

OMB No. 0651-0011 (exp. 4/94)

Tab settings 8-20-01



To the Honorable Commissioner of Pat

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shred original documents or copy thereof.

1. Name of conveying party(ies): AMERICAN AXLE & MANUFACTURING, INC.

- Individual(s), Association, General Partnership, Limited Partnership, Corporation-State, Other

Additional name(s) of conveying party(ies) attached? Yes No

3. Nature of conveyance: Assignment, Merger, Security Agreement, Change of Name, Other Supplement to Intellectual Property Security Agreement

Execution Date: August 15, 2001

2. Name and address of receiving party(ies)

Name: THE CHASE MANHATTAN BANK, AS COLLATERAL AGENT

Internal Address:

Street Address: 270 PARK AVENUE

City: NEW YORK State: NY ZIP: 10017

- Individual(s) citizenship, Association, General Partnership, Limited Partnership, Corporation-State, Other

If assignee is not domiciled in the United States, a domestic representative designation is attached: Yes No

(Designations must be a separate document from assignment)

Additional name(s) & address(es) attached? Yes No

4. Application number(s) or patent number(s):

A. Trademark Application No.(s)

B. Trademark Registration No.(s)

PLEASE SEE ATTACHED.

Additional numbers attached? Yes No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: PENELOPE J.A. AGODOA

Internal Address:

FEDERAL RESEARCH CORPORATION

Street Address: 400 SEVENTH STREET, NW

SUITE 101

City: WASHINGTON State: DC ZIP: 20004

6. Total number of applications and registrations involved:

7. Total fee (37 CFR 3.41): \$390

- Enclosed, Authorized to be charged to deposit account

8. Deposit account number:

(Attach duplicate copy of this page if paying by deposit account)

08/22/2001 TBIAZI 0000062 74670433

DO NOT USE THIS SPACE

01 FC:481 40.00 OP, 02 FC:482 350.00 OP

g. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

SCOTT A. ROBINSON Name of Person Signing

Signature

AUGUST 16, 2001 Date

Total number of pages including cover sheet, attachments, and document:

Mail documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks, Box Assignments Washington, D.C. 20231

(continued)

ADDITIONAL NAME OF CONVEYING PARTY:

MSP INDUSTRIES CORPORATION


Schedule II
Summary of Trademark/Service Mark
Applications, Registrations, etc.
As of July 24, 2001

1.

Logo ("AAM & Design") 

- a. USA - **Registered** (Class 7 and part of class 12)
Ser. No.: 74/670,433 Reg. Ser. No.: 2,247,899
Filing Date: 03/05/95 Reg. Date: 05/25/99
Renewal Date: 05/25/09
- aa. USA - **Registered** (class 12)
Ser. No.: 74/975,361 Reg. Ser. No.: 2,127,484
Filing Date: 05/05/95 Reg. Date: 01/06/98
Renewal Date: 01/06/08
- b. Japan - **Registered** (class 12)
Ser. No.: 7-114883 Reg. Ser. No.: 4258748
Filing Date: 11/06/95 Reg. Date: 04/02/99
Renewal Date: 04/02/09
- Divisional: **Registered** (Class 7)
Ser. No.: 10-111490 Reg. Ser. No.: 4300717
Filing Date: 12/25/98 Reg. Date: 06/30/99
Renewal Date: 06/30/09
- c. Mexico - **Registered**
Ser. No.: 247191 Reg. No. 549,865
Filing Date: 11/03/95 Reg. Date: 05/29/97
Renewal Date: 11/03/05
- d. Germany - **Registered**
Ser. No.: 39544706.2 Reg. No. 39544706
Filing Date: 11/03/95 Reg. Date: 10/23/96
Renewal Date: 11/03/05
- e. United Kingdom - **Registered**
Ser. No.: 2,043,637 Reg. No. 2043637
Filing Date: 11/06/95 Reg. Date: 07/19/96
Renewal Date: 11/06/05
- f. Canada - **Registered**
Ser. No.: 796,384 Reg. No. 537,552
Filing Date: 11/03/95 Reg. Date: 11/22/00
Renewal Date: 11/22/15
- g. Brazil - **Pending**
Ser. No.: 818889977
Filing Date: 11/06/95
- h. France - **Registered**
Ser. No.: 95595731 Reg. No. 95595731
Filing Date: 11/03/95 Reg. Date: 5/10/96
Renewal Date: 11/03/05

- i. Argentina - **Pending**
 Ser. No.: 2097620
 Filing Date: 08/12/97
- j. Indonesia - **Pending**
 Ser. No.: 097-18903
 Filing Date: 09/04/97
- k. Malaysia - **Pending**
 Ser. No.: 97-12335
 Filing Date: 08/29/97
- l. S. Korea - **Pending**
 Ser. No.: 97/37176
 Filing Date: 08/09/97
- m. Thailand - **Registered**
 Ser. No.: 346,711 Reg. No. Kor80962
 Filing Date: 10/17/97 Reg. Date: 10/29/98
 Renewal Date: 10/16/07

2. "American Axle & Manufacturing with Design". ():

- a. USA - **Registered**
 Ser. No.: 74/539,905 Reg. No. 2,161,159
 Filing Date: 06/20/94 Reg. Date: June 2, 1998
 Renewal Date: 06/02/08
 Supplemental Register Application - **Pending**
 Ser. No.: 75/245859
 Filing Date: 02/10/97
- b. Canada - **Pending**
 Ser. No.: 770,090
 Filing Date: 12/05/94
- c. Mexico - **Registered**
 Ser. No.: 219992 Reg. No. 498587
 Filing Date: 12/14/94 Reg. Date 7/26/95
 Renewal Date: 12/14/2004
- d. United Kingdom - **Registered**
 Ser. No.: 2,001,196 Reg. No. 2001196
 Filing Date: 11/08/94 Reg. Date: 11/10/95
 Renewal Date: 11/08/04
- e. Germany - **Registered**
 Ser. No.: A57958/12Wz Reg. No. 2911265
 Filing Date: 10/13/94 Reg. Date: (8/21/95)
 Renewal Date: 10/31/04
- f. France - **Registered**
 Ser. No.: 94/543,907 Reg. No. 94/543,907
 Filing Date: 09/11/94 Reg. Date: (09/11/94)
 Renewal Date: 09/11/04

- g. Japan - **Registered**
 Ser. No.: 6-128423 Reg. No. 4253018
 Filing Date: 12/20/94 Reg. Date: 03/19/99
 Renewal Date: 03/19/09
- h. Brazil - **Registered**
 Ser. No.: 818955597 Reg. No.: TBD
 Filing Date: 11/28/95 Reg. Date: 08/18/98
 Renewal Date: 08/18/08

3. **"Gem-Cote"**.

- a. USA - **Registered**
 Ser. No.: 74/651,555 Reg. No. 2,336,380
 Filing Date: 03/24/95 Reg. Date: 03/28/00
 Renewal Date: 03/28/10

4. **"Forging New World Driveline Standards"**.

- a. USA - **Registered**
 Ser. No.: 74/689,243 Reg. No. 2,011,616
 Filing Date: 06/15/95 Reg. Date: 10/29/96
 Renewal Date: 10/29/06
- b(i). Japan - **Registered** (class 42)
 Reg. No.: 4173474 Ser. No. 07/129874
 Reg. Date: 07/31/98 Filing Date 12/14/95
 Renewal Date: 07/31/08
- b(ii). Japan - **Pending**
 (Japanese Language)
 Ser. No.: 08/023546
 Filing Date: 3/06/96
- b(iii). Japan - **Pending**
 Ser. No.: 08/023544
 Filing Date: 3/06/96
- b(iv). Japan - **Registered** (class 12)
 Ser. No.: 08-023545 Reg. No.: 4266061
 Filing Date: 01/08/99 Reg. Date: 04/23/99
 Renewal Date: 04/23/09
- b(v). Japan - **Registered** (class 7)
 Ser. No.: 11-001417 Reg. No.: 4301293
 Filing Date: 01/08/99 Reg. Date: 07/30/99
 Renewal Date: 07/30/09
- c(i). Germany - **Registered**
 (English Language Servicemark)
 Serial No.: 395 50 436.8 Reg. No. 395 50 436.8
 Filing Date: 12/11/95 Reg. Date: 06/11/96
 Renewal Date: 12/11/2005

- c(ii) Germany - **Pending**
 (German Language Servicemark)
 Serial No.: 39608612.8
 Filing Date: 02/24/96
- c(iii) Germany - **Registered**
 (English Language Trademark)
 Serial No.: 39608613.6 Reg. No. 396 08 613
 Filing Date: 02/24/96 Reg. Date: 08/5/96
 Renewal Date: 02/24/2006
- d(i) Mexico - **Registered**
 (English language)
 Ser. No. 250188 Reg. No. 527,144
 Filing Date: 12/13/95 Reg. Date. 7/29/96
 Renewal Date: 12/13/05
- d(ii) Mexico - **Registered**
 (Spanish language)
 Ser. No. 277477 Reg. No. 538,898
 Filing Date: 10/22/96 Reg. Date: 12/17/96
 Renewal Date: 10/22/06
- e. United Kingdom - **Pending**
 Ser. No.: 2,048,057
 Filing Date: 01/25/96
- ee. United Kingdom - **Registered**
 Ser. No.: 2,135,276 Reg. No.: TBD
 Filing Date: 06/06/97 Reg. Date: 12/05/97
- f. Canada - **Registered**
 Ser. No.: 799942 Reg. Ser. No.: 487435
 Filing Date: 12/14/95 Reg. Date: 12/23/97

5. "**Radiax**". - **Pending**
 U.S. Ser. No.: 75/650,445
 Filing Date: 02/22/99

6. "**Powerlite**".
- a. USA - **Pending**
 Ser. No.: 75/306,731
 Filing Date: 06/11/97
 - b. Canada - **Pending**
 Ser. No.: 863,380
 Filing Date: 12/05/97
 - c. Mexico - **Pending**
 Ser. No.: 316,977
 Filing Date: 12/10/97

7. "TracRite". Differentials and light weight propeller shafts.
- a. **USA - Pending**
 Ser. No.: 75/243,706
 Filing Date: 01/31/97
 - b. **Argentina - Registered**
 Ser. No.: 2,094,985 Reg. Ser. No.: 1695804
 Filing Date: 07/29/97 Reg. Date: 10/19/98
 Renewal Date: 10/19/08
 - c. **Brazil - Pending**
 Ser. No.: 819.993.921
 Filing Date: 07/30/97
 - d. **Canada - Pending**
 Ser. No.: 851,582
 Filing Date: 07/22/97
 - e. **France - Registered**
 Ser. No.: 97/688,579 Reg. Ser. No.: 97688579
 Filing Date: 07/23/97 Reg. Date: 01/02/98
 Renewal Due: 07/23/07
 - f. **Germany - Registered**
 Ser. No.: 397 35 503.3 Reg. Ser. No.: 39735503
 Filing Date: 07/25/97 Reg. Date: 01/22/98
 Renewal Date: 07/25/07
 - g. **Indonesia - Registered**
 Ser. No.: D97/15845 Reg. Ser. No.: 421885
 Filing Date: 07/31/97 Reg. Date: 08/27/97
 Renewal Date: 07/31/07
 - h. **Malaysia - Pending**
 Ser. No.: 97-10574
 Filing Date: 07/31/97
 - i. **Mexico - Registered**
 Ser. No.: 302418 Reg. Ser. No.: 566483
 Filing Date: 07/25/97 Reg. Date: 12/10/98
 Renewal Date: 07/25/07
 - j. **S. Korea - Registered**
 Ser. No.: 97/34949 Reg. Ser. No.: 0442125
 Filing Date: 07/26/97 Reg. Date: 02/20/99
 Renewal Date: 02/20/09
 - k. **Thailand - Registered**
 Ser. No.: 348,571 Reg. Ser. No.: Kor78343
 Filing Date: 11/12/97 Reg. Date: 09/22/98
 Renewal Date: 11/12/07
 - l. **United Kingdom - Registered**
 Ser. No.: 2,140,322 Reg. Ser. No.: TBD
 Filing Date: 07/28/97 Reg. Date: 06/12/98

m. Japan - **Registered**
Ser. No.: 9-143440 Reg. Ser. No.: 4294417
Filing Date: 07/31/95 Reg. Date: 07/16/99
Renewal Date: 07/16/09

8. "**Lash Free.**" Lash free ("no lash") idler arm assemblies. - **Pending**
U.S. Ser. No.: 75/650,444
Filing Date: 02/22/99

9. "**MSP.**" Service Mark Registration for MSP Industries Corporation.
USA - **Registered**
Ser. No.: 73/788,862 / Reg. No. 1,764,025
Filing Date: 03/24/89 / Reg. Date: 04/13/93
Renewal Date: 04/13/03

10. "**MSP**" - Stylized. MSP.
USA - **Registered**
Ser. No.: 73/788,859 / Reg. No. 1,707,756
Filing Date: 03/24/89 / Reg. Date: 08/18/92
Renewal Date: 08/18/02

11. "**Warm Flow.**" MSP.
USA - **Registered**
Ser. No.: 73/311,464 / Reg. No. 1,250,947
Filing Date: 05/21/81 / Reg. Date: 09/13/83
Renewal Date: 09/13/03

12. "**TRUCKDRIVE.**" Albion Automotive. **Pending.**
European Community Trademark Application No. 000490193

13. "**POWERDENSE.**"
USA - **Pending**
Ser. No.: 76/199325
Filing Date: 01/22/01

14. "**AAM.**" (Letters Only).
USA - **Pending**
Ser. No.: 76/114347
Filing Date: 08/11/00
a. Argentina - **Pending**
Ser. No.: 2329179
Filing Date: 02/26/01
b. Australia - **Pending**
Ser. No.: 867050
Filing Date: 02/22/01

- c. Austria
 - Ser. No.: TBD
 - Filing Date: TBD
- d. Benelux (Belgium/Netherlands/Luxembourg)
 - Ser. No.: TBD
 - Filing Date: TBD
- e. Brazil – **Pending**
 - i. Ser. No.: 823600130 (Class 7)
Filing Date: 02/22/01
 - ii. Ser. No.: 823600149 (Class 12)
Filing Date: 02/22/01
- f. Canada – **Pending**
 - Ser. No.: 1093508
 - Filing Date: 02/21/01
- g. European Union – **Pending**
 - Ser. No.: 2120830
 - Filing Date: 02/27/01
- h. France – **Pending**
 - Ser. No.: 01 3 086 087
 - Filing Date: 03/01/01
- i. Germany – **Pending**
 - Ser. No.: 30114741.8/12
 - Filing Date: 03/06/01
- j. Italy – **Pending**
 - Ser. No.; MI2001C002218
 - Filing Date: 02/27/01
- k. Japan – **Pending**
 - Ser. No.: 2001-18058
 - Filing Date: 03/01/01
- l. Korea – **Pending**
 - Ser. No.: 2001-0007311
 - Filing Date: 02/27/01
- m. Malaysia – **Pending**
 - i. Ser. No.: 2001-02279 (Class 7)
Filing Date: 02/23/01
 - ii. Ser. No.; 2001-02280 (Class 12)
Filing Date: 02/23/01
- n. Mexico – **Pending**
 - i. Ser. No.: 478380 (Class 7)
Filing Date: 03/29/01
 - ii. Ser. No.: 478381 (Class 12)
Filing Date: 03/29/01
- o. Spain – **Pending**
 - Ser. No.: 2403.796
 - Filing Date: 05/28/01

- p. Sweden – ***Pending***
 - Ser. No.: 01-01327
 - Filing Date: 02/26/01
- q. Thailand – ***Pending***
 - i. Ser. No.: 450827 (Class 7)
 - Filing Date: 04/11/01
 - ii. Ser. No.: 450828 (Class 12)
 - Filing Date: 04/11/01
- r. United Kingdom
 - Ser. No.: TBD
 - Filing Date: TBD
- s. Venezuela – ***Pending***
 - i. Ser. No.: 3595-01 (Class 7)
 - Filing Date: 03/06/01
 - ii. Ser. No.: 3596-01 (Class 12)
 - Filing Date: 03/06/01

15. **"Smart Bar."** Jeff Kincaid, etc.
- USA – Pending
 - Ser. No.: 76/195290
 - Filing Date: 01/11/01
 - a. Canada
 - Ser. No.: 1107195
 - Filing Date: 06/20/01
 - b. Japan
 - Ser. No.: 2001-57203
 - Filing Date: 06/22/01
 - c. Korea
 - Ser. No.: 2001-28806
 - Filing Date: 07/02/01
 - d. Thailand
 - Ser. No.: 459079
 - Filing Date: 07/11/01

16. Albion Automotive (Holdings) Ltd. also owns numerous registrations for the "Albion" mark and related marks, none of which is registered in the U.S.

17. AAM also claims common law trademark rights in the following marks:

- a. Delivering. Power.
- b. Full-Circle Support and Design.
- c. PowerDense.
- d. PowerDuty.
- e. PowerRide
- f. I-Ride
- g. SMARTrace

SUPPLEMENT dated as of August 15, 2001, to the Intellectual Property Security Agreement dated as of October 27, 1997 (the "*Intellectual Property Security Agreement*"), made by AMERICAN AXLE & MANUFACTURING, INC., a Delaware corporation (the "*Borrower*" and, together with any U.S. Subsidiary becoming a party thereto pursuant to Section 5.11 of the Credit Agreement referred to below, the "*Grantors*") in favor of THE CHASE MANHATTAN BANK, a New York banking corporation, as collateral agent (in such capacity the "*Collateral Agent*") for the Secured Parties (as such term is defined below).

