



09-25-2000

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IN THE



DEMARK OFFICE

101469150

Attorney Docket No. 7495A-500017C1

**COVER SHEET FOR RECORDAL OF DOCUMENT (PATENT)**

Hon. Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

Pursuant to 37 C.F.R. 3.31, enclosed herewith is a document for recordal in this case.  
The following information is provided:

**(1) Name Of Party Conveying The Interest:**

Rockwell International Corporation  
a Delaware corporation  
777 East Wisconsin Avenue, Suite 1400  
Milwaukee, Wisconsin 53202

**(2) Name And Address Of Party Receiving The Interest:**

Rockwell Heavy Vehicle Systems, Inc.  
a Delaware corporation  
2135 West Maple Road  
Troy, Michigan 48084

**(3) Description Of The Transaction To Be Recorded:**

Assignment       License  
 Change of Name     Other \_\_\_\_\_

**(4) Application(s) and/or Patent(s) Against Which Enclosure Is To Be Recorded:**

Serial Number \_\_\_\_\_, filed \_\_\_\_\_  
 Application being filed concurrently herewith.  
 Patent Number 5484041 issued January 16, 1996

**(5) Name And Address Of The Party To Whom Correspondence Concerning The Request To Record Should Be Mailed:**

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09/25/2000 JJALLANZ 00000238 5484041

01 FC:581

40.00 EP

(6) **Number Of Applications and/or Patents Identified In The Cover Sheet And Total Recordal Fee:**

Number of Applications/Patents: ..... 1

Total Recordal Fee Enclosed: ..... \$40.00

(7) **Date(s) The Document Was Executed:** November 15, 1996

To the best of my knowledge and belief, the foregoing information is true and correct, and if the attached is not an original document, the undersigned verifies that it is a true copy of the original.

If, for some reason, Applicant(s) has/have not paid a sufficient fee, please charge our Deposit Account No. 08-0750 for any further fees which may be due. A duplicate copy of this document is enclosed.

Respectfully submitted,

By:

  
David A. McClaughry

Reg. No.

37885

Attorney for Applicant(s)

Date: August 28, 2000

**ASSIGNMENT OF INVENTIONS, PATENT APPLICATIONS AND PATENTS**

WHEREAS, Rockwell International Corporation ("Assignor"), a corporation organized and existing under the laws of the State of Delaware, desires to assign to Rockwell Heavy Vehicle Systems, Inc., ("Assignee"), a corporation organized and existing under the laws of the State of Delaware, pursuant to that certain Assignment and Assumption Agreement between Assignor and Assignee dated November 15, 1996, certain assets of Assignor identified as Contributed Assets in Annex A to that certain Agreement and Plan of Merger dated as of July 31, 1996 among Rockwell International Corporation, The Boeing Company and Boeing NA, Inc., and;

WHEREAS, Assignor is the owner of, or has rights in, those inventions, patent applications and patents included among the Contributed Assets, including those inventions, patent applications and patents listed on the Schedule attached hereto ("Contributed Inventions, Patent Applications and Patents").

NOW, THEREFORE, in consideration of the issuance of stock in Assignee to Assignor and for other good and valuable consideration delivered by Assignee to Assignor, the receipt and sufficiency of which are hereby acknowledged, said Assignor does hereby sell, grant, assign, convey and transfer unto the said Assignee, Assignor's entire right, title and interest in and to the Contributed Inventions, Patent Applications and Patents, including any applications or patents arising therefrom or any continuations or divisions thereof, and any and all re-examinations or reissues thereof and the subject matter of any and all claims which may be obtained in every such patent, the same to be held and enjoyed by the said Assignee, its successors, assigns or other legal representatives, for its own use and advantage, and for the use and advantage of its successors, assigns or other legal representatives, to the end of the term or terms for which patents are or may be granted, reissued or re-examined, as fully and entirely as the same would have been held and enjoyed by Assignor had this assignment not been made, including all rights to profits and damage by reason of past infringement by any party or parties, with the right to sue



SCHEDULE TO EXHIBIT HVSA ASSIGNMENT (HVSA)  
**AUTOMOTIVE - U. S. Issued and Pending Patents**

Case No.	Title	Patent No.	Appl. No.	L/H	1
2899RE	BRAKE ASSEMBLY - Reissue Patent RE31531	RE.31,531	07/276,065	HEAVY	
5547	DESIGN: COUPLER FOR TRANSMITTAL OF DATA FROM REMOTE COMPUTER TO HOST COMPUTER	DES331,572	07/501,634	HEAVY	
94AUT012	CRUISE CONTROL SHIFT KNOB (DESIGN)	D366,439	29/028,719	HEAVY	
5434	DESIGN PATENT - VEHICLE TRANSMISSION GEAR RANGE SELECTOR HANDLE	D320,187	07/488,788	HEAVY	
4241	RETAINER SPRING FOR CAM FOLLOWER IN BRAKE SHOE - Design Patent	D268925	203,203	HEAVY	
3746	WRENCH - Design Patent	D268,805	184,579	HEAVY	
RIA01DDC	METHOD AND APPARATUS FOR ASSISTING IN SHIFTING TRANSMISSION TO NEUTRAL	5,573,477	08/508,155	HEAVY	
RIA04DDC	OPERATOR INPUT SYSTEM FOR GEAR SHIFT ASSIST MECHANISM	5,571,059	08/508,307	HEAVY	
93AUT011	ENGINE SPEED SYNCHRONIZATION SYSTEM FOR ASSISTING IN MANUAL TRANSMISSION SHIFTING	5,569,115	08/508,135	HEAVY	
93AUT006	SNAP-IN SLIP YOKE PLUG	5,562,546	08/412,074	HEAVY	
96SUS03	TAG AXLE ASSEMBLY	5,540,454	08/376,023	HEAVY	
96SUS01	LIFT AXLE SUSPENSION SYSTEM	5,505,481	08/207,347	HEAVY	
93AUT024B	COMPOSITE BRAKE PISTON WITH INTERNAL CUSHION	5,484,041	08/447,286	HEAVY	
92AUT024	PLANETARY REDUCTION FOR DRIVE AXLES	5,435,793	08/088,271	HEAVY	
93AUT033	A DISC BRAKE ASSEMBLY INCLUDING A CONFIGURED LOAD PLATE	5,433,301	08/166,421	HEAVY	
92AUT031	AXLE HOUSING BREATHER	5,348,570	08/042,934	HEAVY	

