



## US Patents

Cam Followers		
Country	Patent No.	Title
US	10,274,013	CAM FOLLOWER WITH TIRE HAVING AXIAL MOVEMENT MITIGATION FEATURES
US	8,991,351	NEEDLE ROLLER CAM FOLLOWER FOR HIGHER MILEAGE APPLICATIONS OF LIGHT, MEDIUM AND HEAVY DUTY VEHICLES
US	10,697,493	CAM FOLLOWER WITH MULTIPLE ROWS OF INDEPENDENTLY OPERATING BEARINGS
US	9,835,123	ROLLER FOR A FUEL PUMP ACTUATOR
US	10,167,896	Triple Row Yoke Roller Assembly
US	10,731,743	CAM FOLLOWER AND YOKE ROLLER ASSEMBLIES
US	10,458,468	CAM FOLLOWER FOR HIGH THRUST LOAD APPLICATIONS
US	10,801,546	Ball Bearing Cam Follower for an Adjustable Aircraft Seat
US	11,306,807	Maintenance Free Extended Life Cam Follower for a Necker Machine
Other Patents May Be Pending		

Collets and Tool Holders		
Country	Patent No.	Title
US	9,248,508	ADJUSTABLE CLAMPING DEVICE
US	9,999,931	Locking Mechanism for a Collet Assembly and Collet Assembly Including a Locking Mechanism
US	10,639,726	FLEXIBLE COUPLING FOR ATTACHING A COLLET TO A DRAW BAR
US	11,033,971	CLAMPING DEVICE FOR HOLDING A COLLET
US	11,179,783	Quick changeable collet clamping assembly
Other Patents May Be Pending		

Duct Couplings		
Country	Patent No.	Title
US	10,625,871	Dynamic Movement Tube Connection System
US	6,880,863	Flexible Coupling for Gas Conduits
US	6,905,144	Spring-Loaded 'L'-Shaped Seal Ring
US	7,883,094	Offset Stacked Sealing System
Other Patents May Be Pending		

Elastomeric Bearings		
Country	Patent No.	Title
Other Patents May Be Pending		

## Fasteners

Country	Patent No.	Title
US	10,882,553	Kingpin with a Torque Receiving Configuration
US	11,300,147	Sleeves for interference fasteners

**Other Patents May Be Pending**

## Hydraulics

Country	Patent No.	Title
US	11,111,936	Piston assembly having reduced extend force and reduced displacement volume

**Other Patents May Be Pending**

## Plain Journal Bearings

Country	Patent No.	Title
US	7,828,482	Tungsten Carbide Enhanced Bearing
US	8,038,351	SELF-LUBRICATED BEARING ASSEMBLY
US	8,033,389	CONVEYOR CHAIN HAVING A LOW FRICTION LINER
US	10,718,375	BEARING SYSTEM WITH SELF-LUBRICATION FEATURES, SEALS, GROOVES AND SLOTS FOR MAINTENANCE-FREE OPERATION

**Other Patents May Be Pending**

## Plain Bearings

Country	Patent No.	Title
US	8,764,034	STEERING AXLE ASSEMBLY WITH SELF-LUBRICATED BEARINGS
US	9,856,910	SELF-LUBRICATED THRUST BEARING FOR A HINGED AIRCRAFT WING
US	11,353,002	Multi segment wind turbine blade joint bushing
US	6,799,895	CARTRIDGE-TYPE THRUST BEARING

**Other Patents May Be Pending**

## Rods

Country	Patent No.	Title
US	9,909,613	COMPRESSION ROD HAVING A BUCKLING INITIATING FEATURE
US	9,841,048	ROTATION ROD ASSEMBLY WITH SELF LUBRICATING LINER OR GROOVED BUSHINGS

