12231950
Application Number:	12082442
Application Number:	12288230
Application Number:	12156781
Application Number:	12220028
Application Number:	12113592
Application Number:	12082732
Application Number:	11982437

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PATENT
REEL: 023409 FRAME: 0063

CH \$2960.00 61208102

Application Number:	11801608
Application Number:	11809361
Application Number:	11731688
Application Number:	11726743
Application Number:	11649095
Application Number:	11520322
Application Number:	11412520
Application Number:	12006363
Application Number:	11634489
Application Number:	11998865
Application Number:	11413076
Application Number:	11788506
Application Number:	11387604
Application Number:	11110476
Application Number:	11895002
Application Number:	12157790
Application Number:	12319987
Application Number:	61188917
Application Number:	61192759
Application Number:	61192758
Application Number:	61203088
Application Number:	61206559
Application Number:	12475992
Application Number:	61150225
Application Number:	11475330
Patent Number:	6173978
Patent Number:	7479087
Patent Number:	7479086
Patent Number:	6676144
Patent Number:	6550797
Patent Number:	5743011
Patent Number:	5678460
Patent Number:	5524906
Patent Number:	5483932
Patent Number:	6682437

Patent Number:	6581377
Patent Number:	6626063
Patent Number:	6237442
Patent Number:	5857388
Patent Number:	7152623
Patent Number:	7508863
Patent Number:	7296332
Patent Number:	6634266
Patent Number:	6450584
Patent Number:	6708589
Patent Number:	6485109
Patent Number:	6212981
Patent Number:	7174919
Patent Number:	7024751
Patent Number:	7410035
Patent Number:	5918573
Patent Number:	6579492
Patent Number:	6170453
Patent Number:	6651425
Patent Number:	5485737
Patent Number:	5471857
Patent Number:	6915568
Patent Number:	7086366
Patent Number:	6324838
Patent Number:	5987728
Patent Number:	5231893
Patent Number:	7255357

CORRESPONDENCE DATA

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Address Line 2: Kirkland & Ellis LLP

Address Line 4: Chicago, ILLINOIS 60654

PATENT

REEL: 023409 FRAME: 0065

ATTORNEY DOCKET NUMBER:	10313-6 RMP_CK
NAME OF SUBMITTER:	Renee M. Prescan
<p>Total Attachments: 10</p> <p>source=MD First Lien Patent Security Agreement#page1.tif source=MD First Lien Patent Security Agreement#page2.tif source=MD First Lien Patent Security Agreement#page3.tif source=MD First Lien Patent Security Agreement#page4.tif source=MD First Lien Patent Security Agreement#page5.tif source=MD First Lien Patent Security Agreement#page6.tif source=MD First Lien Patent Security Agreement#page7.tif source=MD First Lien Patent Security Agreement#page8.tif source=MD First Lien Patent Security Agreement#page9.tif source=MD First Lien Patent Security Agreement#page10.tif</p>	

PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT (this "Patent Security Agreement") dated as of October 16, 2009 is made by METALDYNE, LLC, METALDYNE CHASSIS PRODUCTS, LLC, METALDYNE TUBULAR COMPONENTS, LLC, and METALDYNE BSM, LLC (individually, "Grantor," and collectively, "Grantors"), in favor of WILMINGTON TRUST FSB, in its capacity as Collateral Agent (in such capacity, "Grantee") for the Secured Parties to the Security Agreement (as defined below).

Reference is made to the Security Agreement (the "Security Agreement") dated as of October 16, 2009, among MD Investors Corporation, Metaldyne, LLC, the Subsidiary Loan Parties, and Grantee, as Collateral Agent for the Secured Parties.

Pursuant to the Security Agreement, Grantors have granted to Grantee, for the benefit of Secured Parties, a security interest in the Collateral, including all right, title and interest of Grantors in, to and under the Patents (except for Excluded Assets), whether now owned or hereafter acquired.

Accordingly, each Grantor and Grantee hereby agree as follows:

SECTION 1. Defined Terms. Unless the context otherwise requires, all capitalized terms used but not defined herein shall have the meanings set forth in the Security Agreement.