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Case No.	Title	Patent No.	Appln. No.	L/H
92AUT010	VEHICLE BRAKE SUPPORT ASSEMBLY	5,325,945	07/950,583	HEAVY
92AUT022	AUTOMATIC SLACK ADJUSTING MECHANISM INCLUDING A LOW FRICTION ADJUSTING GEAR	5,305,856	07/954,599	HEAVY
5650	ROTORS HAVING A COMBINED FUNCTION OF PROVIDING A VARIABLE RELUCTANCE MAGNETIC PATH AND AN AXIAL THRUST	5,293,787	07/909,474	HEAVY
5569P	DIAMETRAL RUNOUT REDUCER FOR DRIVING A ROTARY SENSOR	5,252,872	07/735,591	HEAVY
5558	METHOD AND APPARATUS FOR NON-CONTACT EXTRACTION OF ON-BOARD TRIP RECORDERS	5,224,211	07/508,378	HEAVY
5082P6	WHEEL SPEED SENSOR FOR DRIVE AXLE	5,223,760	07/785,243	HEAVY
5632	SLEEVE FOR ALIGNING TWO DISCRETE STRUCTURES HAVING ADJOINING BORES	5,207,113	07/768,149	HEAVY
5552	ANTILOCK BRAKE SYSTEM AND METHOD INCORPORATING A PRESSURE FEEDBACK	5,171,069	07/513,137	HEAVY
5583	THREE POSITION ACTUATOR HAVING A NEUTRAL NORMAL POSITION FOR SHIFTING A TWO SPEED TRANSFER CASE	5,125,326	07/647,388	HEAVY
5-30-C	SPEED SENSOR HAVING A CLOSED MAGNETIC FLUX PATH FOR SENSING SPEED FROM AN AXIAL FACE OF A ROTATING MEMBER	5,111,138	07/732,252	HEAVY
5082P1	UNITARY ROTATIONAL SPEED SENSOR	5,111,098	07/463,736	HEAVY
5569	DIAMETRAL RUNOUT REDUCER FOR ROTATING SHAFT	5,107,158	07/590,994	HEAVY
5541	AUXILIARY TRANSMISSION SHIFT CONTROL SYSTEM	5,092,187	07/610,596	HEAVY
5429	ACOUSTIC SIGNAL TRANSMISSION BETWEEN A TRACTOR AND TRAILER WITHIN THE AIR BRAKE SYSTEM	5,090,779	07/573,938	HEAVY
5169C	ANTI-LOCK BRAKE CONTROLLER IMPROVEMENTS	5,074,626	07/510,302	HEAVY
5372	SEAL ASSEMBLY	5,067,732	07/509,125	HEAVY

Case No.	Title	Patent No.	Appln. No.	L/H	3
4903	STEERING KNUCKLE DAMPER	5,052,528	07/563,478	HEAVY	
5345	EXCESSIVE WEAR INDICATOR FOR BRAKE SYSTEM	5,035,303	07/432,817	HEAVY	
5428	THREE POSITION ACTUATOR FOR SHIFTING A TWO SPEED TRANSFER CASE	5,012,725	07/511,360	HEAVY	
5187	AUTOMATIC TRANSMISSION CONTROL SYSTEM AND METHOD OF OPERATION	5,007,309	07/363,653	HEAVY	
5162	TRANSMISSION AND METHOD OF OPERATION	4,955,851	07/235,140	HEAVY	
4938	LOCK-UP CLUTCH FOR FOUR ELEMENT TORQUE CONVERTER	4,934,495	07/330,003	HEAVY	
4263C	AUTOMATIC BRAKE ADJUSTING MECHANISM	4,926,980	07/740,157	HEAVY	
4555D	METHOD FOR MANUFACTURING A MODIFIED FAST FADE DRIVE AXLE HOUSING	4,921,159	225,621	HEAVY	
4864	TRANSMISSION APPARATUS AND METHOD	4,919,010	07/751,582	HEAVY	
5169	ANTILOCK BRAKE CONTROLLER IMPROVEMENTS	4,917,443	07/345,252	HEAVY	
4942	TRANSMISSION APPARATUS AND METHOD	4,872,375	751,402	HEAVY	
4941	PLANETARY TRANSMISSION APPARATUS HAVING A FOUR ELEMENT TORQUE	4,872,374	751,401	HEAVY	
5091	SELF-ADJUSTING BRAKE ACTUATOR	4,867,281	249,926	HEAVY	
4525	VEHICLE BRAKE SUPPORT	4,858,730	749,046	HEAVY	
4932	BRAKE SUPPORT ASSEMBLY	4,858,729	748,897	HEAVY	
4930	VEHICLE AXLE AND BRAKE SUPPORT ASSEMBLY	4,854,427	748,900	HEAVY	

Case No.	Title	Patent No.	Appln. No.	L/H
4555	MODIFIED FAST FADE DRIVE AXLE HOUSING	4,841,802	845,144	HEAVY
4925D	ANTILOCK BRAKE SYSTEM	4,836,616	216,918	HEAVY
4532	FRICTION PAD AND SUPPORT FOR A DISC BRAKE	4,781,272	752,709	HEAVY
4934	DRIVE AXLE HOUSING BLANK	4,760,755	07/844,658	HEAVY
4923	TWO SPEED AXLE	4,745,822	07/725,452	HEAVY
4244C	FLUID COOLED FRICTION BRAKE	4,736,821	543,567	HEAVY
4501	OFFSET TRUNION BRACKET ON STEER DRIVE AXLE	4,729,448	8996	HEAVY
3013	AIR DISC BRAKE ASSEMBLY WITH SHORTENED END CAP AND INTEGRAL CAST AIR CHAMBER BRACKET	4,727,964	916,928	HEAVY
3026	ANTILOCK BRAKE SYSTEM WITH WHEEL SPEED SENSOR	4,724,935	916,139	HEAVY
4954	APPARATUS FOR EXTRACTING AN ELEMENT FROM AN ASSEMBLY	4,711,011	766,307	HEAVY
4562	ROD ACTUATOR FOR AUTOMATIC SLACK ADJUSTING MECHANISMS	4,693,342	734,530	HEAVY
4911	BRAKE ACTUATOR	4,690,253	07/769,526	HEAVY
4060C	TWO STAGE STEPPED PISTON AIR COMPRESSOR	4,657,488	331,096	HEAVY
4959	DYNAMIC BALANCING MACHINE	4,653,324	765,990	HEAVY
3994C	ROLLER RETAINER FOR BRAKE ASSEMBLY	4,624,348	306,574	HEAVY
4893	AUTOMATIC BRAKE ADJUSTER	4,620,617	698,066	HEAVY



Case No.	Title	Patent No.	Appln. No.	L/H	S
4924	TWO SPEED AXLE SHIFT ACTUATOR	4,619,151	725,270	HEAVY	
4894	MOUNTING PIN SEALS FOR DISC BRAKE CALIPERS	4,611,694	698,287	HEAVY	
4419	BRAKE PROPORTIONING SYSTEM	4,603,921	741,646	HEAVY	
4564	DRIVELINE APPARATUS	4,580,996	513,945	HEAVY	
3710	QUICK CONNECT BRAKE COUPLING	4,580,665	40348	HEAVY	
4561	SLIP TYPE DRIVELINE	4,575,360	513,946	HEAVY	
4591	DRIVELINE	4,573,946	513,944	HEAVY	
4512C	CENTER BEARING ASSEMBLY	4,542,996	685,580	HEAVY	
3586	MULTIPLE DISC BRAKE	4,529,067	528,325	HEAVY	
4242C	DISC BRAKE ANTI-RATTLE DEVICE	4,516,666	623,864	HEAVY	
4167C	ROLLER RETAINER FOR BRAKE ASSEMBLY	4,503,953	515,837	HEAVY	
4634	BRAKING PISTON FOR A DISC BRAKE	4,503,946	528,300	HEAVY	
4635	METHOD FOR FORMING A BRAKING PISTON FOR A DISC BRAKE	4,503,595	528,327	HEAVY	
4586	SLACK ADJUSTER FOR A DISC BRAKE	4,499,976	505,010	HEAVY	
4600	AXLE FOR USE WITH A TIRE INFLATION SYSTEM	4,498,709	509,578	HEAVY	
4030	LOW FRICTION POWER TAKEOFF SHAFT	4,496,333	07/400,515	HEAVY	