A. Reference is made to the Credit Agreement, dated as of October 27, 1997 (as the same may be amended, supplemented or otherwise modified from time to time, the "*Credit Agreement*"), among American Axle & Manufacturing of Michigan, Inc., a Michigan Corporation ("*AAMM*"), the Borrower, the Lenders (such term and each other capitalized term used but not defined having the meaning given it in Section 1.01 in the Credit Agreement), the Fronting Bank, the Administrative Agent and the Collateral Agent (the Lenders, the Fronting Bank, the Administrative Agent and the Collateral Agent, collectively, the "*Secured Parties*").

B. Capitalized terms used herein and not otherwise defined herein shall have the meanings assigned to such terms in the Intellectual Property Security Agreement and the Credit Agreement.

C. Section 4.01(e) of the Intellectual Property Security Agreement requires the Grantors to notify the Collateral Agent of all Collateral of any Grantor that has not been previously identified to the Collateral Agent. The Grantors have identified additional Collateral as set forth on the Schedules hereto. The undersigned Grantors are executing this Supplement in accordance with the requirements of the the Intellectual Property Security Agreement in order to facilitate a supplemental filing to be made by the Collateral Agent with the Patent and Trademark office.

Accordingly, the Collateral Agent and each of the Grantors agree as follows:

SECTION 1. Schedule I of the Intellectual Property Security Agreement is hereby supplemented by the information set forth in Schedule 1 hereto. Schedule II of the Intellectual Property Security Agreement is hereby supplemented by the information set forth in Schedule 2 hereto.

SECTION 2. This Supplement may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. This Supplement shall become effective when the Collateral Agent shall have received counterparts of this Supplement that, when taken together, bear the signatures of each of the Grantors and the Collateral Agent. Delivery of an executed signature page to this Supplement by facsimile transmission shall be as effective as delivery of a manually signed counterpart of this Supplement.

SECTION 3. Each of the Grantors hereby represents and warrants that the information set forth on Schedules 1 and 2 attached hereto is true and correct.

SECTION 4. Except as expressly supplemented hereby, the Intellectual Property Security Agreement shall remain in full force and effect.

SECTION 5. THIS SUPPLEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

SECTION 6. In case any one or more of the provisions contained in this Supplement should be held invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein and in the Security Agreement shall not in any way be affected or impaired thereby (it being understood that the invalidity of a particular provision in a particular jurisdiction shall not in and of itself affect the validity of such provision in any other jurisdiction). The parties hereto shall endeavor in good-faith negotiations to replace the invalid, illegal or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the invalid, illegal or unenforceable provisions.

SECTION 7. The Grantors agree to reimburse the Collateral Agent for its reasonable out-of-pocket expenses in connection with this Supplement, including the reasonable fees, other charges and disbursements of counsel for the Collateral Agent.

IN WITNESS WHEREOF, the parties hereto have duly executed this Supplement to the Intellectual Property Security Agreement as of the day and year first above written.

AMERICAN AXLE & MANUFACTURING,
INC.,

by

Robert A. Krause

Name: ROBERT A. KRAUSE

Title: V. P. + TREASURER

MSP INDUSTRIES CORPORATION,

by

Robert A. Krause

Name: ROBERT A. KRAUSE

Title: TREASURER

THE CHASE MANHATTAN BANK,
as Collateral Agent,

by



Name:

Title:

**RICHARD W. DUKER
VICE PRESIDENT**

Schedule I
Summary of U.S. Patents Owned by
American Axle & Manufacturing, Inc.,
MSP Industries Corporation, and
Colfor Manufacturing, Inc.
As of July 09, 2001

(Note: All listed patents have been assigned to American Axle & Manufacturing, Inc., unless otherwise noted.)

1. U.S. Patent No. 4,426,872 - Die Set and Billet for Use Therein (assigned to MSP Industries Corporation)
Ser. No.: 307,156
Filing Date: 09/30/81
Issue Date: 01/24/84
Expiration Date: 09/30/01
Inventor: David A. Gatny

2. U.S. Patent No. 4,762,011 - Electronic Gage
Ser. No.: 038,941
Filing Date: 04/16/87
Issue Date: 08/09/88
Expiration Date: 04/16/07
Inventor: Paravila O. Jacob

3. U.S. Patent No. 4,932,923 - Sealed Bearing Arrangement for Universal Joint
Ser. No.: 391,821
Filing Date: 08/10/89
Issue Date: 06/12/90
Expiration Date: 08/10/09
Inventor: David P. Thompson

4. U.S. Patent No. 4,970,913 - Venting Mechanism
Ser. No.: 383,902
Filing Date: 07/21/89
Issue Date: 11/20/90
Expiration Date: 07/21/09
Inventors: Stanley J. Kielar; Charles L. Rasmer; Flave F. Stimpson

5. U.S. Patent No. 5,062,656 - Flexible Link Assembly for a Vehicle Suspension System
Ser. No.: 563,150
Filing Date: 08/06/90
Issue Date: 11/05/91
Expiration Date: 08/06/10
Inventors: Ernest J. Hynds; Keith A. Stowe; David C. Cook

6. U.S. Patent No. 5,064,216 - End Link Assembly for an Automotive Vehicle Suspension System
Ser. No.: 562,976
Filing Date: 08/06/90
Issue Date: 11/12/91
Expiration Date: 08/06/10
Inventor: Ernest J. Hynds
7. U.S. Patent No. 5,186,486 - Active Link For a Stabilizer Bar
Ser. No.: 732,888
Filing Date: 07/19/91
Issue Date: 02/16/93
Expiration Date: 07/19/11
Inventors: Ernest J. Hynds; Joseph R. Marshalek
8. U.S. Patent No. 5,294,350 - Magnetic Particle Separator
Ser. No.: 042,186
Filing Date: 04/02/93
Issue Date: 03/15/94
Expiration Date: 04/02/13
Inventors: Richard J. Murphy; Anthony J. Marlow
9. U.S. Patent No. 5,320,587 - Differential Case With Ring Gear
Ser. No.: 018,593
Filing Date: 02/17/93
Issue Date: 06/14/94
Expiration Date: 02/17/13
Inventors: Joen C. Bodtker; Norman E. Schultz
10. U.S. Patent No. 5,529,316 - Adjustable Tie Rod Assembly
Ser. No.: 08/391,408
Filing Date: 02/16/95
Issue Date: 06/25/96
Expiration Date: 02/16/15
Inventors: Brian A. Mattila
11. U.S. Patent No. 5,540,300 - Drive Axle Assembly with Lubricant Cooling System
Ser. No.: 08/370,203
Filing Date: 01/09/95
Issue Date: 07/30/96
Expiration Date: 01/09/15
Inventors: James P. Downs; Dale A. Frank; Douglas B. Lutz;
Charles L. Rasmer; Norman E. Schultz

12. U.S. Patent No. 5,597,258 - Preloaded Pivot Joint
Ser. No.: 08/595,658
Filing Date: 02/02/96
Issue Date: 01/28/97
Expiration Date: 02/02/16
Inventors: Jeffrey Kincaid; Manoj Bhandiwad; Kenneth Kraft
13. U.S. Patent No. 5,672,286 - Method of Welding Aluminum Drive Shaft Components
Ser. No.: 08/692,414
Filing Date: 08/05/96
Issue Date: 09/30/97
Expiration Date: 08/05/16
Inventor: H. Wayne Seeds
14. U.S. Patent No. 5,711,393 - Drive Axle Assembly with Screw Cap
Ser. No.: 08/504,589
Filing Date: 07/20/95
Issue Date: 01/27/98
Expiration Date: 07/20/15
Inventor: Garrett W. Gage
15. U.S. Patent No. 5,806,371 - Gear Arrangement with Backlash Adjustment
Ser. No.: 08/685,040
Filing Date: 07/23/96
Issue Date: 09/15/98
Expiration Date: 07/23/16
Inventors: John C. Hibbler; Richard S. Silbert; Eric P. Jung
16. U.S. Patent No. 5,839,327 - Drive Axle Assembly With Lubricant Cooling System
Ser. No.: 08/673,498
Filing Date: 07/01/96
Issue Date: 11/24/98
Expiration Date: 07/01/16
Inventor: Garrett W. Gage
17. U.S. Patent No. 5,839,845 - Adjustable Torque Pivot Joint
Ser. No.: 08/595,659
Filing Date: 02/02/96
Issue Date: 11/24/98
Expiration Date: 02/02/16
Inventors: Jeffrey L. Kincaid; Brian A. Mattila;
Thomas J. Miller; Kenneth G. Kraft

18. U.S. Patent No. 5,865,363 - Construction and Method of Making Prop Shaft Having Enlarged End Sections
Ser. No.: 08/888,512
Filing Date: 07/07/97
Issue Date: 02/02/99
Expiration Date: 07/07/17
Inventors: Mark S. Barrett; Thomas J. Oldenburg.
19. U.S. Patent No. 5,787,753 - Apparatus and Method for Forging a Pinion Gear With a Near Net Shape (assigned to Colfor Manufacturing, Inc.)
Ser. No.: 08/742,063
Filing Date: 10/31/96
Issue Date: 08/04/98
Expiration Date: 10/31/16
Inventor: Michael C. Dougherty
20. U.S. Patent No. 5,934,135 - Apparatus and Method For Near Net Warm Forging Of Complex Parts From Axi-Symmetrical Workpieces (assigned to MSP Industries Corporation)
Ser. No.: 09/065,611
Filing Date: 04/24/98
Issue Date: 08/10/99
Expiration Date: 04/24/18
Inventor: James Webster
21. U.S. Patent No. 5,947,496 - Low Lash Idler Arm Assembly
Ser. No.: 08/942,512
Filing Date: 10/02/97
Issue Date: 09/07/99
Expiration Date: 10/02/17
Inventors: Kenneth G. Kraft; Jeffrey L. Kincaid.
22. U.S. Patent No. 5,951,431 - Differential Unit With Optimized Assembly Window Geometry
Ser. No.: 09/015,018
Filing Date: 01/29/98
Issue Date: 09/14/99
Expiration Date: 01/29/18
Inventors: James Downs; Edward Eshelman

23. U.S. Patent No. 5,954,353 - Plug In Direct Acting Stabilizer Bar Link
 Ser. No.: 09/019,836
 Filing Date: 02/06/98
 Issue Date: 09/21/99
 Expiration Date: 02/06/18
 Inventors: Jeffrey Lee Kincaid; Neil Alan Wasylewski;
 Talon Thomas Harvey; and David LeRoy Young.
24. U.S. Patent No. 5,984,823 - Differential With Shaft Locking Mechanism
 Ser. No.: 09/140,873
 Filing Date: 08/27/98
 Issue Date: 11/16/99
 Expiration Date: 08/27/18
 Inventor: Garrett W. Gage
25. U.S. Patent No. 6,007,079 - Direct Acting End Link for Stabilizer Bar
 Ser. No.: 08/863,810
 Filing Date: 05/27/97
 Issue Date: 12/28/99
 Expiration Date: 05/27/17
 Inventors: Jeffrey L. Kincaid; Talon T. Harvey; and
 Neil A. Wasylewski
26. U.S. Patent No. 6,007,080 - Plug In Direct Acting Stabilizer Bar Link
 (Note: This is a continuation patent - cross reference with U.S. Patent No.
 5,954,353)
 Ser. No.: 09/346,098
 Filing Date: 07/01/99
 Issue Date: 12/28/99
 Expiration Date: 07/01/19
 Inventors: Jeffrey L. Kincaid; Neil A. Wasylewski; Talon T.
 Harvey; and David L. Young
27. U.S. Patent No. 6,013,004 - Parallel-axis Gear Differential With Pinion Mounted Brake
 Shoes
 Ser. No.: 09/251,319
 Filing Date: 02/17/99
 Issue Date: 01/11/00
 Expiration Date: 02/17/19
 Inventors: Garrett W. Gage; James R. Zinke, II

28. U.S. Patent No. 6,019,383 - Suspension Link Assembly
 Ser. No.: 09/015,491
 Filing Date: 01/28/98
 Issue Date: 02/01/00
 Expiration Date: 01/28/18
 Inventors: Scott M. Kociba; Jeffrey L. Kincaid
29. U.S. Patent No. 6,032,507 – Pre-Bending of Workpieces in Dies in Near Net Warm Forging (assigned to MSP Industries, Inc.)
 Ser. No.: 09/144,966
 Filing Date: 09/01/98
 Issue Date: 03/07/00
 Expiration Date: 09/01/18
 Inventors: Paul P.G. McGinty; James Webster
30. U.S. Patent No. 6,032,508 – Apparatus and Method for Near Net Warm Forging of Complex Parts From Axi-Symmetrical Workpieces (assigned to MSP Industries, Inc.)
 Ser. No.: 09/065,568
 Filing Date: 04/24/98
 Issue Date: 03/07/00
 Expiration Date: 04/24/18
 Inventors: Martin J. Ashworth; Paul P.G. McGinty; James Webster
31. U.S. Patent No. 6,053,838 – Helical Differential Assembly.
 Ser. No.: 09/311,514
 Filing Date: 05/13/99
 Issue Date: 04/25/00
 Expiration Date: 05/13/19
 Inventor: Garrett W. Gage
32. U.S. Patent No. 6,076,840 – Self-Locking Plug-In Stabilizer Bar Links.
 Ser. No.: 09/081,113
 Filing Date: 05/19/98
 Issue Date: 06/20/00
 Expiration Date: 05/19/18
 Inventors: Jeffrey L. Kincaid; Scott T. Costello; Talon T. Harvey
33. 6,102,807 – Prop Shaft Having Enlarged End Sections.
 Ser. No.: 09/175,637
 Filing Date: 10/20/98
 Issue Date: 08/15/00
 Expiration Date: 10/20/18
 Inventors: Mark S. Barrett; Thomas J. Oldenburg

34. 6,139,462 – Differential With Laser Hardened Case
 Ser. No.: 09/140,872
 Filing Date: 08/27/98
 Issue Date: 10/31/00
 Expiration Date: 08/27/18
 Inventors: Garrett W. Gage; Larry G. Haske
35. 6,151,948 – Methods and Apparatuses for Producing Complex-shaped Metal Parts by Forging (assigned to MSP Industries, Inc.)
 Ser. No.: 09/257,919
 Filing Date: 02/26/99
 Issue Date: 11/28/00
 Expiration Date: 02/26/19
 Inventors: Martin J. Ashworth; James Webster; John P. Dancoe
36. 6,155,135 – Drive Unit with Lubricant Cooling Cover
 Ser. No.: 09/197,779
 Filing Date: 11/23/98
 Issue Date: 12/05/00
 Expiration Date: 11/23/18
 Inventors: Garrett W. Gage; Joseph M. Endreszl
37. 6,162,126 – Universal Joint
 Ser. No.: 09/189,886
 Filing Date: 11/11/98
 Issue Date: 12/19/00
 Expiration Date: 11/11/18
 Inventors: Mark S. Barrett; Robert B. Horton; Larry L. Cramer, deceased. (by Suzanne M. Cramer, executor)
38. 6,178,800 B1 – Zone Heating Methods and Apparatuses for Metal Workpieces for Forging. (assigned to MSP Industries, Inc.)
 Ser. No.: 09/114/970
 Filing Date: 07/14/98
 Issue Date: 01/30/01
 Expiration Date: 07/14/18
 Inventors: Kevin Edmonds; Jeffery Stenger
39. 6,189,413 – Captive Molding With Dissimilar Material Insert.
 Ser. No.: 09/351,612
 Filing Date: 07/12/99
 Issue Date: 02/20/01
 Expiration Date: 07/12/19
 Inventors: David M. Morse; Rajendra G. Kumashi

40. 6,254,114 – Composite Stabilizer Bar Link.

Ser. No.: 09/189,165

Filing Date: 11/09/98

Issue Date: 07/03/01

Expiration Date: 11/09/18

Inventors: Jared C. Pulling; Jeffrey L. Kincaid; Darrell L. Jacques

Schedule I
Summary of Pending U.S. Patent Applications
(and Corresponding Foreign Patent Applications)
Owned by American Axle & Manufacturing, Inc.,
MSP Industries Corporation, and Colfor Manufacturing, Inc.
July 23, 2000

1. Preloaded Pivot Joint

Inventors: Jeffrey Kincaid; Manoj Bhandiwad; Kenneth Kraft
Corresponds to **U.S. PATENT NO. 5,597,258**
Issue Date: 01/28/97
Expiration Date: 02/02/16

 - a. BRAZIL
Serial No.: PI 9700805-2
Filing Date: January 28, 1997
 - b. MEXICO
Serial No.: 966307
Filing Date: 112/11/96

2. Dynamically Balanced Driveshaft Assembly and Method of Balancing Same

Inventors: Harold W. Seeds, Robin E. Eastman
Serial No.: 60/005,645 (Provisional)
Filing Date: 10/19/95 (Provisional)
Serial No.: 08/691,193 (Non-provisional)
Filing Date: 08/05/96 (Non-provisional)

 - a. BRAZIL
Ser. No.: PI 9605138-8
Filing Date: 10/15/96
 - b. EPC (U.K., FRANCE, GERMANY, ITALY, AND SPAIN)
Ser. No.: 96305208.9
Filing Date: 07/16/96
 - c. SOUTH KOREA
Ser. No.: 96-28662
Filing Date: 07/16/96
 - d. MEXICO
Ser. No.: 96-2456
Filing Date: 06/24/96
 - e. THAILAND
Ser. No.: 032029
Filing Date: 06/21/96

3.