SECTION 2. Incorporation of the Security Agreement. The Security Agreement and the terms and conditions thereof are hereby incorporated hereby in their entirety by this reference.

SECTION 3. Security Interest in Patents. As security for the payment and performance in full when due, of such Grantor's Obligations, each Grantor hereby grants to Grantee, its permitted successors and assigns, for the ratable benefit of the Secured Parties, a security interest in all of such Grantor's right, title and interest in, to and under the Patents (except for Excluded Assets), whether now owned or hereafter acquired, including, without limitation: (i) the patents and patent applications set forth on Schedule A attached hereto, and (ii) all income, royalties and payments accrued, due or payable now or thereafter, including, without limitation, all claims for damages by reason of past, present or future infringement thereof, with the right to sue for, and collect the same.

SECTION 4. Counterparts. This Patent Security Agreement may be executed in two or more counterparts, each of which shall constitute an original but all of which when taken together shall constitute but one contract. This Patent Security Agreement shall become effective as to any Grantor when a counterpart hereof executed on behalf of such Grantor shall have been delivered to Grantee and a counterpart hereof shall have been executed on behalf of Grantee. Delivery of an executed signature page to this Patent Security Agreement by facsimile or other electronic transmission shall be effective as delivery of a manually executed counterpart hereof.

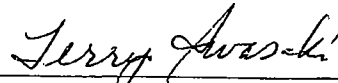
SECTION 5. Governing Law. This Patent Security Agreement shall be construed in accordance with and governed by the laws of the State of New York.

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IN WITNESS WHEREOF, each Grantor and Grantee have duly executed this Patent Security Agreement as of the day and year first above written.

Metaldyne, LLC

by



Name: Terry Iwasaki

Title: Vice President and Chief Financial Officer

Metaldyne Chassis Products, LLC

by

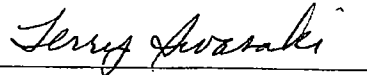


Name: Terry Iwasaki

Title: Vice President and Chief Financial Officer

Metaldyne Tubular Components, LLC

by



Name: Terry Iwasaki

Title: Vice President and Chief Financial Officer

Metaldyne BSM, LLC

by



Name: Terry Iwasaki

Title: Vice President and Chief Financial Officer

SIGNATURE PAGE TO FIRST LIEN PATENT SECURITY AGREEMENT

PATENT
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WILMINGTON TRUST FSB, as Collateral Agent,

by

A handwritten signature in black ink, appearing to read "Renee Kuhl", written over a horizontal line.

Name: Renee Kuhl

Title: Assistant Vice President

SIGNATURE PAGE TO FIRST LIEN PATENT SECURITY AGREEMENT

PATENT
REEL: 023409 FRAME: 0070

SCHEDULE A

PATENTS AND PATENT APPLICATIONS

Title	Application No./ Filing Date	Patent No./ Issue Date	Owner
	61/208102		Metaldyne Chassis Products, LLC
	61/128357		Metaldyne Chassis Products, LLC
	61/198726		Metaldyne, LLC
	61/089507		Metaldyne, LLC
	12/231950		Metaldyne, LLC
Zero roll suspension system	09/357684 7/20/1999	6173978 1/16/2001	Metaldyne Chassis Products, LLC
Single mass dual mode crankshaft damper with tuned hub	12/082442 4/11/2008		Metaldyne, LLC
Differential assembly and method for manufacturing same	12/288230 10/17/2008		Metaldyne, LLC
Elastomeric seal sizer	12/156781 6/4/2008		Metaldyne, LLC
Support structure for differential	12/220028 7/21/2008		Metaldyne, LLC
Cavitation-deterriig energy-efficient fluid pump system and method of operation	12/113592 5/1/2008		Metaldyne BSM, LLC
Cylinder head	12/082732 4/14/2008		Metaldyne Tubular Components, LLC
Apparatus and method for manufacturing knuckle and bearing assembly	11/982437 11/1/2007		Metaldyne Chassis Products, LLC
Inverted pressure regulating valve for an engine oil pump	11/801608 5/10/2007		Metaldyne, LLC
Compact pump arrangement	11/809361 5/31/2007		Metaldyne, LLC