Case No.	Title	Patent No.	Appln. No.	L/H	ε
4223	METHOD OF FORMING AN AXLE	4,492,019	07/509,580	HEAVY	
4374	LUBRICATION SYSTEM FOR A PLANETARY GEAR SYSTEM	4,489,626	339,035	HEAVY	
4308	POWER TRANSMITTING DEVICE FOR AN OIL WELL PUMP	4,484,484	07/245,472	HEAVY	
4446	TRAILER BRAKE SYSTEM	4,478,459	07/468,833	HEAVY	
4531	SLACK ADJUSTER FOR A DISC BRAKE	4,478,317	484,026	HEAVY	
4530	SLACK ADJUSTER FOR A DISC BRAKE	4,478,316	484,025	HEAVY	
4519	HYDRAULIC BRAKE ACTUATOR	4,478,137	457,824	HEAVY	
4517	EMERGENCY AND SERVICE BRAKE ACTUATOR	4,469,015	457,825	HEAVY	
4344	DRIVE AXLE AND FLUID PUMP ASSEMBLY	4,468,981	07/307,840	HEAVY	
3052C	VEHICLE DRIVE CONTROL SYSTEM	4,467,886	466,390	HEAVY	
4583	CENTER BEARING ASSEMBLY	4,463,993	492,763	HEAVY	
3786	LIMITED SLIP DIFFERENTIAL	4,462,272	294,260	HEAVY	
4550	RESILIENT SEALING MEMBER FOR SLIP-TYPE DRIVE SHAFT	4,460,183	07/514,061	HEAVY	
4568	SQUARE SEALING MEMBER FOR SLIP-TYPE DRIVE SHAFT	4,460,182	513,943	HEAVY	
4369	FILTER SYSTEM FOR A POWER TRANSMITTING DEVICE	4,459,208	07/339,036	HEAVY	
4345	DIFFERENTIAL SPEED LIMITED DEVICE	4,452,100	306,028	HEAVY	

Case No.	Title	Patent No.	Appln. No.	L/H	7
4398	CONNECTING ROD AND PISTON DEVICE FOR A BRAKE ADJUSTER	4,446,949	339,037	HEAVY	
4346	DIFFERENTIAL SPEED LIMITING DEVICE	4,445,400	306,052	HEAVY	
3869	INTERLOCK DEVICE FOR A TRANSMISSION SHIFT MECHANISM	4,441,379	165,612	HEAVY	
4064	PUSH-PULL YOKE-POWER TAKEOFF COUPLING	4,433,934	409,490	HEAVY	
4063	POWER TAKEOFF YOKE SHIELDING AND ENGAGING MEANS	4,431,334	372,595	HEAVY	
4221	LUBRICATION SYSTEM FOR A POWER TAKE OFF ASSEMBLY AND A DRIVE SHAFT THEREFOR	4,425,817	244,178	HEAVY	
3487C	AXLE SPINDLE HAVING A NON-INTEGRAL BEARING STOP	4,363,522	355,956	HEAVY	
4034	BRAKE ACTUATOR ASSEMBLY	4,360,086	179,413	HEAVY	
4179	MULTIPLE PISTON FRICTION BRAKE	4,358,000	07/205,534	HEAVY	
3830	SUPPORT FOR A SERIES OF FRICTION DISCS	4,356,901	07/187,386	HEAVY	
4174	FRICTION PAD AND SUPPORT FOR A DISC BRAKE	4,352,414	07/212,001	HEAVY	
4504	METHOD OF FABRICATING A REINFORCED TUBULAR STRUCTURE	4,348,247	07/238,733	HEAVY	
3742	FRICTION BRAKE	4,346,791	07/193,511	HEAVY	
1023	LEAF SPRING STRESS PEENING METHOD	4,337,632	158,732	HEAVY	
1206	APPARATUS FOR WELDING AUTOMOTIVE BRAKE SHOES	4,332,998	182,050	HEAVY	
1207	METHOD & APPARATUS FOR WELDING AUTOMOTIVE BRAKE SHOES	4,323,753	182,048	HEAVY	

Case No.	Title	Patent No.	Appl. No.	L/H	9
3681	NON-INTRUSIVE FLUID MEASURING SYSTEM	4,296,472	07/080,556	HEAVY	
3854	CARBON SPACER	4,277,985	79407	HEAVY	
3887	REINFORCED TUBULAR STRUCTURE AND METHOD OF FABRICATION THEREOF	4,272,971	16454	HEAVY	
5083	SAFETY BRAKE MECHANISM ACQUIRED FROM STRATOLINE INC.	4,263,840	89583	HEAVY	
3845	TANDEM AXLE SUSPENSION BRACKET ASSEMBLY	4,245,852	5276	HEAVY	
3819	HUB AND BEARING SPACER	4,244,631	83082	HEAVY	
3677	HEATING AND COOLING SYSTEM	4,241,783	919,030	HEAVY	
2350	AXLE ASSEMBLY	4,210,220	961,330	HEAVY	
3634	BRAKE SHOE	4,209,084	07/844,096	HEAVY	
20060	MULTI-SPEED PLANETARY DRIVE AXLE ASSEMBLY	4,207,780	876,962	HEAVY	
2899P	BRAKE ASSEMBLY	4,206,834	791,368	HEAVY	
2947	LUBRICATING SYSTEM FOR A POWER TRANSMITTING APPARATUS	4,175,643	639,931	HEAVY	
2925	AIR PISTON DIFFERENTIAL LOCK-OUT	4,167,881	841,222	HEAVY	
2918D	UNIVERSAL JOINT AND CROSS THEREFOR	1,069,716	741,600	HEAVY	