Drive Axle Assembly with Lubricant Cooling System.

Inventors: James P. Downs, Sale A. Frank, Douglas B. Lutz, Charles L. Rasmer, Norman E. Schultz

Corresponds to **U.S. PATENT NO. 5,540,300**

Date of Issue: 07/30/96

Expiration Date: 01/09/15

a. **BRAZIL**

Ser. No.: PI 9600059-7

Filing Date: 01/08/96

b. **THAILAND.**

Serial No.: 029399

Filing Date: 12/21/95

c. **MEXICO – Issued.**

Serial No. 96-0157

Patent No.: 196,895

Filing Date: 01/09/96

Issue Date: 06/08/00

Exp. Date: 01/09/16

4.

Drive Axle Assembly with Lubricant Cooling System

Inventor: Garrett Gage

Corresponds to **U.S. PATENT NO. 5,839,327**

Issue Date: 11/24/98

Expiration Date: 07/01/16

a. **BRAZIL – Issued.**

Ser. No.: PI 9603725-3

Patent No.: PI 9603725-3

Filing Date: 09/10/96

Issue Date: 02/20/01

Exp. Date: 09/10/16

b. **EPC (U.K., FRANCE, GERMANY, ITALY, AND SPAIN) – ISSUED**

Ser. No. 96 306657.6

Patent No.: 0763676

Filing Date: 09/13/96

Patent Date: 02/28/01

Exp. Date: 09/13/16

c. **MEXICO – ABANDON- effective 2005**

Ser. No.: 964141

Filing Date: 09/18/96

d. **THAILAND**

Ser. No.: 033174

Filing Date: 09/10/96

5. Adjustable Tie Rod Assembly.

Inventor: Brian Mattila
Corresponds to **U.S. PATENT NO. 5,529,316**
Date of Issue: 06/25/96
Expiration Date: 02/16/15

a. **MEXICO – Issued.**

Serial No.: 960,583 Patent No.: 195734
Convention Filing Date: 2/16/95 Issue Date: 03/28/00
Exp. Date: 02/13/16

b. **BRAZIL – Issued.**

Serial No.: 9600383-9 Patent No.: PI 9600383-9
Filing Date: 02/12/96 Issue Date: 10/31/00
Exp. Date: 02/12/16

c. **THAILAND**

Serial No.: 030087
Filing Date: 02/15/96

6. Method of Welding Aluminum Driveshaft Components.

Inventor: H. Wayne Seeds
Corresponds to **U.S. PATENT NO. 5,672,286**
Issue Date: 09/30/97
Expiration Date: 08/15/16

a. **SOUTH KOREA**

Ser. No.: 96-25567
Filing Date: 06/29/96

b. **POLAND**

Ser. No.: P-316 072
Filing Date: 09/13/96

c. **THAILAND**

Ser. No.: 032330
Filing Date: 06/21/96

7. Drive Axle Assembly with Screw Cap

Inventor: Garrett W. Gage.
Corresponding to **U.S. PATENT NO. 5,711,393**
Issue Date: 01/27/98
Expiration Date: 07/20/15

a. **BRAZIL - Issued**

Ser. No.: PI 9603107-7 Patent No.: PI 9603107-7
Filing Date: 07/17/96 Issue Date: 11/14/00
Exp. Date: 07/17/16

- b. EPC (U.K., FRANCE, GERMANY, ITALY, AND SPAIN)
Serial No.: 96303432.7
Filing Date: 05/15/96
- c. JAPAN
Serial No.: 08-189251
Filing Date: 07/20/95
- d. MEXICO – *Issued*.
Serial No.: 96-1841 Patent No.: 195,740
Filing Date: 05/16/96 Issue Date: 03/28/00
Exp. Date: 05/16/16
- e. THAILAND
Ser. No.: 031288
Filing Date: 05/08/96

8.

Adjustable Torque Pivot Joint (f/k/a Adjustable Torque Axial Joint).

Inventors: Jeffrey Kincaid; Brian A. Mattila; Thomas J. Miller;
Kenneth G. Kraft

Corresponding to U.S. PATENT NO. 5,839,845

Issue Date: 11/24/98

Expiration Date: 02/02/16

Continuation in Part

Ser. No.: 08/754,546

Filing Date: 11/21/96

- a. BRAZIL
Ser. No.: PI 9700804-4
Filing Date: 01/28/97
- b. CANADA
Serial No.: 2195295
Filing Date: 01/16/97
- c. MEXICO – *Issued*.
Ser. No.: 97-0729 Patent No.: 197,584
Filing Date: January 29, 1997 Issue Date: 07/17/00
Exp. Date: 01/29/17
- d. THAILAND
Ser. No.: 035,443
Filing Date: January 28, 1997

9.

Gear Arrangement with Backlash Adjustment

Inventors: John Hibler, Rick Silbert, Eric Jung.

Corresponding to U.S. PATENT NO. 5,806,371

Issue Date: 09/15/98

Expiration Date: 07/23/16

a. BRAZIL

Ser. No.: PI 9704057-6

Filing Date: 07/22/97

b. MEXICO

Serial No.: 972062

Filing Date: 03/19/97

10.

Universal Joint.

Inventors: Mark Barrett, Robert Horton, & Larry Cramer.

Corresponding to U.S. PATENT NO. 6,162,126

Issue Date: 12/19/00

Expiration Date: 11/11/18

a. MEXICO

Ser. No.: 990519

Filing Date: 01/12/99

b. BRAZIL

Ser. No.: PI 9900034-2

Filing Date: 01/11/99

11.

Differential Unit with Optimized Assembly Window Geometry

Inventores: James Downs and Edward Eshelman.

Corresponding to U.S. PATENT NO. 5,951,431

Issue Date: 09/14/99

Expiration Date: 01/29/18

a. Germany

Ser. No.: 19820206.7

Filing Date: May 6, 1998

b. Japan

Ser. No.: 123507/98

Filing Date: May 6, 1998

c. Mexico

Ser. No.: 983411

Filing Date: 04/30/98

12. Low Lash Idler Arm Assembly.

Inventors: Ken Kraft and Jeff Kincaid.
Corresponding to **U.S. PATENT NO. 5,947,496**
Issue Date: 09/07/99
Expiration Date: 10/02/17

a. Brazil

Ser. No.: PI 9801514-1
Filing Date: 04/29/98

b. Canada – ABANDON (Effective 05/01/02)

Ser. No.: 2,236,539
Filing Date: 05/01/98

c. Germany

Ser. No.: 19819514.1
Filing Date: 04/30/98

d. Mexico

Ser. No.: 983223
Filing Date: 04/24/98

e. Thailand Examination postponed – effective 01/March/01

Ser. No.: 043610
Filing Date: 04/30/98

13. Aluminum Drive Shaft.

Inventors: Marc Menosky and Mark Barrett.
Ser. No.: 08/743,400
Filing Date: November 1, 1996
Continuation Application: Ser. No. 09/027,082
Filing Date: 02/20/98

a. BRAZIL

Ser. No.: PI 9705209-4
Filing Date: October 31, 1997

14. Construction and Method of Making Prop Shaft Having Enlarged End Sections

Inventors; Mark Barrett and Tom Oldenburg.
Corresponding to **U.S. PATENT NO. 5,865,363**
Issue Date: 02/02/99
Expiration Date: 07/07/17

a. Brazil

Ser. No.: PI 9802402-7
Filing Date: 07/06/98

b. Canada

Ser. No.: 2242154
Filing Date: 07/03/98

c. Thailand
Ser. No.: 044728
Filing Date: 07/02/98

15. Direct Acting End Link for Stabilizer Bar.

Inventors: Jeff Kincaid, Talon Harvey, Neil Wasylewski.
Corresponds to **U.S. PATENT NO. 6,007,079**
Issue Date: 12/28/99
Expiration Date: 05/27/17

- a. Brazil
Serial No.: PI 9800608.8
Filing Date: February 13, 1998
- b. Germany
Serial No.: 19805810.1
Filing Date: February 12, 1998
- c. Mexico
Serial No.: 981112
Filing Date: 02/10/98
- d. Thailand Examination Postponed
Serial No.: 042224
Filing Date: February 12, 1998

16. Suspension Link Assembly.

Inventors: Scott Kociba and Jeff Kincaid.
Corresponds to **U.S. PATENT NO. 6,019,383**
Issue Date: 02/01/00
Expiration Date: 01/28/18

PCT Application: Ser. No. PCT/US99/01678
Filing Date – 01/27/99
International Publication WO 99/38717 – Pub. 08/05/99
(Designated Brazil, Canada, Mexico, and EPC)

- a. Brazil
Serial No.: TBD
Filing Date: TBD
- b. Canada
Serial No.: TBD
Filing Date: TBD
- c. Mexico
Serial No.: TBD
Filing Date: TBD
- d. Thailand
Serial No.: 048398
Filing Date: 01/27/99

17.a

Plug-In End Link for Stabilizer Bar.

Inventors: Jeffrey Lee Kincaid, Neil Alan Wasylewski, Talon Thomas
Harvey, and David LeRoy Young.

Corresponds to **U.S. PATENT NO. 5,954,353**

Issue Date: 09/21/99

Expiration Date: 02/06/18

- a. Germany
 - Serial No.: 199035628
 - Filing Date: 01/29/99
- b. Mexico
 - Serial No.: 991315
 - Filing Date: 02/08/99
- c. Thailand
 - Serial No.: 048467
 - Filing Date: 02/01/99

17.b

Plug-In End Link for Stabilizer Bar

(Continuation Application to cover "silent block" feature):

Corresponds to **U.S. PATENT NO. 6,007,080**

Issue Date: 12/28/99

Expiration Date: 07/01/19

- a. Brazil
 - Ser. No.: TBD
 - Filing Date: TBD
- b. EPC
 - Serial No.: 00111024.6
 - Filing Date: 05/31/00
- c. Japan
 - Serial No.: 2000,198135
 - Filing Date: 06/30/00
- d. Korea
 - Ser. No.: TBD
 - Filing Date: TBD
- e. Germany
 - Ser. No.: 19903562.8
 - Filing Date: 01/29/99

18. Differential with Laser Hardened Case.
Inventors: Garrett Gage and Larry Haske.
Corresponds to **U.S. PATENT NO. 6,139,462**
Issue Date: 10/31/00
Expiration Date: 08/27/18
- a. Brazil
Serial No.: TBD
Filing Date: TBD
- b. Canada
Serial No.: TBD
Filing Date: TBD
- c. Germany
Serial No.: 19940788.6
Filing Date: August 27, 1999
- d. Japan
Serial No.: 240047/99
Filing Date: August 26, 1999
- e. Thailand
Serial No.: 052374
Filing Date: August 23, 1999

19. Drive Unit with Lubricant Cooling Cover.
Inventors: Garrett Gage and Joseph Endreszl.
Corresponds to **U.S. PATENT NO. 6,155,135**
Issue Date: 12/05/00
Expiration Date: 11/23/1816
- a. EPC
Serial No.: 99123312.3
Filing Date: 11/22/99

20. Differential with Shaft Locking Mechanism.
Inventor: Garrett Gage.
Corresponds to **U.S. PATENT NO. 5,984,823**
Issue Date: 11/16/99
Expiration Date: 08/27/18
- a. Brazil
Serial No.: TBD
Filing Date: TBD
- b. Canada
Serial No.: TBD
Filing Date: TBD

- c. Germany
 - Serial No.: 19940827.0
 - Filing Date: August 27, 1999
- d. Japan
 - Serial No.: 240048/99
 - Filing Date: August 26, 1999
- e. Thailand
 - Serial No.: 052375
 - Filing Date: August 23, 1999

21.

Hybrid Ball Stud.

Inventors: Jeffrey Kincaid; Neal A. Wasylewski; Brian A. Mattila
 Ser. No.: 09/115,084
 Filing Date: July 14, 1998

- a. Brazil
 - Serial No.: TBD
 - Filing Date: TBD
- b. Canada
 - Serial No.: TBD
 - Filing Date: TBD
- c. Germany
 - Serial No.: 199329516
 - Filing Date: July 14, 1999
- d. Japan
 - Serial No.: 231821/99
 - Filing Date: July 14, 1999
- e. Mexico
 - Serial No.: 996514
 - Filing Date: July 13, 1999
- f. Thailand
 - Serial No.: 051654
 - Filing Date: July 13, 1999

22.

Helical Gear Differential With Geared Lube Pump.

Inventors: James R. Zinke II; Garrett W. Gage.
 Ser. No.: 09/533,056
 Filing Date: March 22, 2000

23.

Composite Stabilizer Bar Link.

Inventors: Jared Pulling; Jeffrey Kincaid; Darrell Jacques.

Corresponds to **U.S. PATENT NO. 6,254,114**

Issue Date: 07/03/01

Expiration Date: 11/09/18

a. Brazil

Ser. No.: TBD

Filing Date: TBD

b. Canada

Ser. No.: TBD

Filing Date: TBD

c. Japan

Ser. No.; TBD

Filing Date: TBD

d. Mexico

Ser. No.: 9910268

Filing Date: 11/09/99

24.

Parallel-Axis Gear Differential with Pinion Mounted Brake Shoes

Inventors: Garrett Gage; James Zinke, II.

Corresponds to **U.S. PATENT NO. 6,013,004**

Issue Date: 01/11/00

Expiration Date: 02/17/19

a. Brazil

Ser. No.: TBD

Filing Date: TBD

b. Canada

Ser. No.: 2,298,818

Filing Date: 02/16/00

c. EPC (France, Germany, Italy, Spain, U.K.)

Ser. No.: 00301250.7

Filing Date: 02/17/00

d. Japan

Ser. No.: 2000-40024

Filing Date: 02/17/00

e. Mexico

Ser. No.: 001658

Filing Date: 02/17/00

25. Hydraulic Anti-Roll Suspension System for Motor Vehicles.
Inventors: Jeffrey Kincaid; Jared Pulling; Neil Wasylewski.
Ser. No.: 09/539,086
Filing Date: 03/30/00

- a. EPC - Pending
Ser. No.: 01108198.1
Filing Date: 03/30/01

26. Helical Differential Assembly
Inventor: Garrett Wayne Gage.
Corresponds to **U.S. PATENT NO. 6,053,838**
Issue Date: 04/25/00
Expiration Date: 05/13/19

- a. Brazil
Ser. No.: TBD
Filing Date: TBD
- b. Canada
Ser. No.: TBD
Filing Date: TBD
- c. Japan
Ser. No.: TBD
Filing Date: TBD
- d. EPC (Germany, France, Spain, Italy, U.K.)
Ser. No.: TBD
Filing Date: TBD

27. Captive Molding with Dissimilar Material Insert.
Inventors: David Morse; Rajendra Kumashi.
Corresponds to **U.S. PATENT NO. 6,189,413**
Issue Date: 02/20/01
Expiration Date: 07/12/19

- a. PCT (desig. Brazil, Japan, Korea, France, Germany, Italy, Spain, U.K.)
Ser. No.: TBD
Filing Date: TBD
- b. Brazil
Ser. No.: TBD
Filing Date: TBD
- c. EPC (France, Germany, Italy, Spain, U.K.)
Ser. No.; TBD
Filing Date: TBD

- d. Japan
 - Ser. No.: TBD
 - Filing Date: TBD
- e. Korea
 - Ser. No.: TBD
 - Filing Date: TBD

28. Self-locking "Plug-in" Stabilizer Bar Link Mechanism.

Inventors: Jeffrey Kincaid; David Young; Neil Wasylewski.
Ser. No.: 09/576,110
Filing Date: 05/22/00

- a. PCT
 - Ser. No.: TBD
 - Filing Date: 05/22/01

29. Power on Demand Differential.

Inventors: John Hibbler; David Morse; Rajendra Kumashi.
Ser. No.: 09/782,700
Filing Date: 02/13/01

30. Tie Rod Assembly Designed for Automated Toe Set.

Inventors: Jeffrey Kincaid; Manoj Bhandiwad.
Ser. No.: 09/576,114
Filing Date: 05/22/00

- a. PCT
 - Ser. No.: PCT/US01/16620
 - Filing Date: 05/22/01

31. Universal Joint.

Inventors: Robert Wehner; Thomas Oldenburg; Donald Kurecka;
Salvatore Grupido.
Ser. No.: 09/496,255
Filing Date: 02/01/00

- a. Brazil
 - Ser. No.: TBD
 - Filing Date: TBD
- b. EPC
 - Ser. No.: PI0100820-0
 - Filing Date: 02/01/01
- c. Japan
 - Ser. No.: TBD
 - Filing Date: TBD

d. Korea - Pending
Ser. No.: 2001-0004786
Filing Date: 02/01/01

32. Aluminum Propeller Shaft With a CV Joint.

Inventor: Michael Duddy.
Ser. No.: 09/494,696
Filing Date: 01/31/00

- a. Brazil – Pending
Ser. No.: PI 0100229-5
Filing Date: 01/31/01
- b. EPC – Pending
Ser. No.: 01 101 273.9
Filing Date: 01/19/01
- c. Japan – Pending
Ser. No.: 2001-19905
Filing Date: 01/29/01
- d. Korea – Pending
Ser. No.: 2001-0004594
Filing Date: 01/31/01

33. Assembly Vent for Boot/Seal Installation.

Inventor: Thomas Oldenburg.
Ser. No.: 09/519,054
Filing Date: 03/03/00

34. Integral Seal Protector/Labyrinth.

Inventor: John Hibbler; David Morse; Rajendra Kumashi.
Ser. No.: 09/520,269
Filing Date: 03/07/00

35. Universal Joint With Thrust Washer

Inventors: Donald Joseph Kurecka; Salvatore Nicola Grupido.
Ser. No.: 60/127,940 (Provisional) / 09/540,221 (Non-provisional)
Filing Date: 04/06/99 (Provisional) / 03/31/00 (Non-provisional)

- a. Brazil
Ser. No.: TBD
Filing Date: TBD
- b. Canada
Ser. No.: 2,303,744
Filing Date: 04/04/00
- c. Japan
Ser. No.: 2000-105449
Filing Date: 04/06/00

- d. Mexico
 - Ser. No.: 003382
 - Filing Date: 04/06/00
- e. Europe (Germany, Spain, France, Italy, U.K.)
 - Ser. No.: 00107098.6
 - Filing Date: 04/06/00

36.a One Piece Differential Bearing Adjuster Lock and Fastener

Inventors: David Morse; Jill Gnass; Joseph Endreszl.
Ser. No.: 09/535,623
Filing Date: 03/27/00

- a. Brazil
 - Ser. No: TBD
 - Filing Date: TBD
- b. EPC
 - Ser. No.: 01105180.2 - 1254
 - Filing Date: 03/02/01
- c. Japan
 - Ser. No: TBD
 - Filing Date: TBD
- d. Korea
 - Ser. No.: TBD
 - Filing Date: TBD

36.b One Piece Differential Bearing Adjuster Lock and Fastener

(Divisional application for method).

