PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
Metaldyne BSM, LLC	02/19/2010

RECEIVING PARTY DATA

Name:	Bank of America, N.A., as Agent		
Street Address:	200 Glastonbury Boulevard		
City:	Glastonbury		
State/Country:	CONNECTICUT		
Postal Code:	06033		

PROPERTY NUMBERS Total: 7

Property Type	Number
Patent Number:	6682437
Patent Number:	5918573
Patent Number:	6170453
Patent Number:	7086366
Application Number:	12113592
Application Number:	11895002
Application Number:	11475330

CORRESPONDENCE DATA

Fax Number: (704)444-8847

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 704-343-2278

Email: ksaltrick@mcguirewoods.com

Correspondent Name: McGuireWoods LLP

Address Line 1: 201 North Tryon Street

Address Line 2: Attention: Wade M. Kennedy

Address Line 4: Charlotte, NORTH CAROLINA 28202

PATENT

REEL: 024170 FRAME: 0983

OF \$280.00 6682437

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ATTORNEY DOCKET NUMBER: 2039261-0106 / KBSALTRICK			
NAME OF SUBMITTER: Wade M. Kennedy, McGuireWoods LLC			
Total Attachments: 7 source=METALDYNE Patent Security Agreement#page1.tif source=METALDYNE Patent Security Agreement#page2.tif source=METALDYNE Patent Security Agreement#page3.tif source=METALDYNE Patent Security Agreement#page4.tif source=METALDYNE Patent Security Agreement#page5.tif source=METALDYNE Patent Security Agreement#page6.tif source=METALDYNE Patent Security Agreement#page7.tif			

PATENT REEL: 024170 FRAME: 0984

PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT (this "Patent Security Agreement") dated as of February 19, 2010 is made by METALDYNE, LLC, METALDYNE SINTERFORGED PRODUCTS, LLC, METALDYNE POWERTRAIN COMPONENTS, INC., METALDYNE SINTERED RIDGWAY, LLC, METALDYNE BSM, LLC, METALDYNE M&A BLUFFTON, LLC, METALDYNE TUBULAR COMPONENTS, LLC, PUNCHCRAFT MACHINING AND TOOLING, LLC, and MD INVESTORS CORPORATION (individually, "Grantor," and collectively, "Grantors"), in favor of Bank of America, N.A., in its capacity as Agent (in such capacity, "Grantee") for the Secured Parties to the Loan Agreement (as defined below).

Reference is made to the Loan and Security Agreement (the "Loan Agreement") dated as of February 19, 2010, among Grantors, the lenders from time to time party thereto and Grantee, as Agent for the Secured Parties.

Pursuant to the Loan 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 all patents, applications for patent, inventions and reissues, continuations, divisions and continuations-in-part in any of the foregoing owned by Grantors (the "Patents") (except for Excluded Assets), whether now owned or hereafter acquired.

Accordingly, each Grantor and Grantee hereby agree as follows:

SECTION 1. <u>Defined Terms</u>. Unless the context otherwise requires, all capitalized terms used-but not defined herein shall have the meanings set forth in the Loan Agreement.

SECTION 2. <u>Incorporation of the Loan Agreement</u>. The Loan 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. <u>Counterparts</u>. 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

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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.

GRANTORS:

METALDYNE, LLC, a Delaware limited liability company

METALDYNE SINTERFORGED PRODUCTS, LLC, a Delaware limited liability company

METALDYNE POWERTRAIN
COMPONENTS, INC., a Delaware
corporation

METALDYNE SINTERED RIDGWAY, LLC, a Delaware limited liability company

METALDYNE BSM, LLC, a Delaware limited liability company

METALDYNE M&A BLUFFTON, LLC, a Delaware limited liability company

METALDYNE TUBULAR COMPONENTS, LLC, a Delaware limited liability company

PUNCHCRAFT MACHINING AND TOOLING, LLC, a Delaware limited liability company

MD INVESTORS CORPORATION, a Delaware corporation

By: Jeny Showsaki

Name: Terry Iwasak

Title: Vice President and Chief Financial Officer

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PATENT SECURITY AGREEMENT Signature Page

PATENT

REEL: 024170 FRAME: 0987

BANK OF AMERICA, N.A., as Agen	BANK	OF	AMERI	CĄ,	N.A.,	as	Agent
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Title: Senior Vice President

PATENT SECURITY AGREEMENT Signature Page

SCHEDULE A

PATENT AND PATENT APPLICATIONS

Title	Application No./	Patent No./	Owner
	Filing Date	Issue Date	Madle IIO
	61/198726		Metaldyne, LLC
	61/089507		Metaldyne, LLC
G: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12/231950		Metaldyne, LLC
Single mass dual mode crankshaft	12/082442		Metaldyne, LLC
damper with tuned hub	4/11/2008		
Differential assembly and method	12/288230		Metaldyne, LLC
for manufacturing same	10/17/2008		
Elastomeric seal sizer	12/156781		Metaldyne, LLC
Miles and the first day to the same and the	6/4/2008		
Support structure for differential	12/220028		Metaldyne, LLC
	7/21/2008		William William
Cavitation-deterrig energy-	12/113592	_	Metaldyne BSM, LLC
efficient fluid pump system and	5/1/2008		
method of operation			
Cylinder head	12/082732		Metaldyne Tubular
	4/14/2008		Components, LLC
Inverted pressure regulating valve	11/801608		Metaldyne, LLC
for an engine oil pump	5/10/2007		
Compact pump arrangement	11/809361		Metaldyne, LLC
	5/31/2007		
Over-center linkage for engaging	11/731688		Metaldyne, LLC
a locking differential or other	3/30/2007		•
mechanism			
Pinion shaft and differential	11/732183	7479087	Metaldyne, LLC
housing assembly	4/3/2007	1/20/2009	•
Pin retention and assembly system	11/726743		Metaldyne, LLC
for locking differential	3/22/2007		
Structure of differential housing	11/726685	7479086	Metaldyne, LLC
	3/22/2007	1/20/2009	,
Dual wall exhaust manifold and	11/649095		Metaldyne Tubular
method of making same	1/3/2007		Components, LLC
Bearing cap with weight reduction	11/520322		Metaldyne, LLC
features	9/13/2006		
Torsional vibration damper	11/412520		Metaldyne, LLC
	4/27/2006		
Process of manufacturing vehicle	08/606127	5743011	Metaldyne Tubular
manifolds	2/23/1996	4/28/1998	Components, LLC
Active torsional vibration damper	08/660343	5678460	Metaldyne, LLC
The state of the s	6/4/1996	10/21/1997	