Case No.	Title	Patent No.	Appln. No. L/H
96A02DC	FOUR POSITION SWITCH FOR SHIFT ASSIST SYSTEM	08/08,145	HEAVY
9602DF	TWO POSITION NEUTRAL SWITCH FOR MULTI-SPEED TRANSMISSION	08/50,657	HEAVY
9602SUS	SPRING BEAM SUSPENSION SYSTEM	08/05,750	HEAVY
96S07	SUSPENSION SYSTEM WITH DAMPED BEAM	08/647,200	HEAVY
9602S06	SUSPENSION SYSTEM WITH IMPROVED BEAM	08/647,220	HEAVY
96SUS	SUSPENSION SYSTEM AND ALIGNMENT MECHANISM THEREFOR	08/08,146	HEAVY
96S04	LEAF AXLE SUSPENSION FOR LARGE AXLE RAILROADS	08/93,800	HEAVY
9602S02	VEHICLE SUSPENSION SYSTEM	08/29,043	HEAVY
96AUT03	EDGE RELIEVED RIM BRAKE ROLLER	08/08,283	HEAVY
96AUT041	LINEAR FRICTION WEDGED BRAKE SHOE ASSEMBLY	08/98,800	HEAVY
9602T03	WBC BRAKE WITH FLUID CONNECTION BETWEEN MAIN BRATE AND ADJUSTING PISTON		HEAVY
96AUT03	DISC BRAKE WITH GEAR DRIVEN ADJUSTING PISTON		HEAVY
96AUT028	DIET SEAL FOR RING BEARING HOUSING	08/659,000	HEAVY
9602T02	ANTI-RATTLE SPURGE TEETH FOR DIFFERENTIAL CASE	08/69,014	HEAVY
96AUT03	WHEEL BEARING ADJUSTMENT INSTRUCTIONS ON ASSET	08/08,196	HEAVY
96AUT023	SPINDLE NOT WITH AUTOMATIC LOCK	08/66,100	HEAVY

Case No.	Title	Patent No.	Appln. No.	L/H	10
96A1021B	PLUG-IN HYDRAULIC CYLINDER HOUSING FOR HYDRAULICALLY ACTUATED CONTROL		08/521,950	HEAVY	
95A1022A	REACTION SURFACES FOR HYDRAULICALLY ACTUATED CLUTCHES		8/621,277	HEAVY	
95A1023	ADJUSTABLE PARKING BRAKE INTERFERENCE WITH SERVICE BRAKE		08/536,230	HEAVY	
96A1004	SEALING ARRANGEMENT FOR BRAKE CAMSHAFT		8/730,733	HEAVY	
95A1005	SLIP YAKE SEALING DEVICE		8/631,700	HEAVY	
95A1022	DRIVE TRANSMISSION SEALING DEVICE		08/522,395	HEAVY	
95A1033	CENTER RACING ROLLER END ARM ARRANGEMENT		08/568,522	HEAVY	
95A1002	METHODS OF WELDING A SENSOR BRACKET TO AN AXLE		8/501,787	HEAVY	
95A1014	YOUNG CONNECTIONS FOR UNIVERSAL JOINTS		08/524,529	HEAVY	
94A1013	CAM BRAKE SHOE FORMED EDGE		08/599,010	HEAVY	
95A1006	SHIFT WIRE TRANSMISSION SYSTEM		8/650,149	HEAVY	
95A1025	RETAINED NEEDLE THRUST WASHER		08/524,370	HEAVY	
94A1004	BRAKE BRACKET ASSEMBLY		8/709,533	HEAVY	
95A1007	BRAKE BRACKET ASSEMBLY		8/281,179	HEAVY	
95A1022	BEARING SUPPORT PLATE FOR AXLE HOUSING		08/526,870	HEAVY	
93A1035	UNIVERSAL JOINT WEAR INDICATOR		8/401,533	HEAVY	

Case No.

Title

Patent No.

Appln. No. L/H

11

3A18709

AUTOMATIC RANGE SELECT FOR MULTISPEED TRANSMISSION

08/87,996

HEAVY

92-11028

CRUISE IN REARVIEW CLIP

08/99,211

HEAVY

AUTOMOTIVE - Foreign Patents Issued and Pending

1	Case/Desg.	Title	Patent No.	Serial No.	Country
4930	HEAVY		PI8601235	PI8601235	BRAZIL
4932	HEAVY	BRAKE SUPPORT ASSEMBLY	PI8600451	PI8600451	BRAZIL
4525	HEAVY	VEHICLE BRAKE SUPPORT	PI8600002	PI8600002	BRAZIL
4893	HEAVY	AUTOMATIC BRAKE ADJUSTER	PI8506264	PI8506264	BRAZIL
4924	HEAVY	TWO SPEED AXLE SHIFT ACTUATOR	PI8504978	PI8504978.6	BRAZIL
4637	HEAVY		PI8404149	PI8404149	BRAZIL
4586	HEAVY		PI8402945	PI8402945	BRAZIL
4531	HEAVY		PI8401668	PI8401668	BRAZIL
4530	HEAVY		PI8401663	PI8401663	BRAZIL
4426	HEAVY		PI8306011	PI8306011	BRAZIL
4244	HEAVY	FLUID COOLED FRICTION BRAKE	PI8205787	PI8205787	BRAZIL
4263	HEAVY		PI8203480	PI8203480	BRAZIL
4167	HEAVY		PI8203195	PI8203195	BRAZIL
3582	HEAVY		PI8107792	PI8107792	BRAZIL
4174	HEAVY		PI8107771	PI8107771	BRAZIL
5569	HEAVY	DIAMETRAL RUNOUT REDUCER FOR ROTATING SHAFT	P69104684	91107195.9	GERMANY
5082P2	HEAVY		P69020330	90125047.2	GERMANY
5082P1	HEAVY		P69018958	90125046.4	GERMANY
5082	HEAVY	UNITARY ROTATIONAL SPEED SENSOR	P68911238	89107995.6	GERMANY
4530	HEAVY		P37472584	84103986.0	GERMANY
4930	HEAVY	VEHICLE AXLE BRAKE AND SUPPORT ASSEMBLY	P3676352.7	860101237.5	GERMANY
4525D	HEAVY		P3587475.9	P3587475.9-0	GERMANY
4932	HEAVY	BRAKE SUPPORT ASSEMBLY	P3584094.3	85115824.6P3	GERMANY
4525	HEAVY	VEHICLE BRAKE SUPPORT	P3584093.5	P3584093.5-0	GERMANY
4223	HEAVY		P3482920.2	84107060.0	GERMANY
4600	HEAVY		P3482919.9	84107059.2	GERMANY
4586	HEAVY		P3475821.6	84106437.1	GERMANY
4637	HEAVY		P3475423.7	84108863.6	GERMANY
4531	HEAVY		P3466426.2	84103533.0	GERMANY
4426	HEAVY		P3371111.9	83110010.2	GERMANY
4263	HEAVY		P3276874.5	82103308.1	GERMANY
4167	HEAVY		P3269044.4	82103305.7	GERMANY
5058	HEAVY	SPRING APPLIED PARKING BRAKE	P3266257.2	82630001.4	GERMANY
5552	HEAVY	ANTILOCK BRAKE SYSTEM AND METHOD INCORPORATING A PRESSURE	PI9101615	PI9101615	GERMANY
4911	HEAVY	BRAKE ACTUATOR	PI8602161	PI8602161	BRAZIL
5082P2	HEAVY	WHEEL SPEED SENSOR FOR DRIVE AXLE	9100055	PI9100055	BRAZIL