U.S. Ser. No.: 09/844,101
Filing Date: 04/27/01

37. Cover Pan ABS Sensor.

Inventors: Dale Dick, Jr.; Joseph Endreszl.
Ser. No.: 09/533,060
Filing Date: 03/22/00

38. Cover Pan Mounted Vent Connector.

Inventor: Joseph Endreszl.
Ser. No.: 09/652,200
Filing Date: 08/31/00

39. Semi-Active Anti-Roll System.

Inventors: Brian Mattila; Jeffrey Kincaid.
Ser. No.: 09/663,613
Filing Date: 09/18/00

40. Isolation Ball Joint for Steering and Suspension Harshness Reduction.
Inventors: Neil Wasylewski; Jeffrey Kincaid.
Ser. No.: 09/755,536
Filing Date: 01/05/01
41. Pre-Bending of Workpieces in Dies in Near Net Warm Forging
MSP Industries Corporation
Inventors: Paul P.G. McGinty, James Webster
Corresponding to U.S. PATENT NO. 6,032,507
Issue Date: 03/07/00
Expiration Date: 09/01/18
- a. Brazil
Ser. No: PI 9903991-5
Filing Date: 09/01/99
- b. Mexico
Ser. No.: 998031
Filing Date: TBD
42. Apparatus and Method for Near Net Warm Forging of Complex Parts from Axial-Symmetrical Workpieces.
MSP Industries Corporation
Inventors: Martin Ashworth; Paul P.G. McGinty; James Webster
Corresponds to Patent No. 6,032,508
Issue Date: 03/07/00
Expiration Date: 04/24/18
43. Boron Carbide Aluminum Driveshaft Tube.
Inventors: Donald Kurecka; Karthik Sivakumar.
U.S. Ser. No.: TBD
Filing Date: 06/08/01
44. Integrated Heat Exchange Circuit for an Axle.
Inventors: David Morse; Michael Bommarito.
U.S. Ser. No.: 09/742,828
Filing Date: 12/20/00

45. Apparatus and Method for Forging a Pinion With a Near Net Shape.

Colfor Manufacturing, Inc.

Inventor: Michael C. Dougherty

Corresponds to U.S. PATENT NO. 5,787,753

Issue Date: 08/04/98

Expiration Date: 10/31/16

a. Argentina - *Issued*

Ser. No.: P96 01 04991 / Patent No.: AR004704B1

Filing Date: 10/31/95 / Issued Date: 11/30/00

/ Exp. Date: 10/31/16

b. Brazil

Ser. No.: P1 9611203-4

Filing Date: 04/29/98

c. EPC *ISSUED.*

Ser. No.: 96 937 888.4

Filing Date: 10/31/96

Germany Patent No.: 969 06 422.7-08 (Germany issues its own #)

d. Mexico - *Issued.*

Ser. No.: 974916 - Reg. No.: 200769

Filing Date: 06/27/97 - Issue Date: 02/02/01

e. Japan

Ser. No.: 517598/1997

Filing Date: 10/31/96

46. Active Vibration Cancellation of Gear Mesh Vibration.

Inventors: Michael Voight; Jeffrey Heaton; Daniel Sagady, David P. Schankin, Rachel Dudley

Ser. No.: 60/199,971 (Provisional) / 09/796,205 (Nonprovisional)

Filing Date: 02/28/01 (Provisional) / TBD (Non-provisional)

a. PCT

Ser. No.: PCT/US01/13433

Filing Date: 04/27/01

47. Robust, Low Mass Stab Bar Link Assembly.

Inventors: Jeffrey Kincaid; Manoj Bhandiwad; Kurt Hauser.

Ser. No.: 09/737,061

Filing Date: 12/14/00

48. Apparatus and Method for Coupling a Disconnectible Stabilizer Bar System.

Inventors: Tom Ignatius; Jeffrey Kincaid; William Reid Jr.; Peter Asmaro.

Ser. No.: 60/273,779 (Provisional)

Filing Date: 03/03/01 (Provisional)

49.

Two Piece Axle Shaft.

Inventor: Bryan Prucher

Ser. No.: TBD

Filing Date: TBD

50.


Method of Balancing a Driveshaft Using Material Removal Process.

Inventors: Mark Barrett; Karthik Sivakumar; Marc Menosky.

Ser. No.: TBD

Filing Date: TBD

Schedule II
Summary of Trademark/Service Mark
Applications, Registrations, etc.
As of July 24, 2001

Logo ("AAM & Design").

- a. USA - **Registered** (Class 7 and part of class 12)
Ser. No.: 74/670,433 Reg. Ser. No.: 2,247,899
Filing Date: 03/05/95 Reg. Date: 05/25/99
Renewal Date: 05/25/09
- aa. USA - **Registered** (class 12)
Ser. No.: 74/975,361 Reg. Ser. No.: 2,127,484
Filing Date: 05/05/95 Reg. Date: 01/06/98
Renewal Date: 01/06/08
- b. Japan - **Registered** (class 12)
Ser. No.: 7-114883 Reg. Ser. No.: 4258748
Filing Date: 11/06/95 Reg. Date: 04/02/99
Renewal Date: 04/02/09
- Divisional: **Registered** (Class 7)
Ser. No.: 10-111490 Reg. Ser. No.: 4300717
Filing Date: 12/25/98 Reg. Date: 06/30/99
Renewal Date: 06/30/09
- c. Mexico - **Registered**
Ser. No.: 247191 Reg. No. 549,865
Filing Date: 11/03/95 Reg. Date: 05/29/97
Renewal Date: 11/03/05
- d. Germany - **Registered**
Ser. No.: 39544706.2 Reg. No. 39544706
Filing Date: 11/03/95 Reg. Date: 10/23/96
Renewal Date: 11/03/05
- e. United Kingdom - **Registered**
Ser. No.: 2,043,637 Reg. No. 2043637
Filing Date: 11/06/95 Reg. Date: 07/19/96
Renewal Date: 11/06/05
- f. Canada - **Registered**
Ser. No.: 796,384 Reg. No. 537,552
Filing Date: 11/03/95 Reg. Date: 11/22/00
Renewal Date: 11/22/15
- g. Brazil - **Pending**
Ser. No.: 818889977
Filing Date: 11/06/95
- h. France - **Registered**
Ser. No.: 95595731 Reg. No. 95595731
Filing Date: 11/03/95 Reg. Date: 5/10/96
Renewal Date: 11/03/05

- i. Argentina - **Pending**
 Ser. No.: 2097620
 Filing Date: 08/12/97
- j. Indonesia - **Pending**
 Ser. No.: 097-18903
 Filing Date: 09/04/97
- k. Malaysia - **Pending**
 Ser. No.: 97-12335
 Filing Date: 08/29/97
- l. S. Korea - **Pending**
 Ser. No.: 97/37176
 Filing Date: 08/09/97
- m. Thailand - **Registered**
 Ser. No.: 346,711 Reg. No. Kor80962
 Filing Date: 10/17/97 Reg. Date: 10/29/98
 Renewal Date: 10/16/07

2. **"American Axle & Manufacturing with Design"**. ():

- a. USA - **Registered**
 Ser. No.: 74/539,905 Reg. No. 2,161,159
 Filing Date: 06/20/94 Reg. Date: June 2, 1998
 Renewal Date: 06/02/08
 Supplemental Register Application - **Pending**
 Ser. No.: 75/245859
 Filing Date: 02/10/97
- b. Canada - **Pending**
 Ser. No.: 770,090
 Filing Date: 12/05/94
- c. Mexico - **Registered**
 Ser. No.: 219992 Reg. No. 498587
 Filing Date: 12/14/94 Reg. Date 7/26/95
 Renewal Date: 12/14/2004
- d. United Kingdom - **Registered**
 Ser. No.: 2,001,196 Reg. No. 2001196
 Filing Date: 11/08/94 Reg. Date: 11/10/95
 Renewal Date: 11/08/04
- e. Germany - **Registered**
 Ser. No.: A57958/12Wz Reg. No. 2911265
 Filing Date: 10/13/94 Reg. Date: (8/21/95)
 Renewal Date: 10/31/04
- f. France - **Registered**
 Ser. No.: 94/543,907 Reg. No. 94/543,907
 Filing Date: 09/11/94 Reg. Date: (09/11/94)
 Renewal Date: 09/11/04

- g. Japan - **Registered**
 Ser. No.: 6-128423 Reg. No. 4253018
 Filing Date: 12/20/94 Reg. Date: 03/19/99
 Renewal Date: 03/19/09
- h. Brazil - **Registered**
 Ser. No.: 818955597 Reg. No.: TBD
 Filing Date: 11/28/95 Reg. Date: 08/18/98
 Renewal Date: 08/18/08

3. "Gem-Cote".

- a. USA - **Registered**
 Ser. No.: 74/651,555 Reg. No. 2,336,380
 Filing Date: 03/24/95 Reg. Date: 03/28/00
 Renewal Date: 03/28/10

4. "Forging New World Driveline Standards".

- a. USA - **Registered**
 Ser. No.: 74/689,243 Reg. No. 2,011,616
 Filing Date: 06/15/95 Reg. Date: 10/29/96
 Renewal Date: 10/29/06
- b(i). Japan - **Registered** (class 42)
 Reg. No.: 4173474 Ser. No. 07/129874
 Reg. Date: 07/31/98 Filing Date 12/14/95
 Renewal Date: 07/31/08
- b(ii). Japan - **Pending**
 (Japanese Language)
 Ser. No.: 08/023546
 Filing Date: 3/06/96
- b(iii). Japan - **Pending**
 Ser. No.: 08/023544
 Filing Date: 3/06/96
- b(iv). Japan - **Registered** (class 12)
 Ser. No.: 08-023545 Reg. No.: 4266061
 Filing Date: 01/08/99 Reg. Date: 04/23/99
 Renewal Date: 04/23/09
- b(v). Japan - **Registered** (class 7)
 Ser. No.: 11-001417 Reg. No.: 4301293
 Filing Date: 01/08/99 Reg. Date: 07/30/99
 Renewal Date: 07/30/09
- c(i). Germany - **Registered**
 (English Language Servicemark)
 Serial No.: 395 50 436.8 Reg. No. 395 50 436.8
 Filing Date: 12/11/95 Reg. Date: 06/11/96
 Renewal Date: 12/11/2005

- c(ii) Germany - **Pending**
 (German Language Servicemark)
 Serial No.: 39608612.8
 Filing Date: 02/24/96
- c(iii) Germany - **Registered**
 (English Language Trademark)
 Serial No.: 39608613.6 Reg. No. 396 08 613
 Filing Date: 02/24/96 Reg. Date: 08/5/96
 Renewal Date: 02/24/2006
- d(i). Mexico - **Registered**
 (English language)
 Ser. No. 250188 Reg. No. 527,144
 Filing Date: 12/13/95 Reg. Date. 7/29/96
 Renewal Date: 12/13/05
- d(ii) Mexico - **Registered**
 (Spanish language)
 Ser. No. 277477 Reg. No. 538,898
 Filing Date: 10/22/96 Reg. Date: 12/17/96
 Renewal Date: 10/22/06
- e. United Kingdom - **Pending**
 Ser. No.: 2,048,057
 Filing Date: 01/25/96
- ee. United Kingdom - **Registered**
 Ser. No.: 2,135,276 Reg. No.: TBD
 Filing Date: 06/06/97 Reg. Date: 12/05/97
- f. Canada - **Registered**
 Ser. No.: 799942 Reg. Ser. No.: 487435
 Filing Date: 12/14/95 Reg. Date: 12/23/97

5. **"Radiax"** - **Pending**
 U.S. Ser. No.: 75/650,445
 Filing Date: 02/22/99

6. **"Powerlite"**.
- a. USA - **Pending**
 Ser. No.: 75/306,731
 Filing Date: 06/11/97
 - b. Canada - **Pending**
 Ser. No.: 863,380
 Filing Date: 12/05/97
 - c. Mexico - **Pending**
 Ser. No.: 316,977
 Filing Date: 12/10/97

7. "TracRite". Differentials and light weight propeller shafts.
- a. USA - Pending
 Ser. No.: 75/243,706
 Filing Date: 01/31/97
 - b. Argentina - Registered
 Ser. No.: 2,094,985 Reg. Ser. No.: 1695804
 Filing Date: 07/29/97 Reg. Date: 10/19/98
 Renewal Date: 10/19/08
 - c. Brazil - Pending
 Ser. No.: 819.993.921
 Filing Date: 07/30/97
 - d. Canada - Pending
 Ser. No.: 851,582
 Filing Date: 07/22/97
 - e. France - Registered
 Ser. No.: 97/688,579 Reg. Ser. No.: 97688579
 Filing Date: 07/23/97 Reg. Date: 01/02/98
 Renewal Due: 07/23/07
 - f. Germany - Registered
 Ser. No.: 397 35 503.3 Reg. Ser. No.: 39735503
 Filing Date: 07/25/97 Reg. Date: 01/22/98
 Renewal Date: 07/25/07
 - g. Indonesia - Registered
 Ser. No.: D97/15845 Reg. Ser. No.: 421885
 Filing Date: 07/31/97 Reg. Date: 08/27/97
 Renewal Date: 07/31/07
 - h. Malaysia - Pending
 Ser. No.: 97-10574
 Filing Date: 07/31/97
 - i. Mexico - Registered
 Ser. No.: 302418 Reg. Ser. No.: 566483
 Filing Date: 07/25/97 Reg. Date: 12/10/98
 Renewal Date: 07/25/07
 - j. S. Korea - Registered
 Ser. No.: 97/34949 Reg. Ser. No.: 0442125
 Filing Date: 07/26/97 Reg. Date: 02/20/99
 Renewal Date: 02/20/09
 - k. Thailand - Registered
 Ser. No.: 348,571 Reg. Ser. No.: Kor78343
 Filing Date: 11/12/97 Reg. Date: 09/22/98
 Renewal Date: 11/12/07
 - l. United Kingdom - Registered
 Ser. No.: 2,140,322 Reg. Ser. No.: TBD
 Filing Date: 07/28/97 Reg. Date: 06/12/98

m. Japan - **Registered**
Ser. No.: 9-143440 Reg. Ser. No.: 4294417
Filing Date: 07/31/95 Reg. Date: 07/16/99
Renewal Date: 07/16/09

8. "**Lash Free.**" Lash free ("no lash") idler arm assemblies. - **Pending**
U.S. Ser. No.: 75/650,444
Filing Date: 02/22/99

9. "**MSP.**" Service Mark Registration for MSP Industries Corporation.
USA - **Registered**
Ser. No.: 73/788,862 / Reg. No. 1,764,025
Filing Date: 03/24/89 / Reg. Date: 04/13/93
Renewal Date: 04/13/03

10. "**MSP**" - Stylized. MSP.
USA - **Registered**
Ser. No.: 73/788,859 / Reg. No. 1,707,756
Filing Date: 03/24/89 / Reg. Date: 08/18/92
Renewal Date: 08/18/02

11. "**Warm Flow.**" MSP.
USA - **Registered**
Ser. No.: 73/311,464 / Reg. No. 1,250,947
Filing Date: 05/21/81 / Reg. Date: 09/13/83
Renewal Date: 09/13/03