Title	Application No./ Filing Date	Patent No./ Issue Date	Owner
Over-center linkage for engaging a locking differential or other mechanism	11/731688 3/30/2007		Metaldyne, LLC
Pinion shaft and differential housing assembly	11/732183 4/3/2007	7479087 1/20/2009	Metaldyne, LLC
Pin retention and assembly system for locking differential	11/726743 3/22/2007		Metaldyne, LLC
Structure of differential housing	11/726685 3/22/2007	7479086 1/20/2009	Metaldyne, LLC
Dual wall exhaust manifold and method of making same	11/649095 1/3/2007		Metaldyne Tubular Components, LLC
Bearing cap with weight reduction features	11/520322 9/13/2006		Metaldyne, LLC
Method and apparatus for suspending a vehicular wheel assembly	10/152083 5/20/2002	6676144 1/13/2004	Metaldyne Chassis Products, LLC
Zero roll suspension system	09/811198 3/16/2001	6550797 4/22/2003	Metaldyne Chassis Products, LLC
Torsional vibration damper	11/412520 4/27/2006		Metaldyne, LLC
Process of manufacturing vehicle manifolds	08/606127 2/23/1996	5743011 4/28/1998	Metaldyne Tubular Components, LLC
Active torsional vibration damper	08/660343 6/4/1996	5678460 10/21/1997	Metaldyne, LLC
Gasket for exhaust system joint	08/276297 7/18/1994	5524906 6/11/1996	Metaldyne Tubular Components, LLC
Hollow balance shaft; for an automobile engine	08/230642 4/21/1994	5483932 1/16/1996	Metaldyne, LLC

Title	Application No./ Filing Date	Patent No./ Issue Date	Owner
Static unbalance-type balance shafts with axis alignment preservation	10/047487 1/14/2002	6682437 1/27/2004	Metaldyne BSM, LLC
Carburization of vehicle manifold flanges to prevent corrosion	10/024929 12/19/2001	6581377 6/24/2003	Metaldyne Tubular Components, LLC
High value static unbalance-type balance shafts	09/866240 5/25/2001	6626063 9/30/2003	Metaldyne, LLC
High value static unbalance-type balance shafts	09/227952 1/11/1999	6237442 5/29/2001	Metaldyne, LLC
Balance shafts having minimal mass	08/677085 7/9/1996	5857388 1/12/1999	Metaldyne, LLC
Fluid jet with noise reducing sleeve	12/006363 1/2/2008		Metaldyne, LLC
Fluid jet for providing fluid under pressure to a desired location	10/914297 8/9/2004	7152623 12/26/2006	Metaldyne, LLC
Fluid jet for providing fluid under pressure to a desired location	11/634489 12/6/2006		Metaldyne, LLC
Measuring and testing device incorporating an air gauge	11/716803 3/12/2007	7508863 3/31/2009	Metaldyne Chassis Products, LLC
Knuckle hub assembly and method for making same	11/998865 11/30/2007		Metaldyne Chassis Products, LLC
Knuckle hub assembly and method for making same	11/413076 4/27/2006		Metaldyne Chassis Products, LLC
Brake rotor assembly and method for making same	10/783942 2/20/2004	7296332 11/20/2007	Metaldyne Chassis Products, LLC
Wheel hub assembly fixture	10/016589 12/14/2001	6634266 10/21/2003	Metaldyne Chassis Products, LLC