PATENT

REEL: 011089 FRAME: 0147



2 Case/Desg.	Title	Patent No.	Serial No.	Count
5082	HEAVY UNITARY ROTATIONAL SPEED SENSOR	8903594	PI8903594	BRAZIL
4174D	HEAVY	8601732.4	8601732.4	SWEDEN
4174	HEAVY	8122374	8122374	FRANCE
3742	HEAVY FRICTION BRAKE	8118450	8118450	FRANCE
4174	HEAVY	8107093-0	8107093-0	SWEDEN
3742	HEAVY FRICTION BRAKE	8105502-2	8105502-2	SWEDEN
2899-D	HEAVY	8100845-0	8100845-0	SWEDEN
3994	HEAVY	8027478	8027478	FRANCE
3681	HEAVY	8021037	8021037	FRANCE
3710	HEAVY	8011098	8011098	FRANCE
3994	HEAVY	8008994-9	8008994-9	SWEDEN
3710	HEAVY	8003346-7	8003346-7	SWEDEN
3634	HEAVY	7829778	7829778	FRANCE
3434	HEAVY FRICTION BRAKE	7826592	7826592	FRANCE
2899-P	HEAVY	7812545	7812545	FRANCE
3634	HEAVY	7810621-8	7810621-8	SWEDEN
2944	HEAVY	7722039	7722039	FRANCE
2899	HEAVY	7714969	7714969	FRANCE
2404	HEAVY	7713520	7713520	FRANCE
2944	HEAVY	7708364.0	7708364.0	SWEDEN
4174	HEAVY	658501	7618/81-2	SWITZERL
5082P2	HEAVY WHEEL SPEED SENSOR FOR DRIVE AXLE	653924	68013/90	AUSTRALI
5082P1	HEAVY UNITARY ROTATIONAL SPEED SENSOR	653710	68012/90	AUSTRALI
3994	HEAVY	651898	9423/80-1	SWITZERL
5558	HEAVY	646435	72752/91	AUSTRALI
3887	HEAVY REINFORCED TUBULAR STRUCTURE & METHOD OF FABRICATION THEREOF	645299	1493/80-4	SWITZERL
5541	HEAVY	639609	85766/91	AUSTRALI
5169	HEAVY ANTILOCK BRAKE CONTROLLER IMPROVEMENTS	637338	46946/89	AUSTRALI
4959	HEAVY DYNAMIC BALANCING MACHINE	601682	58769/86	AUSTRALI
4525	HEAVY VEHICLE BRAKE SUPPORT	595788	52682/86	AUSTRALI
4954	HEAVY APPARATUS FOR EXTRACTING AN ELEMENT FROM AN ASSEMBLY	591679	58758/86	AUSTRALI
4952	HEAVY APPARATUS FOR USE IN THE MANUFACTURE AND REPAIR OF TUBULAR	590577	58757/86	AUSTRALI
4223	HEAVY AN IMPROVED DISC BRAKE	578613	29740/84	AUSTRALI
4637	HEAVY	574373	31436/84	AUSTRALI
4586	HEAVY SLACK ADJUSTER FOR A DISC BRAKE	573588	29171/84	AUSTRALI
4600	HEAVY	572857	29743/84	AUSTRALI

3 Case/Desig.	Title	Patent No.	Serial No.	Country
4530	HEAVY	570965	26377/84	AUSTRAL.
4893	HEAVY	570354	52684/86	AUSTRAL.
4426	HEAVY	566032	20019/83	AUSTRAL.
4601	HEAVY	563139	34584/84	AUSTRAL.
4167	HEAVY	554874	82865/82	AUSTRAL.
4263	HEAVY	552744	82864/82	AUSTRAL.
3582	HEAVY	550921	76917/81	AUSTRAL.
4174	HEAVY	550562	76919/81	AUSTRAL.
3994	HEAVY	540837	64779/80	AUSTRAL.
4637	HEAVY	535542/7	535542	SPAIN
4532	HEAVY	535537	535537	SPAIN
4586	HEAVY	533472/1	533472	SPAIN
4531	HEAVY	531515	531515	SPAIN
4530	HEAVY	531514	531514	SPAIN
4426	HEAVY	526878	526878	SPAIN
4217	HEAVY	525928	525928	SPAIN
4894	HEAVY	36 01 683	P3601683.7-1	GERMANY
3742	HEAVY	3133196	P3133196.3-1	GERMANY
3994	HEAVY	3046994	P3046994.4-1	GERMANY
3710	HEAVY	3016694	P3016694.0-1	GERMANY
3634	HEAVY	2841372	P2841372.1-1	GERMANY
3434	HEAVY	2840300	P2840300.1	GERMANY
2899-P	HEAVY	2818682	P2818682.5-1	GERMANY
5569	HEAVY	264263/92	153357/91	JAPAN
4600	HEAVY	239055	297253	ARGENTIN/
4932	HEAVY	23719	15932/86	TURKEY
4530	HEAVY	232855	296244	ARGENTIN/
4531	HEAVY	231755	296245	ARGENTIN/
4911	HEAVY	23161	30985/86	TURKEY
4426	HEAVY	231468	294626	ARGENTIN/
4894	HEAVY	22757	2715/86	TURKEY
4174D	HEAVY	2138520	8411751	GT. BRITA
4174	HEAVY	2088498	8133353	GT. BRITA
3742	HEAVY	2085100	8123552	UK
3994	HEAVY	2066910	8037318	GT. BRITA
3434-	HEAVY	2064066	8033708	UK

PATENT

REF: 011089 FRAME: 0149

4 Case/Desg.	Title	Patent No.	Serial No.	Countr
3681	HEAVY	2059596	8029921	UK
3710	HEAVY	2049792	8012549	GT. BRIT
5169	HEAVY	2005578	2005578	CANADA
3434	HEAVY	2004335	78/35108	UK
5541	HEAVY	2,053,682	2053682	CANADA
2899-P	HEAVY	190563	7803692	NETHERLF
3994	HEAVY	190129	8007086	NETHERLF
36J4	HEAVY	189930	7810486	NETHERLF
4174	HEAVY	188557	3586/81	HUNGARY
4930	HEAVY	1771533	37533/86	JAPAN
4525	HEAVY	1771531	365/86	JAPAN
5552	HEAVY	174546	25491	MEXICO
5569	HEAVY	174000	9100972	MEXICO
5541	HEAVY	173395	9101969	MEXICO
4586	HEAVY	1710011	1235559/84	JAPAN
4530	HEAVY	1710005	72607/84	JAPAN
4930	HEAVY	165952	75/DEL/86	INDIA
4932	HEAVY	165435	1057/DEL/85	INDIA
4525	HEAVY	164707	951/DEL/85	INDIA
4932	HEAVY	163634	2758	MEXICO
4525	HEAVY	163548	2743	MEXICO
4263	HEAVY	1632919	101953/82	JAPAN
4930	HEAVY	163,896	2908	MEXICO
2899-1	HEAVY	1602333	22238/78	GT. BRITA
2899-P	HEAVY	1600535	12411/78	GT. BRITA
4634	HEAVY	159457	202566	MEXICO
4637	HEAVY	159454	202531	MEXICO
3582	HEAVY	1592873	192665/81	JAPAN
3582	HEAVY	158845	190358	MEXICO
4530	HEAVY	158381	200970	MEXICO
4531	HEAVY	158380	200969	MEXICO
2899	HEAVY	1580963	13540/77	GT. BRITAI
4635	HEAVY	1577293	179488/84	JAPAN
2944	HEAVY	1577230	25636/77	GT. BRITAI
4167	HEAVY	1569349	91507/82	JAPAN
4217	HEAVY	156,422	198812	MEXICO