12. "**TRUCKDRIVE.**" Albion Automotive. **Pending.**
European Community Trademark Application No. 000490193

13. "**POWERDENSE.**"
USA - **Pending**
Ser. No.: 76/199325
Filing Date: 01/22/01

14. "**AAM**". (Letters Only).
USA - **Pending**
Ser. No.: 76/114347
Filing Date: 08/11/00
a. Argentina - **Pending**
Ser. No.: 2329179
Filing Date: 02/26/01
b. Australia - **Pending**
Ser. No.: 867050
Filing Date: 02/22/01

- c. Austria
 - Ser. No.: TBD
 - Filing Date: TBD
- d. Benelux (Belgium/Netherlands/Luxembourg)
 - Ser. No.: TBD
 - Filing Date: TBD
- e. Brazil – **Pending**
 - i. Ser. No.: 823600130 (Class 7)
 - Filing Date: 02/22/01
 - ii. Ser. No.: 823600149 (Class 12)
 - Filing Date: 02/22/01
- f. Canada – **Pending**
 - Ser. No.: 1093508
 - Filing Date: 02/21/01
- g. European Union – **Pending**
 - Ser. No.: 2120830
 - Filing Date: 02/27/01
- h. France – **Pending**
 - Ser. No.: 01 3 086 087
 - Filing Date: 03/01/01
- i. Germany – **Pending**
 - Ser. No.: 30114741.8/12
 - Filing Date: 03/06/01
- j. Italy – **Pending**
 - Ser. No.; MI2001C002218
 - Filing Date: 02/27/01
- k. Japan – **Pending**
 - Ser. No.: 2001-18058
 - Filing Date: 03/01/01
- l. Korea – **Pending**
 - Ser. No.: 2001-0007311
 - Filing Date: 02/27/01
- m. Malaysia – **Pending**
 - i. Ser. No.: 2001-02279 (Class 7)
 - Filing Date: 02/23/01
 - ii. Ser. No.; 2001-02280 (Class 12)
 - Filing Date: 02/23/01
- n. Mexico – **Pending**
 - i. Ser. No.: 478380 (Class 7)
 - Filing Date: 03/29/01
 - ii. Ser. No.: 478381 (Class 12)
 - Filing Date: 03/29/01
- o. Spain – **Pending**
 - Ser. No.: 2403.796
 - Filing Date: 05/28/01

- p. Sweden – **Pending**
 Ser. No.: 01-01327
 Filing Date: 02/26/01
- q. Thailand – **Pending**
 - i. Ser. No.: 450827 (Class 7)
 Filing Date: 04/11/01
 - ii. Ser. No.: 450828 (Class 12)
 Filing Date: 04/11/01
- r. United Kingdom
 Ser. No.: TBD
 Filing Date: TBD
- s. Venezuela – **Pending**
 - i. Ser. No.: 3595-01 (Class 7)
 Filing Date: 03/06/01
 - ii. Ser. No.: 3596-01 (Class 12)
 Filing Date: 03/06/01

15. "**Smart Bar.**" Jeff Kincaid, etc.
 USA – Pending
 Ser. No.: 76/195290
 Filing Date: 01/11/01
- a. Canada
 Ser. No.: 1107195
 Filing Date: 06/20/01
 - b. Japan
 Ser. No.: 2001-57203
 Filing Date: 06/22/01
 - c. Korea
 Ser. No.: 2001-28806
 Filing Date: 07/02/01
 - d. Thailand
 Ser. No.: 459079
 Filing Date: 07/11/01

16. Albion Automotive (Holdings) Ltd. also owns numerous registrations for the "Albion" mark and related marks, none of which is registered in the U.S.

17. AAM also claims common law trademark rights in the following marks:

- a. Delivering. Power.
- b. Full-Circle Support and Design.
- c. PowerDense.
- d. PowerDuty.
- e. PowerRide
- f. I-Ride
- g. SMARTrace

INTELLECTUAL PROPERTY SECURITY AGREEMENT

INTELLECTUAL PROPERTY SECURITY AGREEMENT dated as of October 27, 1997, made by AMERICAN AXLE & MANUFACTURING, INC., a Delaware corporation (the "*Borrower*" and, together with any U.S. Subsidiary becoming a party hereto pursuant to Section 5.11 of the Credit Agreement referred to below, the "*Grantors*") in favor of THE CHASE MANHATTAN BANK, a New York banking corporation, as collateral agent (in such capacity the "*Collateral Agent*") for the Secured Parties (as such term is defined below).

Reference is made to the Credit Agreement, dated as of October 27, 1997 (as the same may be amended, supplemented or otherwise modified from time to time, the "*Credit Agreement*"), among American Axle & Manufacturing of Michigan, Inc., a Michigan Corporation ("*AAMM*"), the Borrower, the Lenders (such term and each other capitalized term used but not defined having the meaning given it in Section 1.01 in the Credit Agreement), the Fronting Bank, the Administrative Agent and the Collateral Agent (the Lenders, the Fronting Bank, the Administrative Agent and the Collateral Agent, collectively, the "*Secured Parties*").

The Lenders and the Fronting Bank, respectively, have agreed to make Loans to the Borrower and to issue Letters of Credit for the account of the Borrower, pursuant to, and upon the terms and subject to the conditions specified in, the Credit Agreement.

The obligations of the Lenders to make Loans and of the Fronting Bank to issue Letters of Credit under the Credit Agreement are conditioned upon, among other things, the execution and delivery by the Grantors of an intellectual property security agreement in the form hereof to secure the due and punctual payment of, with respect to each Grantor, its obligations as obligor or guarantor in respect of (a) the unpaid principal of and premium, if any, and interest (including interest accruing at the then applicable rate provided in the Credit Agreement after the maturity of the Loans and interest accruing at the then applicable rate provided in the Credit Agreement after the filing of any petition in bankruptcy, or the commencement of any insolvency, reorganization or like proceeding, relating to the Borrower whether or not a claim for post-filing or post petition interest is allowed in such proceeding) on the Loans, when and as due, whether at maturity, by acceleration, upon one or more dates set for prepayment or otherwise, (b) each payment required to be made by the Borrower under the Credit Agreement, when and as due, including payments in respect of reimbursements of L/C Disbursements, interest thereon and obligations to provide cash collateral, and (c) all other obligations and liabilities of every nature of the Grantors from time to time owed to the Secured Parties or any of them, whether direct or indirect, absolute or contingent, due or to become due, or now existing or hereafter incurred (including monetary obligations incurred during the pendency of any bankruptcy, insolvency, receivership or other similar proceeding, regardless of whether allowed or allowable in such proceeding), which may arise under, out of or in connection with, the Credit Agreement, this Agreement or any other Loan Document and any obligation of the Borrower to a Lender under an Interest Rate Protection Agreement or under any other document made, delivered or given in connection with any of the foregoing, in each case whether on account of principal, interest, reimbursement obligations, fees, indemnities, costs, expenses or otherwise, including all fees and disbursements of counsel to the Collateral Agent or to the Secured Parties that are required to be paid by any Loan Party pursuant to the terms of the Credit Agreement, this Agreement, any other Loan Document or any Interest Rate Protection Agreement with a Lender (all the foregoing obligations collectively, the "*Obligations*").

Accordingly, the Grantors and the Collateral Agent, on behalf of itself and each other Secured Party (and each of their successors and assigns), hereby agree as follows:

ARTICLE I

Definitions

SECTION 1.01. *Definition of Terms Used Herein.* All capitalized terms used but not defined herein shall have the meanings assigned to such terms in the Credit Agreement.

SECTION 1.02. *Definition of Certain Terms Used Herein.* As used herein, the following terms shall have the following meanings:

"*Agreement*" shall mean this Intellectual Property Security Agreement.

"*Collateral*" shall mean, with respect to each Grantor, all of the following, whether now owned or hereafter acquired by such Grantor: (a) Patents, including all granted Patents, recordings and pending applications, including those listed on Schedule I attached hereto, (b) Trademarks, including all registered Trademarks, registrations, recordings, and pending applications, including those listed on Schedule II attached hereto, (c) Copyrights, including all registered Copyrights, registrations, recordings, supplemental registrations and pending applications, including those listed on Schedule III attached hereto, (d) Licenses, including those listed on Schedule IV hereto, (e) General Intangibles, and (f) all products and Proceeds (including insurance proceeds) of, and additions, improvements and accessions to, and books and records describing or used in connection with, any and all of the property described above.

"*Copyrights*" shall mean, with respect to each Grantor, all of the following now or hereafter owned by such Grantor: (i) all copyright rights in any work subject to the copyright laws of the United States or any other country, whether as author, assignee, transferee or otherwise, and (ii) all registrations and applications for registration of any such copyright in the United States or any other country, including registrations, recordings, supplemental registrations and pending applications for registration in the United States Copyright Office.

"*Copyright License*" shall mean, with respect to each Grantor, any written agreement, now or hereafter in effect, granting any right to any third party under any Copyright now or hereafter owned by such Grantor or which such Grantor otherwise has the right to license, or granting any right to such Grantor under any Copyright now or hereafter owned by any third party, and all rights of such Grantor under any such agreement.

"*General Intangibles*" shall mean, with respect to each Grantor, all intangible, intellectual or other similar property of such Grantor of any kind or nature now owned or hereafter acquired by such Grantor, including inventions, designs, Patents, Copyrights, Licenses, Trademarks, trade secrets, confidential or proprietary technical and business information, know-how, show-how or other data or information, software and databases and all embodiments or fixations thereof and related documentation, registrations, franchises, and all other intellectual or other similar property rights not otherwise described above.

"*Indemnitee*" shall mean the Collateral Agent, the Secured Parties and their respective officers, directors, trustees, affiliates and controlling persons.

"*License*" shall mean, with respect to each Grantor, any Patent License, Trademark License, Copyright License or other license or sublicense as to which such Grantor is a party (other than those license agreements which by their terms prohibit assignment or a grant of a security interest by such Grantor as licensee thereunder).

"*Patent License*" shall mean, with respect to each Grantor, any written agreement, now or hereafter in effect, granting to any third party any right to make, use or sell any invention on which a Patent, now or hereafter owned by such Grantor or which such Grantor otherwise has the right to license, is in existence, or granting to such Grantor any right to make, use or sell any

invention on which a Patent, now or hereafter owned by any third party, is in existence, and all rights of such Grantor under any such agreement.

"*Patents*" shall mean, with respect to each Grantor, all the following now or hereafter owned by such Grantor: (a) all letters patent of the United States or any other country, including patents, design patents or utility models, all registrations and recordings thereof, and all applications for letters patent of the United States or any other country, including registrations, recordings and pending applications in the United States Patent and Trademark Office or any similar offices in any other country, and (b) all reissues, continuations, divisions, continuations-in-part, renewals or extensions thereof, and the inventions disclosed or claimed therein, including the right to make, use and/or sell the inventions disclosed or claimed therein.

"*Proceeds*" shall mean, with respect to each Grantor, any consideration received from the sale, exchange, license, lease or other disposition of any asset or property that constitutes Collateral owned by such Grantor, any value received as a consequence of the possession of any such Collateral and any payment received from any insurer or other person or entity as a result of the destruction, loss, theft or other involuntary conversion of whatever nature of any asset or property that constitutes Collateral, any claim of such Grantor against third parties for (and the right to sue and recover for and the rights to damages or profits due or accrued arising out of or in connection with) (a) past, present or future infringement of any Patent now or hereafter owned by such Grantor or licensed under a Patent License, (b) past, present or future infringement or dilution of any Trademark now or hereafter owned by such Grantor or licensed under a Trademark License or injury to the goodwill associated with or symbolized by any Trademark now or hereafter owned by such Grantor, (c) past, present or future breach of any License, (d) past, present or future infringement of any Copyright now or hereafter owned by such Grantor or licensed under a Copyright License, and (e) any and all other amounts from time to time paid or payable under or in connection with any of such Collateral.

"*Trademark License*" shall mean, with respect to each Grantor, any written agreement, now or hereafter in effect, granting to any third party any right to use any Trademark now or hereafter owned by such Grantor or that such Grantor otherwise has the right to license, or granting to such Grantor any right to use any Trademark now or hereafter owned by any third party, and all rights of such Grantor under any such agreement.

"*Trademarks*" shall mean, with respect to each Grantor, all of the following now or hereafter owned by such Grantor: (a) all trademarks, service marks, trade names, corporate names, company names, business names, fictitious business names, trade styles, trade dress, logos, other source or business identifiers, prints and labels on which any of the foregoing have appeared or appear, and all designs and general intangibles of like nature, now existing or hereafter adopted or acquired, all registrations and recordings thereof, and all registration and recording applications filed in connection therewith, including registrations, recordings and applications in the United States Patent and Trademark Office, any State of the United States or any similar offices in any other country or any political subdivision thereof, and all extensions or renewals thereof, and (b) all goodwill associated therewith or symbolized thereby, and (c) all other assets, rights and interests that uniquely reflect or embody such goodwill.

"*U.S. Subsidiaries*" shall mean the Subsidiaries (as defined in the Credit Agreement) incorporated or otherwise organized in the United States of America.

SECTION 1.03. *Rules of Interpretation.* The rules of interpretation specified in Section 1.02 of the Credit Agreement shall be applicable to this Agreement.

ARTICLE II

Security Interest

SECTION 2.01. *Security Interest.* As security for the payment or performance, as the case may be, of the Obligations, each Grantor hereby creates, mortgages, pledges, hypothecates and transfers to the Collateral Agent, its successors and assigns, for the benefit of the Secured Parties, and hereby grants to the Collateral Agent, its successors and assigns, for the ratable benefit of the Secured Parties, a continuing first priority security interest in all such Grantor's right, title and interest in, to and under the Collateral, subject to liens permitted under Section 6.02 of the Credit Agreement (the "*Security Interest*"). Without limiting the foregoing, the Collateral Agent is hereby authorized to file one or more financing statements, continuation statements, filings with the United States Patent and Trademark Office or United States Copyright Office (or similar office in any other country), or any other documents for the purpose of perfecting, confirming, continuing, enforcing or protecting the Security Interest granted by such Grantor, without the signature of such Grantor, naming such Grantor as debtor and the Collateral Agent as secured party.

Notwithstanding any other provision of this Agreement to the contrary, the Collateral shall not include any License which by its terms or the terms governing it prohibits assignment thereof or the grant of a security interest therein; *provided* that such term or terms are typical or customary in connection with the document or instrument to which they relate.

Each Grantor agrees at all times to keep accurate and complete, in all material respects, accounting records with respect to the Collateral and, on and after the occurrence and during the continuance of a Default, a record of all payments and Proceeds received in respect thereof.

SECTION 2.02. *Further Assurances.* Each Grantor agrees, at its own cost and expense, to promptly execute, acknowledge, deliver and cause to be duly filed all such further instruments and documents and take all such actions as the Collateral Agent may from time to time reasonably request for the better assuring, preserving and perfecting of the Security Interest and the rights and remedies created hereby, including the payment of any fees and taxes required in connection with the execution and delivery of this Agreement, the granting of the Security Interest created hereby, the filing of any financing statements or other documents (including filings with the United States Patent and Trademark Office and the United States Copyright Office or similar offices in any other country) in connection herewith, and the execution and delivery of any document required to supplement this Agreement with respect to any Patents, Trademarks and/or Copyrights applied for, acquired, registered (or for which registration applications are filed) or issued after the date hereof. If any amount payable under or in connection with any of the Collateral shall be or become evidenced by any promissory note or other instrument, upon the request of the Collateral Agent, such note or instrument shall (to the extent not previously pledged and delivered pursuant to the Pledge Agreement) be immediately pledged and delivered to the Collateral Agent, duly endorsed in a manner satisfactory to the Collateral Agent. Each Grantor agrees promptly to notify the Collateral Agent if any material portion of the Collateral is canceled or overturned, opposed, misappropriated, injured, infringed, lost (other than due to expiration of any issued Patent) or, if applicable, diluted.

SECTION 2.03. *Inspection and Verification.* Without limiting the scope of Section 5.07 of the Credit Agreement, the Collateral Agent and such representatives as the Collateral Agent may reasonably designate shall have the right to inspect, at any reasonable time or times, any of the Collateral, all records related thereto (and to make extracts and copies from such records) and the premises upon which any of the Collateral is located, to discuss any Grantor's affairs with the officers of such Grantor and its independent accountants and to verify under reasonable procedures the validity, amount, quality, quantity, value conditions, and status of or any other matter relating to such Collateral, including, in the case of Collateral in the possession of any third party (with, except after an Event of Default shall have occurred and

during the continuance thereof, the consent of such Grantor, which consent shall not be unreasonably withheld), by contacting such person possessing such Collateral for the purpose of making such a verification. The Collateral Agent shall have the absolute right to share any information it gains from such inspection or verification with any or all of the Secured Parties.

SECTION 2.04. *Taxes; Encumbrances.* At its option, the Collateral Agent may discharge past due taxes, assessments, charges, fees, liens, security interests or other encumbrances at any time levied or placed on any of the Collateral and not permitted under this Agreement or other Loan Documents, and may pay for the maintenance and preservation of any of the Collateral to the extent any Grantor fails to do so to the extent required by this Agreement or the other Loan Documents, and such Grantor agrees to reimburse the Collateral Agent on demand for any payment made or any expense incurred by the Collateral Agent pursuant to the foregoing authorization; *provided, however*, that nothing in this Section 2.04 shall be interpreted as excusing any Grantor from the performance of, or imposing any obligation on the Collateral Agent or any other Secured Party to cure or perform, any covenants or other promises of any Grantor with respect to taxes, assessments, charges, fees, liens, security interests or other encumbrances and maintenance as set forth herein or in the other Loan Documents.