Title	Application No./ Filing Date	Patent No./ Issue Date	Owner
Knuckle hub assembly and method for making same	09/899772 7/5/2001	6450584 9/17/2002	Metaldyne Chassis Products, LLC
Brake rotor assembly and method for making same	09/803785 3/12/2001	6708589 3/23/2004	Metaldyne Chassis Products, LLC
Knuckle hub assembly and method for making same	09/414113 10/8/1999	6485109 11/26/2002	Metaldyne Chassis Products, LLC
Knuckle hub fixture assembly and method of using	09/414114 10/8/1999	6212981 4/10/2001	Metaldyne Chassis Products, LLC
Flow redirection member and method manufacture	10/970678 10/20/2004	7174919 2/13/2007	Metaldyne Tubular Components, LLC
Housing and method of manufacturing said housing	10/809200 3/25/2004	7024751 4/11/2006	Metaldyne, LLC
Torsional vibration damper	07/979507 11/20/1992	5370580 12/6/1994	Metaldyne, LLC
Torsional vibration damper	08/662413 6/10/1996	5862897 1/26/1999	Metaldyne, LLC
Damper and method for tuning a damper utilizing a surface contact reducing resilient member	10/860871 6/4/2004	7410035 8/12/2008	Metaldyne, LLC
Energy efficient fluid pump	09/069807 4/30/1998	5918573 7/6/1999	Metaldyne BSM, LLC
Forged in bushing article and method of making	09/947981 9/6/2001	6579492 66/17/2003	Metaldyne, LLC
Oil/air scavenging system for balance shaft housings	09/343396 6/30/1999	6170453 1/9/2001	Metaldyne BSM, LLC
Stamped exhausts manifold for vehicle engines	10/147791 5/17/2002	6651425 11/25/2003	Metaldyne Tubular Components, LLC

Title	Application No./ Filing Date	Patent No./ Issue Date	Owner
Apparatus for hydroforming a vehicle manifold	08/408742 3/22/1995	5485737 1/23/1996	Metaldyne Tubular Components, LLC
Process for hydroforming a vehicle manifold	08/207570 3/7/1994	5471857 12/5/1995	Metaldyne Tubular Components, LLC
Method of manufacturing connecting rods	10/744275 12/23/2003	6915568 7/12/2005	Metaldyne, LLC
Energy efficient fluid pump	09/489525 1/21/2000	7086366 8/8/2006	Metaldyne BSM, LLC
Device for isolating torque fluctuations	10/475250 4/8/2002	6955252 10/18/2005	Metaldyne, LLC
Flow deflector member for exhaust manifold	09/414396 10/7/1999	6324838 12/4/2001	Metaldyne Tubular Components, LLC
Method of forming a vehicle transmission clutch housing	08/933389 9/19/1997	5987728 11/23/1999	Metaldyne, LLC
Dual mode damper; crankshaft vibration damper	07/805381 12/10/1991	5231893 8/3/1993	Metaldyne, LLC
Method and apparatus for suspending a vehicle	11/291083 11/30/2005	7255357 8/14/2007	Metaldyne Chassis Products, LLC
Method and apparatus for suspending a vehicle	11/788506 4/20/2007		Metaldyne Chassis Products, LLC
Knuckle and bearing assembly and process of manufacturing same	11/387604 3/23/2006		Metaldyne Chassis Products, LLC
Device for controlling parasitic losses in a fluid pump	11/110476 4/20/2005		Metaldyne, LLC
Debris flush system for balance shaft bearings	11/895002 8/22/2007		Metaldyne BSM, LLC

Title	Application No./ Filing Date	Patent No./ Issue Date	Owner
Exhaust manifold having improved nvh characteristics	12/1517790 6/13/2008		Metaldyne Tubular Components, LLC
Dual-layer to flange welded joint	12/319987 1/14/2009		Metaldyne Tubular Components, LLC
	61/188917		Metaldyne Tubular Components, LLC
	61/192759		Metaldyne Tubular Components, LLC
	61/192758		Metaldyne Tubular Components, LLC
	61/203088		Metaldyne Tubular Components, LLC
	61/206559		Metaldyne Tubular Components, LLC
	12/475992		Metaldyne, LLC
	61/150225		Metaldyne, LLC
Gear-driven balance shaft apparatus with backlash control	11/475330 6/27/2006		Metaldyne BSM, LLC