ANTILOCK BRAKE CONTROLLER IMPROVEMENTS

AUXILIARY TRANSMISSION SHIFT CONTROL SYSTEM

BRAKE SHOE

VEHICLE AXLE BRAKE AND SUPPORT ASSEMBLY

VEHICLE BRAKE SUPPORT

ANTILOCK BRAKE SYSTEM AND METHOD INCORPORATING A PRESSURE

DIAMETRAL RUNOUT REDUCER FOR ROTATING SHAFT

SLACK ADJUSTER FOR A DISC BRAKE

SLACK ADJUSTER FOR A DISC BRAKE

BRAKE SUPPORT ASSEMBLY

AUTOMATIC BRAKE ADJUSTING MECHANISM

VEHICLE AXLE AND BRAKE SUPPORT ASSEMBLY

AN IMPROVED BRAKING PISTON FOR A DISC BRAKE

DISC BRAKE ACTUATOR

METHOD FOR FORMING A BRAKING PISTON FOR A DISC BRAKE

ROLLER RETAINER FOR BRAKE ASSEMBLY

WEDGE BRAKE CAGE AND ROLLER ASSEMBLY

5 Case/Desg.	Title	Patent No.	Serial No.	Count.
4174	HEAVY	154467	190362	MEXICO
4263	HEAVY	154,084	193,123	MEXICO
4167	HEAVY	154,083	192,959	MEXICO
3634-1	HEAVY	150132	81/0412	NORWAY-I
3434	HEAVY	146787	78/2976	NORWAY
3634	HEAVY	146072	78/3430	NORWAY
2899	HEAVY	1396085	44600/77	JAPAN
2899-P	HEAVY	1381140	47165/78	JAPAN
5082	HEAVY	1333964	597950	CANADA
4952	HEAVY	1279509	512411	CANADA
4893	HEAVY	1276891	500177	CANADA
4959	HEAVY	1274991	512791	CANADA
4911	HEAVY	1274194	510248	CANADA
4954	HEAVY	1269516	512555	CANADA
4909	HEAVY	1259267	500859	CANADA
4930	HEAVY	1255238	500858	CANADA
4525	HEAVY	1254845	498476	CANADA
4801	HEAVY	1248332	469056	CANADA
4635	HEAVY	1243827	460283	CANADA
3586	HEAVY	1238585	459670	CANADA
4498	HEAVY	1235076	469061	CANADA
4532	HEAVY	1233760	459992	CANADA
4640	HEAVY	1232210	459343	CANADA
4634	HEAVY	1230835	459669	CANADA
4637	HEAVY	1230834	460282	CANADA
4636	HEAVY	1226531	459993	CANADA
4601	HEAVY	1221187	465323	CANADA
4426	HEAVY	1217153	438559	CANADA
4531	HEAVY	1212636	450569	CANADA
4586	HEAVY	1206426	455371	CANADA
4530	HEAVY	1206425	450570	CANADA
4217	HEAVY	1204393	433900	CANADA
3710	HEAVY	1196875	350895	CANADA
4263	HEAVY	1196296	401073	CANADA
4344	HEAVY	1191176	409512	CANADA
4175	HEAVY	1171003	388876	CANADA

BRAKE ASSEMBLY  
 BRAKE ASSEMBLY  
 UNITARY ROTATIONAL SPEED SENSOR  
 AUTOMATIC BRAKE ADJUSTER  
 DYNAMIC BALANCING MACHINE  
 BRAKE SHOE RETENTION APPARATUS  
 METHOD OF FORMING A BRAKE DRUM  
 METHOD FOR FORMING A BRAKING PISTON FOR A DISC BRAKE  
 MULTIPLE DISC BRAKE  
 BRAKE DRUM  
 FRICTION PAD AND SUPPORT FOR A DISC BRAKE  
 BRAKING PISTON FOR A DISC BRAKE  
 WEDGE BRAKE CAGE AND ROLLER ASSEMBLY  
 DRIVE AXLE AND FLUID PUMP ASSEMBLY

6 Case/Desg.	Title	Patent No.	Serial No.	Countr.
4174	HEAVY	1164813	388875	CANADA
4034	HEAVY	1160163	383807	CANADA
3994-D	ROLLER RETAINER FOR BRAKE ASSEMBLY	1156159	413967	CANADA
3994	HEAVY	1150164	365401	CANADA
4174	HEAVY	1142992	49777A/81	ITALY
3681	HEAVY	1139963	360303	CANADA
3994	HEAVY	1134725	26647A/80	ITALY
3681	HEAVY	1133821	24926A/80	ITALY
3710	HEAVY	1130598	21979A/80	ITALY
3845	HEAVY	1126780	342,744	CANADA
2944	HEAVY	1116104	280385	CANADA
3634	HEAVY	1099714	28783A/78	ITALY
3434	HEAVY	1098579	27567A/78	ITALY
3634-1	HEAVY	1098457	343602	CANADA-D
2816	HEAVY	1094403	271449	CANADA
2899-P	HEAVY	1094112	22572A/78	ITALY
3634	HEAVY	1092992	310237	CANADA
2914D1	HEAVY	1086365	336251	CANADA
2926	HEAVY	1084304	282870	CANADA
2914	HEAVY	1080289	283514	CANADA
2899	HEAVY	1076494	275145	CANADA
2899-P	HEAVY	1074715	301986	CANADA
2918	HEAVY	1069716	275623	CANADA
2807	HEAVY	1069323	283513	CANADA
2404	HEAVY	1068619	275603	CANADA
2741	HEAVY	1067176	248770	CANADA
4932	HEAVY	1,307,210	499,089	CANADA
4632	HEAVY	1,231,900	459,342	CANADA
4600	HEAVY	1,219,799	457064	CANADA
4506	HEAVY	1,213,427	438560	CANADA
4063	HEAVY	1,196,208	422998	CANADA
4260	HEAVY	1,169,367	400516	CANADA
3854	HEAVY	1,147,171	358159	CANADA
3817	HEAVY	1,140,616	359785	CANADA
5569	HEAVY	0478887	91107195	FRANCE
5569	HEAVY	0478887	91107195,-	GT. BRITAIN