SECTION 2.05. *No Assumption of Liability.* The Security Interest is granted as security only and shall not subject any Secured Party to, or in any way alter or modify, any obligation or liability of any Grantor with respect to or arising out of any of the Collateral.

ARTICLE III

Representations and Warranties

Representations and Warranties. Each Grantor represents and warrants, as to itself and the Collateral in which the Security Interest is created hereunder, that:

SECTION 3.01. *Validity of Patents, Trademarks and Copyrights.* Each of the Patents, Trademarks and Copyrights is subsisting and has not been adjudged invalid or unenforceable, in whole or in part, except as could not reasonably be expected to have a Material Adverse Effect.

SECTION 3.02. *Title and Authority.* Each Grantor has rights in and good title to the Collateral shown on the schedules hereto as being owned by it and has full corporate power and authority to grant to the Collateral Agent (for the benefit of the Secured Parties) the Security Interest in the Collateral pursuant hereto and to execute, deliver and perform its obligations in accordance with the terms of this Agreement, without the consent or approval of any other person other than any consent or approval that has been obtained, except, in each case, as could not reasonably be expected to have a Material Adverse Effect.

SECTION 3.03. *Filings.* (a) Fully executed financing statements containing a description of the Collateral shall promptly following the Closing Date be filed of record in every governmental, municipal or other office in every jurisdiction located within the United States and its respective territories and possessions or such other analogous documents in other countries as are necessary to publish notice of and protect the validity of and to establish a valid and perfected security interest in favor of the Collateral Agent (for the benefit of the Secured Parties) in respect of the Collateral in which a security interest may be perfected by filing a financing statement or analogous document in the United States and its political subdivisions, territories and possessions pursuant to the Uniform Commercial Code or other applicable law in such jurisdictions or pursuant to applicable law in other countries, and no further or subsequent filing, refile, recording, rerecording, registration or reregistration is necessary in any such jurisdiction, except as provided under applicable law with respect to the filing of continuation statements or other documents of similar effect, except as contemplated by paragraph (b) below and filings with

respect to after-acquired Collateral, with respect to which all necessary actions will be promptly taken subsequent to the acquisition of such after-acquired Collateral.

(b) Each Grantor shall ensure and warrants that fully executed security agreements in the form hereof and containing a description of the Collateral shall have been received and recorded within three months after the execution of this Agreement with respect to United States Patents and United States registered Trademarks (and Trademarks for which United States registration applications are pending) and within one month after the execution of this Agreement with respect to United States registered Copyrights by the United States Patent and Trademark Office and the United States Copyright Office pursuant to 35 U.S.C. § 261, 15 U.S.C. § 1060 or 17 U.S.C. § 205 and the regulations thereunder, as applicable, and otherwise as may be required pursuant to the laws of any other country or any political subdivision thereof, to protect the validity and first priority of and to perfect a valid first priority security interest in favor of the Collateral Agent (for the benefit of the Secured Parties) in respect of the Collateral in which a security interest may be perfected by filing in the United States and its political subdivisions, territories and possessions, and no further or subsequent filing, refile, recording, rerecording, registration or reregistration is necessary in any such jurisdiction, except as provided under applicable law with respect to the filing of continuation statements (other than such actions as are necessary to perfect the Collateral Agent's first priority security interest with respect to any Collateral (or registration or application for registration thereof) acquired or developed after the date hereof).

SECTION 3.04. *Validity of Security Interests.* This Agreement is effective to create in favor of the Collateral Agent, for the ratable benefit of the Secured Parties, a legal, valid and enforceable security interest in the Collateral, and, when financing statements in appropriate form are filed in the offices specified on Schedule 3.19 of the Credit Agreement and this Agreement is filed in the United States Patent and Trademark Office and the United States Copyright Office, this Agreement will constitute a fully perfected Lien on, and security interest in, all right, title and interest of the Grantors in such Collateral and, to the extent contemplated therein and subject to § 9-306 of the UCC, the proceeds thereof, in each case prior and superior in right to any other person (it being understood that subsequent recordings in the United States Patent and Trademark Office and the United States Copyright Office may be necessary to perfect a lien on registered trademarks, trademark applications and copyrights acquired by the Grantors after the date hereof), other than with respect to the rights of persons pursuant to Liens expressly permitted by Section 6.02 of the Credit Agreement.

SECTION 3.05. *Information Regarding Names and Locations.* Each Grantor has disclosed in writing to the Collateral Agent on Schedule V any material trade names used to identify it in its business or in the ownership of its properties during the past five years.

SECTION 3.06. *Absence of Other Liens.* The Collateral is owned by the Grantors free and clear of any Lien of any nature whatsoever (except for Liens expressly permitted by Section 6.02 of the Credit Agreement or hereby and any liens of licenses listed on Schedule VI). Other than as contemplated hereby and by the other Loan Documents, and except as permitted therein, the Grantors have not filed (a) any financing statement or analogous document under the Uniform Commercial Code, (b) any assignment in which any Grantor assigns the Collateral, any security agreement or any similar instrument covering any Collateral with the United States Patent and Trademark Office, the United States Copyright Office or any similar office in any other country of political subdivision thereof and (c) any assignment in which any Grantor assigns the Collateral or any security agreement or similar instrument covering any Collateral with any foreign governmental, municipal or other office.

ARTICLE IV

Covenants

SECTION 4.01. *Covenants Regarding Patent, Trademark and Copyright*

Collateral. (a) Each Grantor (either itself or through licensees) will, for each Patent, not do any act, or omit to do any act, whereby any Patent that is material to the conduct of the Grantors' businesses, taken as a whole, may become invalidated or dedicated to the public, and shall continue to mark, to the extent consistent with past practices and good business judgment, any products covered by a material Patent with the relevant patent number as necessary and sufficient to establish and preserve such Grantor's material rights under applicable patent laws.

(b) Each Grantor (either itself or through its licensees or its sublicensees) will, for each Trademark material to the conduct of the Grantors' businesses, taken as a whole, to the extent consistent with past practices and good business judgment, (i) maintain such Trademark in full force free from any material claim of abandonment or invalidity for nonuse, (ii) maintain the quality of products and services offered under such Trademark to the extent that the failure to do so would result in a Material Adverse Effect, (iii) display such Trademark with notice of federal or foreign registration to the extent necessary and sufficient to establish and preserve such Grantor's material rights under applicable law and (iv) not knowingly use or knowingly permit the use of such Trademark in violation of any material third-party rights.

(c) Each Grantor (either itself or through licensees) will, for each work covered by a material Copyright, to the extent consistent with past practices and good business judgment, continue to publish, reproduce, display, adopt and distribute the work with appropriate copyright notice as necessary and sufficient to establish and preserve such Grantor's material rights under applicable copyright laws.

(d) Each Grantor shall notify the Collateral Agent immediately if it knows or has reason to know that any Patent, Trademark or Copyright material to the conduct of the Grantors' businesses, taken as a whole, may become abandoned, lost or dedicated to the public, or of any adverse determination or development (including the institution of, or any such determination or development in, any proceeding in the United States Patent and Trademark Office, United States Copyright Office or any court or similar office of any country) regarding such Grantor's ownership of any such Patent, Trademark or Copyright, its right to register the same, or to keep and maintain the same.

(e) In no event shall any Grantor, either itself or through any agent, employee, licensee or designee, file an application for any Patent, Trademark or Copyright (or for the registration of any Trademark or Copyright) with the United States Patent and Trademark Office, United States Copyright Office or any office or agency in any political subdivision of the United States or in any other country or any political subdivision thereof, unless it promptly informs the Collateral Agent, and, upon request of the Collateral Agent, executes and delivers any and all agreements, instruments, documents and papers as the Collateral Agent may reasonably request to evidence (and, in the case of applications for Trademarks with the United States Patent and Trademark Office, perfect) the Collateral Agent's security interest in such Patent, Trademark or Copyright of such Grantor and the good will and general intangibles of such Grantor relating thereto or represented thereby, and such Grantor hereby appoints the Collateral Agent as its attorney-in-fact to execute and file such writings for the foregoing purposes, all acts of such attorney being hereby ratified and confirmed; such power, being coupled with an interest, is irrevocable until the Obligations are paid in full.

(f) Each Grantor will take all necessary steps that are consistent with the practice in any proceeding before the United States Patent and Trademark Office, United States Copyright Office or any office or agency in any political subdivision of the United States or in any other country or any political subdivision thereof, to maintain and pursue each material application (and to obtain the relevant grant or registration) relating to the Patents, Trademarks and/or Copyrights

which are material to the Grantors' businesses, taken as a whole, to maintain each issued Patent and each registration of the Trademarks and Copyrights that is material to the conduct of the Grantors' businesses, taken as a whole, including timely filings of applications for renewal, affidavits of use, affidavits of incontestability and payment of maintenance fees, and, if consistent with good business judgment, to initiate opposition, interference and cancellation proceedings against third parties.

(g) In the event that any Collateral consisting of a Patent, Trademark or Copyright material to the conduct of the Grantors' businesses, taken as a whole, is believed by the Grantor that has created the Security Interest in such Collateral pursuant hereto to have been infringed, misappropriated or diluted by a third party in any material respect, such Grantor shall notify the Collateral Agent promptly after it learns thereof and shall, if consistent with good business judgment, promptly sue for infringement, misappropriation, or dilution and to recover any and all damages for such infringement, misappropriation or dilution, and take such other actions as are appropriate under the circumstances to protect such Collateral.

SECTION 4.02. *Protection of Security.* Each Grantor shall, at its own cost and expense, take any and all reasonable actions necessary to defend title to the Collateral against all persons, to properly maintain, protect and preserve the Collateral and to defend the Security Interest of the Collateral Agent in the Collateral and the priority thereof against any Lien not permitted under the Credit Agreement in each case, except as otherwise permitted by the Credit Agreement.

SECTION 4.03. *Continuing Obligations of the Grantors.* Each Grantor shall remain liable to observe and perform all the conditions and obligations to be observed and performed by it under each License, contract, agreement, interest or obligation relating to the Collateral, all in accordance with the terms and conditions thereof, to the extent consistent with good business practice. Without limiting the foregoing, the Collateral Agent shall have no obligation or liability under any License by reason of or arising out of this Agreement or the granting or the assignment to the Collateral Agent of the Security Interest or the receipt by the Collateral Agent of any payment related to any License pursuant hereto, nor shall the Collateral Agent be required or obligated in any manner to perform or fulfill any of the obligations of any Grantor under or pursuant to any License, or to make any payment, or to make any inquiry as to the nature or the sufficiency of any payment received by it or the sufficiency of any performance by any party under any License, or to present or file any claim, or to take any action to collect or enforce any performance of the payment of any amounts that may have been assigned to it or to which it may be entitled at any time or times.

SECTION 4.04. *Use and Disposition of Collateral.* A Grantor shall not (i) make or permit to be made an assignment, pledge or hypothecation of the Collateral, and shall grant no other security interest in the Collateral (other than pursuant hereto or except as permitted by Section 6.02 of the Credit Agreement) or (ii) make or permit to be made any transfer of the Collateral, and shall remain at all times in possession thereof other than transfers to the Collateral Agent pursuant to the provisions hereof; notwithstanding the foregoing, a Grantor may use and dispose of the Collateral in any lawful manner not in violation of the provisions of this Agreement, the Credit Agreement or any other Loan Document, unless the Collateral Agent shall, after an Event of Default shall have occurred and during the continuance thereof, notify the Borrower not to sell, convey, lease, assign, transfer or otherwise dispose of any Collateral except with respect to any transfer between the Borrower or a Wholly Owned Subsidiary that is a Grantor and the Borrower or a Wholly Owned Subsidiary that is a Grantor.

SECTION 4.05. *Locations of Collateral; Place of Business.* (a) Each Grantor agrees, at such time or times as the Collateral Agent may reasonably request, promptly to prepare and deliver to the Collateral Agent a duly certified schedule or schedules in form reasonably satisfactory to the Collateral Agent, showing the identity, amount and location (to the extent practicable) of any and all Collateral.

(b) Each Grantor agrees not to change, or permit to be changed, the location of its chief executive office or chief place of business or the name or names used to identify it in its business or in the ownership of its properties unless all filings under the Uniform Commercial Code or under other applicable laws that are required to be made with respect to the Collateral have been made and the Collateral Agent has a valid, legal and perfected first priority security interest in the Collateral, subject to no liens, other than Liens permitted by Section 6.02 of the Credit Agreement and any liens or licenses listed on Schedule V, and prior notice thereof has been given to the Collateral Agent along with copies of all such filings to be made.

SECTION 4.06. *Future Rights.* (a) If, before the time that all Obligations shall have been paid in full, no Letters of Credit are outstanding and the Secured Parties no longer have Commitments under the Credit Agreement, any Grantor shall obtain rights to any material asset or item that may be considered Collateral, the provisions of Section 2.01 shall automatically apply thereto and each Grantor shall give to the Collateral Agent prompt notice thereof in writing.

(b) With respect to any such material asset or item that may be considered Collateral as set forth in paragraph (a) above, each Grantor shall follow the procedures set forth in Section 3.03, as applicable, to ensure that the Collateral Agent's valid first priority security interest therein is perfected.

SECTION 4.07 *Assignment of Licenses.* Upon and during the continuance of an Event of Default and at the reasonable request of the Collateral Agent, each Grantor shall use its reasonable efforts to obtain all requisite consents or approvals by the licensor of each Copyright License, Patent License or Trademark License to effect the assignment of all of the Grantors' rights, title and interest thereunder to the Collateral Agent or its designee.

SECTION 4.08. *Collateral Agent's Liabilities and Expenses; Indemnification.*
 (a) Notwithstanding anything to the contrary provided herein, the Collateral Agent assumes no liabilities with respect to any claims regarding each Grantor's ownership (or purported ownership) of, or rights or obligations (or purported rights or obligations) arising from, the Collateral or any use (or actual or alleged misuse), license or sublicense thereof by any Grantor or any licensee of such Grantor, whether arising out of any past, current or future event, circumstance, act or omission or otherwise, or any claim, suit, loss, damage, expense or liability of any kind or nature arising out of or in connection with the Collateral or the production, marketing, delivery, sale or provision of goods or services under or in connection with any of the Collateral. As between the Secured Parties and the Grantors, all of such liabilities shall be borne exclusively by the Grantors.

(b) Each Grantor hereby agrees to pay all expenses of the Collateral Agent and to indemnify the Collateral Agent with respect to any and all losses, claims, damages, liabilities and related expenses in respect of this Agreement or the Collateral in each case to the extent the Borrower is required to do so pursuant to Section 9.05 of the Credit Agreement.

(c) Any amounts payable as provided hereunder shall be additional Obligations secured hereby and by the other Security Documents. Without prejudice to the survival of any other agreements contained herein, all indemnification and reimbursement obligations contained herein shall survive the payment in full of the principal and interest under the Credit Agreement, the expiration of the Letters of Credit and the termination of the Commitments or this Agreement.

ARTICLE V

Remedies

SECTION 5.01. *Power of Attorney.* Upon the occurrence and during the continuance of any Event of Default, subject to prior written notice to the Borrower, the Collateral Agent shall have the right, as the true and lawful attorney-in-fact of the Grantors, with power of substitution for the Grantors and in the Grantors' names, the Collateral Agent's name or otherwise,

for the use and benefit of the Secured Parties (a) upon prior notice from the Collateral Agent, to receive, endorse, assign and/or deliver any and all notes, acceptances, checks, drafts, money orders or other evidences of payment relating to the Collateral or any part thereof; (b) to demand, collect, receive payment of, give receipt for and give discharges and releases of all or any of the Collateral; (c) to sign the name of any Grantor on any invoice relating to any of the Collateral; (d) to commence and prosecute any and all suits, actions or proceedings at law or in equity in any court of competent jurisdiction to collect or otherwise realize on all or any of the Collateral or to enforce any rights in respect of any Collateral; (e) to settle, compromise, compound, adjust or defend any actions, suits or proceedings relating to or pertaining to all or any of the Collateral; (f) to license or, to the extent permitted by any applicable law, sublicense, whether general, special or otherwise, and whether on an exclusive or non-exclusive basis, any of the Collateral throughout the world for such term or terms, on such conditions, and in such manner, as the Collateral Agent shall determine (other than in violation of any then existing licensing arrangements to the extent that waivers or other adequate provision cannot be secured therefor); and (g) generally to use, sell, assign, transfer, pledge, make any agreement with respect to or otherwise deal with all or any of the Collateral, and to do all other acts and things necessary to carry out the purposes of this Agreement, as fully and completely as though the Collateral Agent were the absolute owner of the Collateral for all purposes; *provided, however*, that except as provided for by law or the Uniform Commercial Code as in effect in the State of New York or its equivalent in other jurisdictions, nothing herein contained shall be construed as requiring or obligating the Collateral Agent to make any commitment or to make any inquiry as to the nature or sufficiency of any payment received by the Collateral Agent, or to present or file any claim or notice, or to take any action with respect to the Collateral or any part thereof or the moneys due or to become due in respect thereof or any property covered thereby, and no action taken by the Collateral Agent or omitted to be taken with respect to the Collateral or any part thereof shall give rise to any defense, counterclaim or offset in favor of any Grantor or to any claim or action against the Collateral Agent. It is understood and agreed that the appointment of the Collateral Agent as the attorney-in-fact of the Grantors for the purposes set forth above in this Section 5.01 is coupled with an interest and is irrevocable. The provisions of this Section 5.01 shall in no event relieve the Grantors of any of their obligations hereunder or under the Credit Agreement or any other Loan Document with respect to the Collateral or any part thereof or impose any obligation on the Collateral Agent or the Secured Parties to proceed in any particular manner with respect to the Collateral or any part thereof, or in any way limit the exercise by the Collateral Agent or any Secured Party of any other or further right that it may have on the date of this Agreement or hereafter, whether hereunder or by law or by the Security Agreement, or otherwise.