Title	Application No./	Patent No./	Owner
	Filing Date	Issue Date	
Gasket for exhaust system joint	08/276297	5524906	Metaldyne Tubular
	7/18/1994	6/11/1996	Components, LLC
Hollow balance shaft; for an	08/230642	5483932	Metaldyne, LLC
automobile engine	4/21/1994	1/16/1996	
Static unbalance-type balance	10/047487	6682437	Metaldyne BSM, LLC
shafts with axis alignment	1/14/2002	1/27/2004	
preservation			
Carburization of vehicle manifold	10/024929	6581377	Metaldyne Tubular
flanges to prevent corrosion	12/19/2001	6/24/2003	Components, LLC
High value static unbalance-type	09/866240	6626063	Metaldyne, LLC
balance shafts	5/25/2001	9/30/2003	
High value static unbalance-type	09/227952	6237442	Metaldyne, LLC
balance shafts	1/11/1999	5/29/2001	
Balance shafts having minimal	08/677085	5857388	Metaldyne, LLC
mass	7/9/1996	1/12/1999	-
Fluid jet with noise reducing	12/006363		Metaldyne, LLC
sleeve	1/2/2008		•
Fluid jet for providing fluid under	10/914297	7152623	Metaldyne, LLC
pressure to a desired location	8/9/2004	12/26/2006	
Fluid jet for providing fluid under	11/634489		Metaldyne, LLC
pressure to a desired location	12/6/2006 ⁻		, ,
Flow redirection member and	10/970678	7174919	Metaldyne Tubular
method manufacture	10/20/2004	2/13/2007	Components, LLC
Housing and method of	10/809200	7024751	Metaldyne, LLC
manufacturing said housing	3/25/2004	4/11/2006	,
Torsional vibration damper	07/979507	5370580	Metaldyne, LLC
.	11/20/1992	12/6/1994	, , , , , , , , , , , , , , , , , , , ,
Torsional vibration damper	08/662413	5862897	Metaldyne, LLC
P	6/10/1996	1/26/1999	
Damper and method for tuning a	10/860871	7410035	Metaldyne, LLC
damper utilizing a surface contact	6/4/2004	8/12/2008	
reducing resilient member	31 11 23,3 1	0. 1	
Energy efficient fluid pump	09/069807	5918573	Metaldyne BSM, LLC
anoigy officient field pump	4/30/1998	7/6/1999	111011111111111111111111111111111111111
Forged in bushing article and	09/947981	6579492	Metaldyne, LLC
method of making	9/6/2001	66/17/2003	Wicking ine, EEC
Oil/air scavenging system for	09/343396	6170453	Metaldyne BSM, LLC
balance shaft housings	6/30/1999	1/9/2001	intomicino Dolvi, DDC
Stamped exhausts manifold for	10/147791	6651425	Metaldyne Tubular
vehicle engines	5/17/2002	11/25/2003	Components, LLC
Apparatus for hydroforming a	08/408742	5485737	Metaldyne Tubular
vehicle manifold	3/22/1995	1/23/1996	Components, LLC
Process for hydroforming a	08/207570	5471857	Metaldyne Tubular
vehicle manifold	3/7/1994	12/5/1995	Components, LLC
venicie maimuiu	3/ // 1774	14/3/1993	Components, LLC

Title	Application No./ Filing Date	Patent No./ Issue Date	Owner
Method of Manufacturing	10/744275	6915568	Metaldyne, LLC
connecting rods	12/23/2003	7/12/2005	
Energy efficient fluid pump	09/489525	7086366	Metaldyne BSM, LLC
	1/21/2000	8/8/2006	•
Device for isolating torque	10/475250	6955252	Metaldyne, LLC
fluctuations	4/8/2002	10/18/2005	•
Flow deflector member for	09/414396	6324838	Metaldyne Tubular
exhaust manifold	10/7/1999	12/4/2001	Components, LLC
Method of forming a vehicle	08/933389	5987728	Metaldyne, LLC
transmission clutch housing	9/19/1997	11/23/1999	
Dual mode damper; crankshaft	07/805381	5231893	Metaldyne, LLC
vibration damper	12/10/1991	8/3/1993	
Device for controlling parasitic	11/110476		Metaldyne, LLC
losses in a fluid pump	4/20/2005		
Debris flush system for balance	11/895002		Metaldyne BSM, LLC
shaft bearings	8/22/2007		
Exhaust manifold having	12/1517790		Metaldyne Tubular
improved nvh characteristics	6/13/2008		Components, LLC
Dual-layer to flange welded joint	12/319987		Metaldyne Tubular
	1/14/2009		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	11/475330		Metaldyne BSM, LLC
apparatus with backlash control	6/27/2006		