7 Case/Desg.	Title	Patent No.	Serial No.	Country
5569	DIAMETRAL RUNOUT REDUCER FOR ROTATING SHAFT	0478887	91107195.9	EUROPE
5082P2	UNITARY ROTATIONAL SPEED SENSOR	0442121	90125047.2	SPAIN
5082P2	WHEEL SPEED SENSOR FOR DRIVE AXLE	0442121	90125047.2	FRANCE
5082P2	UNITARY ROTATIONAL SPEED SENSOR	0442121	90125047.2	ITALY
5082P2	WHEEL SPEED SENSOR FOR DRIVE AXLE	0442121	90125047.2	UK
5082P2	WHEEL SPEED SENSOR FOR DRIVE AXLE	0442121	0442121	EUROPE
5082P1	UNITARY ROTATIONAL SPEED SENSOR	0437796	90125046.4	EUROPE
5082P1	HEAVY	0437796	90125046.4	FRANCE
5082P1	HEAVY	0437796	90125046.4	SPAIN
5082P1	HEAVY	0437796	90125046.4	ITALY
4525D	HEAVY	0437796	90125046.4	UK
4525D	VEHICLE BRAKE SUPPORT	0368368	P3587475.9-0	SWEDEN
4525D	HEAVY	0368368	P3587475.9-0	FRANCE
4525D1	VEHICLE BRAKE SUPPORT	0368368	89123537.6	EUROPE
5082	UNITARY ROTATIONAL SPEED SENSOR	0368368	89123537.6	UK
5082	UNITARY ROTATIONAL SPEED SENSOR	0357870	89107995.6	EUROPE
5082	UNITARY ROTATIONAL SPEED SENSOR	0357870	89107995.6	UK
5082	UNITARY ROTATIONAL SPEED SENSOR	0357870	89107995.6	FRANCE
5082	UNITARY ROTATIONAL SPEED SENSOR	0357870	89107995.6	SWEDEN
4911	BRAKE ACTUATOR	0357870	89107995.6	ITALY
4932	BRAKE SUPPORT ASSEMBLY	0216986	86104701.7	BELGIUM
4932	BRAKE SUPPORT ASSEMBLY	0205664	85115824.6	FRANCE
4525	HEAVY	0205664	85115824.6	BELGIUM
4525	VEHICLE BRAKE SUPPORT	0205659	85114532.6	EUROPE
4525	HEAVY	0205659	85114532.6	FRANCE
4893	HEAVY	0205659	85114532.6	UK
4893	AUTOMATIC BRAKE ADJUSTER	0190453	85116267.7	FRANCE
4893	HEAVY	0190453	85116267.7	ITALY
4893	HEAVY	0190453	85116267.7	SWEDEN
4893	HEAVY	0190453	85116267.7	NETHERLAND
4893	HEAVY	0190453	85116267.7	UK
4601	HEAVY	0190453	85116267.7	GERMANY
4637	HEAVY	0149726	84112475.3	EUROPE
4637	HEAVY	0137162	84108863.6	FRANCE
4637	HEAVY	0137162	84108863.6	NETHERLAND
4637	HEAVY	0137162	84108863.6	ITALY

8 Case/Desg.	Title	Patent No.	Serial No.	Countr
4637	HEAVY	0137162	84108863.6	SWITZERL
4637	HEAVY	0137162	84108863.6	UK
4223	HEAVY	0130477	84107060.0	ITALY
4223	HEAVY	0130477	84107060.0	BELGIUM
4223	HEAVY	0130477	84107060.0	FRANCE
4223	HEAVY	0130477	84107060.0	HOLLAND
4223	HEAVY	0130477	84107060.0	SWEDEN
4223	HEAVY	0130477	84107060.0	SWITZERL
4223	HEAVY	0130477	84107060.0	UK
4600	HEAVY	0130476		NETHERL
4586	HEAVY	0129145	84106437.1	FRANCE
4586	HEAVY	0129145	84106437.1	NETHERL
4586	HEAVY	0129145	84106437.1	ITALY
4586	HEAVY	0129145	84106437.1	SWEDEN
4586	HEAVY	0129145	84106437.1	SWITZERL
4586	HEAVY	0129145	84106437.1	UK
4530	HEAVY	0125487	84103986.0	EUROPE
4530	HEAVY	0125487	84103986.0	FELGIUM
4530	HEAVY	0125487	84103986.0	FRANCE
4530	HEAVY	0125487	84103986.0	NETHERL
4530	HEAVY	0125487	84103986.0	ITALY
4530	HEAVY	0125487	84103986.0	SWEDEB
4530	HEAVY	0125487	84103986.0	SWITZERL
4530	HEAVY	0125487	84103986.0	UK
4531	HEAVY	0124754	84103533.0	BELGIUM
4531	HEAVY	0124754	84103533.0	FRANCE
4531	HEAVY	0124754	84103533.0	NETHERL
4531	HEAVY	0124754	84103533.0	ITALY
4531	HEAVY	0124754	84103533.0	SWEDEN
4531	HEAVY	0124754	84103533.0	SWITZERL
4531	HEAVY	0124754	84103533.0	UK
4426	HEAVY	0108263	83110010.2	EUROPE
4426	HEAVY	0108263	83110010.2	NETHERL
4426	HEAVY	0108263	83110010.2	ITALY
4426	HEAVY	0108263	83110010.2	SWEDEN
4426	HEAVY	0108263	83110010.2	SWITZERL

METHOD OF FORMING AN AXLE

STAKED ADJUSTER SLEEVE

9	Case/Desg.	Title	Patent No.	Serial No.	Country
4344	HEAVY	DRIVE AXLE AND FLUID PUMP ASSEMBLY	0076388	82108126.2	EUROPE
4244	HEAVY	FLUID COOLED FRICTION BRAKE	0076387	82108125.4	FRANCE
4244	HEAVY	FLUID COOLED FRICTION BRAKE	0076387	82108125.4	GERMANY
4244	HEAVY	FLUID COOLED FRICTION BRAKE	0076387	82108125.4	ITALY
4244	HEAVY	FLUID COOLED FRICTION BRAKE	0076387	82108125.4	SWEDEN
4244	HEAVY	FLUID COOLED FRICTION BRAKE	0076387	82108125.4	UK
4263	HEAVY		0067287	82103308.1	FRANCE
4263	HEAVY		0067287	82103308.1	ITALY
4263	HEAVY		0067287	82103308.1	SWEDEN
4263	HEAVY	AUTOMATIC BRAKE ADJUSTING MECHANISM	0067287	82103308.1	UK
4167	HEAVY	ROLLER RETAINER FOR BRAKE ASSEMBLY	0066075	82103305.7	BELGIUM
4167	HEAVY	ROLLER RETAINER FOR BRAKE ASSEMBLY	0066075	82103305.7	FRANCE
4167	HEAVY		0066075	82103305.7	ITALY
4167	HEAVY		0066075	82103305.7	SWEDEN
4167	HEAVY		0066075	82103305.7	UK
5058	HEAVY	SPRING APPLIED PARKING BRAKE	0056779	82630001.4	FRANCE
5058	HEAVY	SPRING APPLIED PARKING BRAKE	0056779	82630001.4	NETHERLANDS
5058	HEAVY	SPRING APPLIED PARKING BRAKE	0056779	82630001.4	ITALY
5058	HEAVY	SPRING APPLIED PARKING BRAKE	0056779	82630001.4	SWEDEN
5058	HEAVY	SPRING APPLIED PARKING BRAKE	0056779	82630001.4	UK
5552	HEAVY		0 453 811	91104994.8	EUROPE
5082P2	HEAVY	WHEEL SPEED SENSOR FOR DRIVE AXLE	0 442 121	90125047.2	EUROPE
4911	HEAVY		0 216 986	86104701.7	EUROPE
4930	HEAVY		0 205 732	86101237.5	FRANCE
4930	HEAVY		0 205 732	86101237.5	BELGIUM
4930	HEAVY		0 205 732	86101237.5	NETHERLANDS
4930	HEAVY		0 205 732	86101237.5	ITALY
4930	HEAVY		0 205 732	86101237.5	UK
4930	HEAVY		0 205 732	86101237.5	SWEDEN
4932	HEAVY		0 205 664	85115824.6	NETHERLANDS
4932	HEAVY		0 205 664	85115824.6	ITALY
4932	HEAVY		0 205 664	85115824.6	SWEDEN
4932	HEAVY		0 205 664	85115824.6	UK
4525	HEAVY		0 205 659	85114532.6	SWEDEN
4223	HEAVY		0 130 477	84107060.0	EUROPEAN
4600	HEAVY		0 130 476	84107059	BELGIUM
4600	HEAVY		0 130 476	84107059.0	FRANCE