SECTION 5.02. *Other Remedies upon Default.* Upon the occurrence and during the continuance of an Event of Default, each Grantor expressly agrees that, subject to prior written notice to the Borrower, the Collateral Agent on demand shall have the right to take any or all of the following actions at the same or different times: with or without legal process and with or without previous notice or demand for performance, to take possession of all tangible manifestations or embodiments of the Collateral and documentation relating thereto and all business records, documents, files, prints and labels with respect to the Collateral, and without liability for trespass to enter any premises where such tangible manifestations or embodiments, business records, documents, files, prints and labels with respect to the Collateral may be located for the purpose of taking possession of or removing such tangible manifestations or embodiments, business records, documents, files, prints and labels with respect to the Collateral, and, generally, to exercise any and all rights afforded to a secured party under the Uniform Commercial Code or other law applicable to any part of the Collateral. Subject to and without limiting the generality of the foregoing, each Grantor agrees that the Collateral Agent shall have the right, subject to the mandatory requirements of applicable law, to sell or otherwise dispose of all or any part of the Collateral, at public or private sale or at any broker's board or on any securities exchange, for cash, upon credit or for future delivery as the Collateral Agent shall deem appropriate. The Collateral Agent shall be authorized at any such sale (if it deems it advisable to do so) to restrict the prospective bidders or purchasers to persons who will represent and agree that they are purchasing the Collateral for their own account for investment and not with a view to the distribution or sale thereof where the failure to obtain such a representation and agreement could result in a violation

of any applicable securities laws, and upon consummation of any such sale the Collateral Agent shall have the right to assign, transfer and deliver to the purchaser or purchasers thereof the Collateral so sold. Each such purchaser at any such sale shall hold the property sold absolutely, free from any claim or right on the part of any Grantor, and each Grantor hereby waives (to the extent permitted by law) all rights of redemption, stay and appraisal that such Grantor now has or may at any time in the future have under any rule of law or statute now existing or hereafter enacted.

The Collateral Agent shall give the Grantors at least 10 days' written notice (which each Grantor agrees is reasonable notice within the meaning of Section 9-504(3) of the Uniform Commercial Code as in effect in the State of New York or its equivalent in other jurisdictions) of the Collateral Agent's intention to make any sale of Collateral. Such notice, in the case of a public sale, shall state the time and place for such sale and, in the case of a sale at a broker's board or on a securities exchange, shall state the board or exchange at which such sale is to be made and the day on which the Collateral, or portion thereof, will first be offered for sale at such board or exchange. Any such public sale shall be held at such time or times within ordinary business hours and at such place or places as the Collateral Agent may fix and state in the notice (if any) of such sale. At any such sale, the Collateral, or portion thereof, to be sold may be sold in one lot as an entirety or in separate parcels, as the Collateral Agent may (in its sole and absolute discretion) determine. The Collateral Agent shall not be obligated to make any sale of any Collateral if it shall determine not to do so, regardless of the fact that notice of sale of such Collateral shall have been given. The Collateral Agent may, without notice or publication, adjourn any public or private sale or cause the same to be adjourned from time to time by announcement at the time and place fixed for sale, and such sale may, without further notice, be made at the time and place to which the same was so adjourned. In case any sale of all or any part of the Collateral is made on credit or for future delivery, the Collateral so sold may be retained by the Collateral Agent until the sale price is paid by the purchaser or purchasers thereof, but the Collateral Agent shall not incur any liability in case any such purchaser or purchasers shall fail to take up and pay for the Collateral so sold and, in case of any such failure, such Collateral may be sold again upon like notice to the Grantors. At any public sale made pursuant to this Section 5.02, the Collateral Agent or any Secured Party may bid for or purchase, free from any right of redemption, stay, valuation or appraisal on the part of any Grantor (all said rights being also hereby waived and released to the extent permitted by law), the Collateral or any part thereof offered for sale and may make payment on account thereof by using any claim then due and payable to the Collateral Agent or any Secured Party from any Grantor as a credit against the purchase price, and the Collateral Agent or any Secured Party may, upon compliance with the terms of sale, hold, retain and dispose of such property without further accountability to such Grantor therefor. As an alternative to exercising the power of sale herein conferred upon it, the Collateral Agent may proceed by a suit or suits at law or in equity to foreclose this Agreement and to sell the Collateral or any portion thereof pursuant to a judgment or decree of a court or courts having competent jurisdiction or pursuant to a proceeding by a court-appointed receiver.

SECTION 5.03. *Application of Proceeds of Sale.* The proceeds of any sale of Collateral, as well as any Collateral consisting of cash, shall be applied by the Collateral Agent as follows:

First, to the payment of the reasonable costs and expenses of the Collateral Agent as set forth in Sections 5.01 and 5.02 and in the Credit Agreement;

Second, to the payment of all amounts of the Obligations owed to the Secured Parties in respect of Loans made by them and outstanding and amounts owing in respect of any L/C Disbursement or Letter of Credit or under any Interest Rate Protection Agreement, pro rata as among the Secured Parties in accordance with the amount of such Obligations owed them;

Third, to the payment and discharge in full of the Obligations (other than those referred to above), pro rata as among the Secured Parties in accordance with the amount of such Obligations owed to them; and

Fourth, after payment in full of all Obligations, to the applicable Grantor, or its successor or assign thereof, or to whomsoever may be lawfully entitled to receive the same or as a court of competent jurisdiction may direct, any Collateral then remaining.

The Collateral Agent shall have absolute discretion as to the time of application of any such proceeds, moneys or balances in accordance with this Agreement. Upon any sale of the Collateral by the Collateral Agent (including pursuant to a power of sale granted by statute or under a judicial proceeding), the receipt of the Collateral Agent or of the officer making the sale shall be a sufficient discharge to the purchaser or purchasers of the Collateral so sold and such purchaser or purchasers shall not be obligated to see to the application of any part of the purchase money paid over to the Collateral Agent or such officer or be answerable in any way for the misapplication thereof.

SECTION 5.04. *Grant of License to Use Patent, Trademark and Copyright Collateral.* For the purpose of enabling the Collateral Agent to exercise rights and remedies under Article V hereof at such time as the Collateral Agent shall be lawfully entitled to exercise such rights and remedies, each Grantor hereby grants to the Collateral Agent an irrevocable, non-exclusive license (exercisable without payment of royalty or other compensation to such Grantor) to use, license or sublicense any of the Collateral now owned or hereafter acquired by such Grantor, and wherever the same may be located, and including in such license reasonable access to all media in which any of the licensed items may be recorded or stored. The use of such license by the Collateral Agent shall be exercised, at the option of the Collateral Agent for any purpose appropriate in connection with the exercise of remedies hereunder, only upon the occurrence and during the continuance of an Event of Default; *provided* that any license, sublicense or other transaction entered into by the Collateral Agent in accordance herewith shall be binding upon such Grantor notwithstanding any subsequent cure of an Event of Default. The Collateral Agent agrees to apply the net proceeds received from any license as provided in Section 5.03 hereof.

ARTICLE VI

Miscellaneous

SECTION 6.01. *The Collateral Agent Appointed Attorney-in-Fact.* Except as otherwise provided herein, each Grantor hereby appoints the Collateral Agent the attorney-in-fact of such Grantor, effective upon the occurrence and during the continuance of an Event of Default, for the purposes of carrying out the provisions of this Agreement, taking any action and executing any instrument that the Collateral Agent may reasonably deem necessary or advisable to accomplish the purposes hereof, and doing all other acts that such Grantor is obligated to do hereunder. Such appointment is in each case irrevocable and coupled with an interest. Each Grantor hereby ratifies all that such attorney shall lawfully do or cause to be done by virtue hereof in accordance with this Agreement.

SECTION 6.02. *Notices.* Notices and other communications provided for herein shall be in writing and given to the Borrower or any Secured Party in the manner provided for in the Credit Agreement.

SECTION 6.03. *Successors and Assigns.* (a) Whenever in this Agreement any of the parties hereto is referred to, such reference shall be deemed to include the permitted successors and assigns of such party, and the terms "Lender", "Fronting Bank" and "Secured Party" shall include each permitted successor and assignee of any Lender, Fronting Bank or Secured Party permitted under Section 9.04 of the Credit Agreement and all covenants, promises and agreements by or on behalf of the Grantors or the Collateral Agent or that are contained in this Agreement

shall bind and inure to the benefit of their respective permitted successors and permitted assigns referred to above.

(b) No Grantor shall assign or delegate any of its rights and duties hereunder.

(c) The covenants, promises and agreements by the Grantors shall inure to the benefit of each Secured Party and each assignee of any Secured Party permitted under Section 9.04 of the Credit Agreement.

SECTION 6.04. *Applicable Law.* THIS AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK, EXCEPT TO THE EXTENT THAT FEDERAL LAW OR LAWS OF ANOTHER STATE OR FOREIGN JURISDICTION MAY APPLY TO PATENTS, TRADEMARKS, COPYRIGHTS, OTHER COLLATERAL OR REMEDIES.

SECTION 6.05. *Waivers; Amendment.* (a) No failure or delay of the Collateral Agent in exercising any power or right hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other right or power. The rights and remedies of the Collateral Agent hereunder and of other Secured Parties under the Loan Documents are cumulative and are not exclusive of any rights or remedies that they would otherwise have. No waiver of any provisions of this Agreement or any other Loan Document or consent to any departure by any Grantor therefrom shall in any event be effective unless the same shall be permitted by paragraph (b) below, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice to or demand on any Grantor in any case shall entitle such Grantor to any other or further notice or demand in similar or other circumstances.

(b) Neither this Agreement nor any provision hereof may be waived, amended or modified except pursuant to an agreement or agreements in writing entered into between any Grantor and the Collateral Agent, with the prior written consent of the Required Lenders; *provided, however*, that except as provided herein or in the other Loan Documents, no such agreement shall amend, modify, waive or otherwise affect the rights or duties of the Collateral Agent hereunder without the prior written consent of the Collateral Agent.

SECTION 6.06. *Security Interest Absolute.* All rights of the Collateral Agent hereunder, the security interests granted hereunder and all obligations of the Grantors hereunder shall be absolute and unconditional.

SECTION 6.07. *Survival of Agreement.* All covenants, agreements, representations and warranties made by any Grantor herein and in the certificates or other instruments prepared or delivered in connection with or pursuant to this Agreement or any other Loan Document shall be considered to have been relied upon by the Secured Parties and shall survive the making by the Lenders of the Loans, the execution and delivery to the Lenders of the Loan Documents and the issuance by the Fronting Bank of the Letters of Credit regardless of any investigation made by the Secured Parties or on their behalf and shall continue in full force and effect so long as the principal of or any accrued interest on any Loan or L/C Disbursement or any Fee or any other amount payable under or in respect of this Agreement or any other Loan Document is outstanding and unpaid and so long as the Commitments have not been terminated.

SECTION 6.08. *Binding Effect; Assignments.* This Agreement shall become effective as to any Grantor when a counterpart hereof executed on behalf of such Grantor shall have been delivered to the Collateral Agent, and thereafter shall be binding upon such Grantor and its respective successors and assigns, and shall inure to the benefit of such Grantor and the Secured Parties and their respective successors and assigns, except that no Grantor shall have the right to assign its rights hereunder or any interest herein (and any such attempted assignment shall be void) except as expressly contemplated by this Agreement or the other Loan Documents.

SECTION 6.09. *Termination; Release.* (a) This Agreement and the security interests granted hereby shall terminate when all the Obligations have been indefeasibly paid in full, the Commitments have been terminated and no Letters of Credit are outstanding.

(b) Upon any sale by any Grantor of any Collateral that is permitted under the Credit Agreement or upon the effectiveness of any written consent to the release of the Security Interest in any Collateral pursuant to Section 9.08 of the Credit Agreement, the Security Interest in such Collateral shall be automatically released.

(c) In connection with any termination or release pursuant to paragraphs (a) and (b), the Collateral Agent shall execute and deliver to each Grantor, at such Grantor's expense, all Uniform Commercial Code termination statements, documents in order to terminate any United States Patent and Trademark Office filings and similar documents that such Grantor shall reasonably request to evidence such termination or release. Any execution and delivery of termination statements or documents pursuant to this Section 6.09 shall be without recourse to or warranty by the Collateral Agent.

SECTION 6.10. *WAIVER OF JURY TRIAL.* EACH PARTY HERETO HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT OR ANY OF THE OTHER LOAN DOCUMENTS. EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS, AS APPLICABLE, BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 6.10.

SECTION 6.11. *Severability.* In the event any one or more of the provisions contained in this Agreement or in any other Loan Document should be held invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein and therein shall not in any way be affected or impaired thereby (it being understood that the invalidity of a particular provision in a particular jurisdiction shall not in and of itself affect the validity of such provision in any other jurisdiction). The parties shall endeavor in good-faith negotiations to replace the invalid, illegal or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the invalid, illegal or unenforceable provisions.

SECTION 6.12. *Jurisdiction; Consent to Service of Process.* (a) Each Grantor hereby irrevocably and unconditionally submits, for itself and its property, to the nonexclusive jurisdiction of any New York State court or Federal court of the United States of America sitting in New York City, and any appellate court from any thereof, in any action or proceeding arising out of or relating to this Agreement or the other Loan Documents, or for recognition or enforcement of any judgment, and each of the parties hereto hereby irrevocably and unconditionally agrees that all claims in respect of any such action or proceeding may be heard and determined in such New York State or, to the extent permitted by law, in such Federal court. Each of the parties hereto agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Nothing in this Agreement shall affect any right that any Loan Party or Secured Party may otherwise have to bring any action or proceeding relating to this Agreement or the other Loan Documents against any Grantor or any Secured Party or its properties in the courts of any jurisdiction.

(b) Each Grantor and each Secured Party hereby irrevocably and unconditionally waives, to the fullest extent it may legally and effectively do so, any objection that it may now or hereafter have to the laying of venue of any suit, action or proceeding arising out of or relating to this Agreement or the other Loan Documents in any New York State or Federal court. Each of the parties hereto hereby irrevocably waives, to the fullest extent permitted by law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court.

(c) Each party to this Agreement irrevocably consents to service of process in the manner provided for notices in Section 6.02. Nothing in this Agreement will affect the right of any party to this Agreement to serve process in any other manner permitted by law.

SECTION 6.13. *Counterparts.* This 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 instrument, and shall become effective as provided in Section 6.08.

SECTION 6.14. *Headings.* Article and Section headings used herein are for convenience of reference only, are not part of this Agreement and are not to affect the construction of, or to be taken into consideration in interpreting, this Agreement.

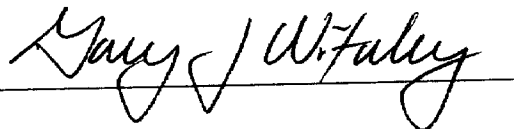
SECTION 6.15. *Additional Grantors.* Pursuant to Section 5.11 of the Credit Agreement, each U.S. Subsidiary that was not in existence or not a U.S. Subsidiary on the date thereof is required to enter into this Agreement as a Grantor upon becoming a U.S. Subsidiary. Upon execution and delivery, after the date hereof, by the Collateral Agent and such U.S. Subsidiary of an instrument in the form of Annex 1, such U.S. Subsidiary shall become a Grantor hereunder with the same force and effect as if originally named as a Grantor hereunder. The execution and delivery of any such instrument shall not require the consent of any Grantor hereunder. The rights and obligations of each Grantor hereunder shall remain in full force and effect notwithstanding the addition of any new Grantor as a party to this Agreement.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

AMERICAN AXLE & MANUFACTURING,
INC.,

by


Name:
Title:



THE CHASE MANHATTAN BANK,
as Collateral Agent,

by

Name:
Title:


Deborah Davey
Vice President

SCHEDULE I
TO INTELLECTUAL PROPERTY
SECURITY AGREEMENT

Patents:

<u>Patent No.</u>	<u>Inventor</u>	<u>Country</u>	<u>Issue Date</u>	<u>Title</u>
4,307,833	G.A. Barnard	U.S.	12/29/81	Method of Manufacturing a Yoke and Tube Arrangement
4,762,011	P.O. Jacob	U.S.	08/09/88	Electronic Gage
*4,916,973	W.K. Fuelberth A. Fedor, Jr.	U.S.	04/17/90	Torque Biased Differential Mechanism
4,932,923	D.P. Thompson	U.S.	06/12/90	Sealed Bearing Arrangement for Universal Joint
*4,938,738	A. Fedor, Jr. W.K. Fuelberth R.J. Murphy	U.S.	07/03/90	Two-Speed Drive Arrangement
4,970,913	S.J. Kielar C.L. Rasmer F.F. Stimpson	U.S.	11/20/90	Venting Mechanism
5,062,656	E.J. Hynds K.A. Stowe D.C. Cook	U.S.	11/05/91	Flexible Link Assembly for a Vehicle Suspension System
5,064,216	E.J. Hynds	U.S.	11/12/91	End Link Assembly for an Automotive Vehicle Suspension System
5,102,160	K.A. Stowe	U.S.	04/07/92	Connector Assembly for a Stabilizer Bar
5,112,031	E.J. Hynds K.A. Stowe	U.S.	05/12/92	Interlocking Mounting Bushing Assembly for a Stabilizer Bar
5,186,486	E.J. Hynds	U.S.	02/16/93	Active Link For a Stabilizer Bar

5,294,350	R.J. Murphy A.J. Marlow	U.S.	03/15/94	Magnetic Particle Separator
5,320,587	J.C. Bodtker N.E. Schultz	U.S.	06/14/94	Differential Case With Ring Gear
5,529,316	B.A. Mattila	U.S.	06/25/96	Adjustable Tie Rod Assembly
5,540,300	G.W. Gage J.P. Downs D.A. Frank D.B. Lutz C.L. Rasmer N.E. Schultz	U.S.	07/30/96	Drive Axle Assembly with Lubricant Cooling System
5,597,258	J.L. Kincaid M.V. Bhandiwad K.G. Kraft	U.S.	01/28/97	Preloaded Pivot Joint

Patent Applications:

<u>Serial No.</u>	<u>Inventor</u>	<u>Country</u>	<u>Filing Date</u>	<u>Title</u>
PI 9700805-2	J.L. Kincaid M.V. Bhandiwad K.G. Kraft	Brazil	01/28/97	Preloaded Pivot Joint
2191820	J.L. Kincaid M.V. Bhandiwad K.G. Kraft	Canada	12/2/96	Preloaded Pivot Joint
966307	J.L. Kincaid M.V. Bhandiwad K.G. Kraft	Mexico	12/11/96	Preloaded Pivot Joint
08/691,193	H. Wayne Seeds	U.S.	08/05/96	Dynamically Balanced Driveshaft Assembly and Method of Balancing Same
PI 9605138-8	H. Wayne Seeds	Brazil	10/15/96	Dynamically Balanced Driveshaft Assembly and Method of Balancing Same

2,188,206	H. Wayne Seeds	Canada	10/18/96	Dynamically Balanced Driveshaft Assembly and Method of Balancing Same
96305208.9	H. Wayne Seeds	EPC (U.K., France, Italy, Spain, & Germany)	07/16/96	Dynamically Balanced Driveshaft Assembly and Method of Balancing Same
96-28662	H. Wayne Seeds	S. Korea	07/16/96	Dynamically Balanced Driveshaft Assembly and Method of Balancing Same
96-2456	H. Wayne Seeds	Mexico	06/24/96	Dynamically Balanced Driveshaft Assembly and Method of Balancing Same
P-316 547	H. Wayne Seeds	Poland	10/16/96	Dynamically Balanced Driveshaft Assembly and Method of Balancing Same
032029	H. Wayne Seeds	Thailand	06/21/96	Dynamically Balanced Driveshaft Assembly and Method of Balancing Same
PI 9600059-7	G.W. Gage J.P. Downs D.A. Frank D.B. Lutz C.L. Rasmer N.E. Schultz	Brazil	01/08/96	Drive Axle Assembly with Lubricant Cooling System
029399	G.W. Gage J.P. Downs D.A. Frank D.B. Lutz C.L. Rasmer N.E. Schultz	Thailand	12/21/95	Drive Axle Assembly with Lubricant Cooling System

2,166,756	G.W. Gage J.P. Downs D.A. Frank D.B. Lutz C.L. Rasmer N.E. Schultz	Canada	01/09/96	Drive Axle Assembly with Lubricant Cooling System
96-0157	G.W. Gage J.P. Downs D.A. Frank D.B. Lutz C.L. Rasmer N.E. Schultz	Mexico	01/09/96	Drive Axle Assembly with Lubricant Cooling System
08/673,498	G.W. Gage	U.S.	07/01/96	Drive Axle Assembly with Lubricant Cooling System
PI 9603725-3	G.W. Gage	Brazil	09/10/96	Drive Axle Assembly with Lubricant Cooling System
2,185,072	G.W. Gage	Canada	09/09/96	Drive Axle Assembly with Lubricant Cooling System
96 306657.6	G.W. Gage	EPC (U.K., France, Italy, Spain, & Germany)	09/13/96	Drive Axle Assembly with Lubricant Cooling System
964141	G.W. Gage	Mexico	09/18/96	Drive Axle Assembly with Lubricant Cooling System
033174	G.W. Gage	Thailand	09/10/96	Drive Axle Assembly with Lubricant Cooling System
960583	B.A. Mattila	Mexico	02/16/95	Adjustable Tie Rod Assembly
9600383-9	B.A. Mattila	Brazil	02/12/96	Adjustable Tie Rod Assembly
2,169,593	B.A. Mattila	Canada	02/15/96	Adjustable Tie Rod Assembly
030087	B.A. Mattila	Thailand	02/15/96	Adjustable Tie Rod Assembly
08/692,414	H. Wayne Seeds	U.S.	08/05/96	Method of Welding Aluminum Driveshaft Components

PI 9603784-9	H. Wayne Seeds	Brazil	09/17/96	Method of Welding Aluminum Driveshaft Components
2,180,066	H. Wayne Seeds	Canada	06/27/96	Method of Welding Aluminum Driveshaft Components
96 112325.7	H. Wayne Seeds	China	09/16/96	Method of Welding Aluminum Driveshaft Components
96305352.5	H. Wayne Seeds	EPC (U.K., France, Italy, Spain, & Germany)	07/22/96	Method of Welding Aluminum Driveshaft Components
96-25567	H. Wayne Seeds	S. Korea	06/29/96	Method of Welding Aluminum Driveshaft Components
963206	H. Wayne Seeds	Mexico	08/05/96	Method of Welding Aluminum Driveshaft Components
P-316 072	H. Wayne Seeds	Poland	09/13/96	Method of Welding Aluminum Driveshaft Components
032330	H. Wayne Seeds	Thailand	06/21/96	Method of Welding Aluminum Driveshaft Components
08/504,589	G.W. Gage	U.S.	07/20/95	Drive Axle Assembly
PI 9603107-7	G.W. Gage	Brazil	07/17/96	Drive Axle Assembly
2,176,101	G.W. Gage	Canada	05/08/96	Drive Axle Assembly
96303432.7	G.W. Gage	EPC (U.K., France, Italy, Spain, & Germany)	05/15/96	Drive Axle Assembly
08-189251	G.W. Gage	Japan	07/18/96	Drive Axle Assembly

96-1841	G.W. Gage	Mexico	05/16/96	Drive Axle Assembly
031288	G.W. Gage	Thailand	05/08/96	Drive Axle Assembly
08/595,659	J.L. Kincaid B.A. Mattila T.J. Miller K.G. Kraft	U.S.	02/02/96	Adjustable Torque Pivot Joint
PI 9700804-4	J.L. Kincaid B.A. Mattila T.J. Miller K.G. Kraft	Brazil	01/28/97	Adjustable Torque Pivot Joint
2,195,295	J.L. Kincaid B.A. Mattila T.J. Miller K.G. Kraft	Canada	01/16/97	Adjustable Torque Pivot Joint
97-0729	J.L. Kincaid B.A. Mattila T.J. Miller K.G. Kraft	Mexico	01/29/97	Adjustable Torque Pivot Joint
035,443	J.L. Kincaid B.A. Mattila T.J. Miller K.G. Kraft	Thailand	01/28/97	Adjustable Torque Pivot Joint
08/685,040	J.C. Hibbler R.S. Silbert E.P. Jung	U.S.	07/23/96	Gear Arrangement with Backlash Adjustment
(None yet)	J.C. Hibbler R.S. Silbert E.P. Jung	Brazil	07/22/97	Gear Arrangement with Backlash Adjustment
2,199,329	J.C. Hibbler R.S. Silbert E.P. Jung	Canada	03/06/97	Gear Arrangement with Backlash Adjustment
972062	J.C. Hibbler R.S. Silbert E.P. Jung	Mexico	03/19/97	Gear Arrangement with Backlash Adjustment

60/045,706	J.P. Downs E.J. Eshelman	U.S.	05/06/97	Differential Case with Optimized Window Geometry
60/045,467	K.G. Kraft	U.S.	05/02/97	Low Lash Idler Arm Assembly
08/743,400	M.M. Menosky M.S. Barrett	U.S.	11/1/96	Aluminum Drive Shaft

(Foreign Applications corresponding to U.S. Ser. No. 08/743,400 have been filed in Argentina, Brazil, Canada, and Mexico. No serial numbers or filing dates were available as of 10/14/97)

08/888,511	M.S. Barrett T.J. Oldenburg	U.S.	07/07/97	Construction and Method of Making Prop Shaft Having Enlarged End Sections
08/863,810	J.L. Kincaid T.T. Harvey N.A. Wasylewski	U.S.	05/27/97	Direct Acting End Link for Stabilizer Bar

* AAM intends to allow U.S. patent nos. 4,916,973 and 4,938,738 to lapse through nonpayment of the year 7 ½ maintenance fees.

SCHEDULE II
TO INTELLECTUAL PROPERTY
SECURITY AGREEMENT

Trademarks, Trademark Registrations and Trademark Registration Applications

A. "AAM & Design" ()

- (i). USA - Pending
Ser. No.: 74/670,433
Filing Date: 05/05/95
- (i.a.) USA - Pending
Ser. No.: 74/975,361
Filing Date: 03/05/95
- (ii). Japan - Pending
Ser. No.: 7-114883
Filing Date: 11/06/95
- (iii). Mexico - Pending
Ser. No.: 247191
Filing Date: 11/03/95
- (iv). Germany - Registered
Application Ser. No. 39544706.2 / Reg. No. 39544706
Filing Date: 11/3/95 / Reg. Date: 10/23/96
- (v). United Kingdom - Registered
Application Ser. No. 2,043,637 / Reg. No. 2043637
Filing Date: 11/06/95 / Reg. Date: 07/19/96
- (vi). Canada - Pending
Ser. No.: 796,384
Filing Date: 11/03/95
- (vii). Brazil - Pending
Ser. No.: 818889977
Filing Date: 11/06/95
- (viii). France - Registered
Application Ser. No. 95595731 / Reg. No. 95595731
Filing Date: 11/03/95 / Reg. Date: 05/10/96

- (ix) **Argentina - Pending**
Application Ser. No. 2097620
Filing Date: 08/12/97
- (x) **Indonesia - Pending**
Application Ser. No. D97 18903
Filing Date: 09/04/97
- (xi) **Malaysia - Pending**
Application Ser. No. 97-12335
Filing Date: 08/29/97
- (xii) **S. Korea - Pending**
Application Ser. No. 97/37176
Filing Date: 08/09/97
- (xiii) **Thailand - Pending**
Application Ser. No. (Not received yet)
Filing Date: (Not received yet)

B. "American Axle & Manufacturing with Design" ()

- (i). **USA - Pending**
Ser. No.: 74/539,905
Filing Date: 06/20/94

Supplemental Register Application:
Ser. No.: 75/245859
Filing Date: 02/10/97
- (ii). **Canada - Pending**
Ser. No.: 770,090
Filing Date: 12/05/94
- (iii). **Mexico - Registered**
Application Ser. No. 219992 / Reg. No. 498587
Filing Date: 12/14/94 / Reg. Date: 07/26/95
- (iv). **United Kingdom - Registered**
Application Ser. No. 2,001,196 / Reg. No. 2001196
Filing Date: 11/08/94 / Reg. Date: 11/10/95

(v). **Germany - Pending**
Ser. No.: A57958/12Wz
Filing Date: 10/13/94

(vi). **France - Registered**
Ser. No.: 94/543,907
Filing Date: 09/11/94

(vii). **Japan - Pending**
Ser. No.: 6-128423
Filing Date: 12/20/94

(viii). **Brazil - Pending**
Ser. No.: 818955597
Filing Date: 11/28/95

C. **"Gem-Cote"**

(i). **USA - Pending**
Ser. No.: 651,555
Filing Date: 03/24/95

D. **"Forging New World Driveline Standards"**

(i). **USA - Registered**
Application Ser. No. 74/689,243 / Reg. No. 2,011,616
Filing Date: 06/15/95 / Reg. Date: 10/29/96

(ii). **Japan**

a. **Pending**
Ser. No.: 07/129874
Filing Date: 12/14/95

b. **Pending**
Ser. No.: 08/023546
Filing Date: 03/06/96

c. **Pending**
Ser. No.: 08/023544
Filing Date: 03/06/96

(iii). **Germany**

- a. **English Language Service Mark - Registered**
Application Ser. No.: 395 50 436.8 / Reg. No. 395 50 436.8
Filing Date: 12/11/95 / Reg. Date: 06/11/96
- b. **German Language Service Mark - Pending**
Ser. No.: 39608612.8
Filing Date: 02/24/96
- c. **English Language Trademark - Registered**
Application Ser. No.: 39608613.6 / Reg. No. 396 08 613
Filing Date: 02/24/96 / Reg. Date: 08/05/96

(iv). **Mexico**

- a. **English Language - Registered**
Application Ser. No.: 250188 / Reg. No.: 527,144
Filing Date: 12/13/95 / Reg. Date: 07/29/96
- b. **Spanish Language - Registered**
Application Ser. No.: 277477 / Reg. No. 538,898
Filing Date: 10/22/96 / Reg. Date: 12/17/96

(v). **United Kingdom - Pending**
Ser. No.: 2,048,057
Filing Date: 01/25/96

(v.a.) **United Kingdom - Pending**
Ser. No.: 2,135,276
Filing Date: 06/06/97

(vi). **Canada - Pending**
Ser. No.: 799,942
Filing Date: 12/14/95

E. **"TRACRITE"**

- (i). **USA - Pending**
Application Ser. No. 75/243,706
Filing Date: 01/31/97
- (ii) **Argentina - Pending**
Application Ser. No. 2,094,985
Filing Date: 07/29/97

- (iii) **Brazil - Pending**
Application Ser. No.: 819993921
Filing Date: 07/30/97
- (iv) **Canada - Pending**
Application Ser. No. 851,582
Filing Date: 07/22/97
- (v) **France - Pending**
Application Ser. No. 97/688,579
Filing Date: 07/23/97
- (vi) **Germany - Pending**
Application Ser. No. 397 35 503.3
Filing Date: 07/25/97
- (vii) **Indonesia - Pending**
Application Ser. No. D97-15845
Filing Date: 07/31/97
- (viii) **Malaysia - Pending**
Application Ser. No. 97-10574
Filing Date: 07/31/97
- (ix) **Mexico - Pending**
Application Ser. No. 302418
Filing Date: 07/25/97
- (x) **S. Korea - Pending**
Application Ser. No. 97/34949
Filing Date: 07/26/97
- (xi) **Thailand - Pending**
Application Ser. No. (Not received yet)
Filing Date: (Not received yet)
- (xii) **U.K. - Pending**
Application Ser. No. 2,140,322
Filing Date: 07/28/97
- (xiii) **Japan - Pending**
Application Ser. No. 97-34949
Filing Date: 07/26/97

F. "POWERLITE"

- (i) USA - Pending**
Application Ser. No. 75/306,731
Filing Date: 06/11/97

G. Other

- (i) The Company claims limited common law trademark rights in the following names:**
 - (a) "Radiax"**
 - (b) "Genesys"**
- (ii) "AAM" is used as a trade name by the Company:**

**SCHEDULE III
TO INTELLECTUAL PROPERTY
SECURITY AGREEMENT**

**COPYRIGHT REGISTRATIONS AND
COPYRIGHT REGISTRATION APPLICATIONS**

None.

**SCHEDULE IV
TO INTELLECTUAL PROPERTY
SECURITY AGREEMENT**

Licenses

- a. **Assignment and License Back - Technical Documentation, dated February 28, 1994, by and between General Motors Corporation and American Axle & Manufacturing, Inc.**
- b. **License - Patents & Technical Documentation, dated February 28, 1994, between General Motors Corporation and American Axle & Manufacturing, Inc.**
- c. **Gerodisc Option Agreement dated November 1, 1995, between American Axle & Manufacturing, Inc., and ASHA Corporation**
- d. **Technology License and Support Services Agreement dated October 25, 1995, between American Axle & Manufacturing, Inc., and Tochigi Fuji Sangyo K.K.***
- e. **Consulting and License Agreement dated June 2, 1997, between American Axle & Manufacturing, Inc., and Yakov Fleytman, Ph.D.**
- f. **Product Distribution Agreement, dated December 20, 1996, by and between M&M Knopf Auto Parts, Inc., and American Axle & Manufacturing, Inc.**

**SCHEDULE V
TO INTELLECTUAL PROPERTY
SECURITY AGREEMENT**

Liens On

None.