10 Case/Desg.	Title	Patent No.	Serial No.	Country
4600	HEAVY	0 130 476	84107059.2	SWEDEN
4600	HEAVY	0 130 476	84107059.2	SWITZERI
4600	HEAVY	0 130 476	84107059.2	UK
5569	HEAVY		PI9102417	BRAZIL
5558	HEAVY		PI9101497	BRAZIL
5082P1	HEAVY		PI9100056	BRAZIL
92AUT024	HEAVY		P4322517.9	GERMANY
94AUT013	HEAVY		9600945	BRAZIL
93AUT028	HEAVY		94830451.4	EUROPE
93AUT039	HEAVY		94830448.0	EUROPE
5169	HEAVY		9478/90	JAPAN
5082P1D	HEAVY		94116159.8	EUROPE
92AUT022	HEAVY		936055	MEXICO
92AUT022	HEAVY		9307116	BRAZIL
5552	HEAVY		90141/91	JAPAN
92AUT022	HEAVY		2141948	CANADA
5569	HEAVY		2,042,176	CANADA
5552	HEAVY		2,038,807	CANADA
5082	HEAVY		172079/89	JAPAN
5082P1	HEAVY		1605/91	JAPAN
5082P2	HEAVY		1604/91	JAPAN
2899-D	HEAVY		10608	MEXICO
5569	HEAVY			BELGIUM

DIAMETRAL RUNOUT REDUCER FOR ROTATING SHAFT

UNITARY ROTATIONAL SPEED SENSOR

PLANETARY REDUCTION FOR DRIVE AXLE

CAM BRAKE SHOE WITH FORMED EDGES

ADJUSTER SLEEVE

ADJUSTER MECHANISM FOR A DISC BRAKE

ANTILOCK BRAKE CONTROLLER IMPROVEMENTS

UNITARY ROTATIONAL SPEED SENSOR

AUTOMATIC SLACK ADJUSTING MECHANISM INCLUDING A LOW FRICTION

AUTOMATIC SLACK ADJUSTING MECHANISM INCLUDING A LOW FRICTION

ANTILOCK BRAKE SYSTEM AND METHOD INCORPORATING A PRESSURE

AUTOMATIC SLACK ADJUSTING MECHANISM INCLUDING A LOW FRICTION

DIAMETRAL RUNOUT REDUCER FOR ROTATING SHAFT

ANTILOCK BRAKE SYSTEM AND METHOD INCORPORATING A PRESSURE

UNITARY ROTATIONAL SPEED SENSOR

UNITARY ROTATIONAL SPEED SENSOR

UNITARY ROTATIONAL SPEED SENSOR

BRAKE ASSEMBLY

DIAMETRAL RUNOUT REDUCER FOR ROTATING SHAFT

# AUTOMOTIVE - PCT APPLICATIONS

Case No.	Title	Appln. No.	L/H	Frng. Elect.
PCTRIA08DDC	COMBINED SYSTEM FOR ASSISTING SHIFTING OF MANUAL TRANSMISSION	PCT/US96/12273	HEAVY	1) EP, AU, BZ, MX
PCTRIA07DDC	ENGINE SPEED RETARDATION ON TRANSMISSION UPSHIFT	PCT/US96/12267	HEAVY	1) EP, AU, BZ, MX
PCTRIA04DDC	OPERATOR INPUT SYSTEM FOR GEAR SHIFT ASSIST MECHANISM	PCT/US96/12270	HEAVY	1) EP, AU, BZ, MX
PCTRIA03DDC	FOUR POSITION SWITCH FOR SHIFT ASSIST SYTEM	PCT/US96/12268	HEAVY	1) EP, AU, BZ, MX
PCTRIA02DDC	TWO-POSITION NEUTRAL SWITCH FOR MULTI-SPEED TRANSMISSION	PCT/US96/12271	HEAVY	1) EP, AU, BZ, MX
PCTRIA01DDC	METHOD AND APPARATUS FOR ASSISTING IN SHIFTING TRANSMISSION TO NEUTRAL	PCT/US96/12266	HEAVY	1) EP, AU, BZ, MX
PCT94AUT014	YOKE CONNECTIONS FOR UNIVERSAL JOINTS	PCT/US96/04181	HEAVY	1) EP, AU, BZ, CA, CN, JP, MX, US
PCT94AUT005	RETAINED NEED THRUST WASHER	PCT/US96/06084	HEAVY	1) EP, AU, BR, CA, CN, JP, MX, SG
PCT94AUT004	BRAKE BRACKET ASSEMBLY	PCT/US95/09606	HEAVY	1) BZ, CN, MX
PCT94AUT002	BEARING SUPPORT PLATE FOR AXLE HOUSING	PCT/US96/00065	HEAVY	1) EU, HY, MX, CN
PCT93AUT035	UNIVERSAL JOINT WEAR INDICATOR	PCT/US96/03200	HEAVY	1) EP, AU, BZ, CN, CH, JP, :
PCT93AUT011	ENGINE SPEED SYNCHRONIZATION SYSTEM FOR ASSISTING IN MANUAL TRANSMISSION SHIFTING	PCT/US96/12272	HEAVY	1) EP, AU, BZ, MX
PCT93AUT009	AUTOMATIC RANGE SHIFT FOR MULTI-SPEED TRANSMISSION	PCT/US96/12269	HEAVY	1) EP, AU, BZ, MX
PCT93AUT006	SNAP IN PLUG FOR A SLIP YOKE	PCT/US96/04152	HEAVY	1) EP, AU, BZ, CA, CH, JP, MX, US