**Other Patents May Be Pending**

<b>Rolling Element Bearings</b>		
<b>Country</b>	<b>Patent No.</b>	<b>Title</b>
US	7,007,787	HIGH ENDURANCE HIGH CAPACITY BALL TRANSFER UNIT
US	8,021,053	ROTARY WING AIRCRAFT BALL BEARING
US	8,215,845	TANDEM STACK ANGULAR CONTACT BEARING FOR ROTARY WING AIRCRAFT
US	8,690,446	Thermally Stable Bearings
US	8,104,779	BEARING FOR FOLLOWER OR CAM
US	8,132,964	BEARING FOR FOLLOWER OR CAM
US	8,033,736	SWASHPLATE BEARING ASSEMBLY WITH ENHANCED ALLOYS
US	7,703,746	Ground-Based Power Generator with Ball-Roller Bearing Butterfly Valve
US	8,651,810	Ball Bearing and Pump for Cryogenic Use
US	9,599,151	DOUBLE ROW PRELOADED BALL BEARING WITH SPACER BALLS
US	9,033,587	CAGE FOR A ROLLER BEARING AND A METHOD OF MANUFACTURING
US	9,303,689	Non-Rhythmically Spaced Rolling Elements for Reduction in Bearing Non-Repeatable Run-Out
US	9,227,720	Composite Annular Seal Assembly for Bearings in Aircraft
US	9,453,531	Integrated Bearing Assemblies for Guided Attack Rockets
US	9,695,875	Top Drive Bearing Made of Non-Vacuum Arc Remelted Steel
US	10,077,808	ROLLER PROFILE FOR HOURGLASS ROLLER BEARINGS IN AIRCRAFT
US	10,012,265	CORROSION RESISTANT BEARING
US	9,890,814	PRONG CAGE FOR A DOUBLE-ROW CONCAVE ROLLER BEARING FOR THE SUPPORT STRUCTURE OF A FLAP AT THE REAR OF AN AIRCRAFT WING
US	9,561,845	SUPPORT STRUCTURE OF A FLAP AT THE REAR OF AN AIRCRAFT WING WITH DOUBLE-ROW CONCAVE ROLLER BEARING
US	10,082,179	Seal for Self Aligning Roller Bearing
US	11,149,788	HYBRID BEARING ASSEMBLY WITH ROLLING ELEMENTS AND PLAIN BEARING
US	9,109,623	Integrated cartridge double-row ball bearing for a nuclear reactor control rod drive mechanism
US	11,274,699	Double Row Needle Track Roller Bearing with a Thrust Load Carrying Ball Bearing
US	10,767,688	Bearing system for an articulating motor device
US	10,837,488	Roller bearing assembly for use in a fracking pump crank shaft
US	10,738,825	Double row tapered roller bearing assembly having a two-piece outer ring
<b>Other Patents May Be Pending</b>		

## Self Lubricated Liners

Country	Patent No.	Title
US	8,034,865	Self-Lubricating Surface Coating Composition for Low Friction or Soft Substrate Applications
US	8,741,996	Self-Lubricating Surface Coating Composition for Low Friction or Soft Substrate Applications
US	8,735,481	Self-Lubricating Surface Coating Composition for Low Friction or Soft Substrate Applications
US	9,919,502	Method and Apparatus for Preparing a Surface for Bonding a Material Thereto
US	9,982,768	Self Lubricating Cam Follower Assembly
US	11,299,654	Permanent, self-adhering, self-lubricating, anti-wear composite system
US	10,161,448	SELF-LUBRICATING COMPOSITE BEARING PAD FOR A RAILWAY TRUCK

Other Patents May Be Pending

## Spherical Plain Bearings

Country	Patent No.	Title
US	8,926,185	SPHERICAL PLAIN BEARING WITH LUBRICATION GROOVE
US	8,079,607	SPHERICAL BEARING FOR A STEERING JOINT
US	9,261,132	LOW FRICTION BEARING ASSEMBLY AND LINK APPARATUS
US	8,721,184	COMBINATION SPLIT OUTER RING AND SEAL RETENTION METHOD FOR SPHERICAL PLAIN BEARINGS
US	9,316,257	Spherical bearing with sealing member, method of sealing a spherical bearing and steering assembly comprising said bearing
US	8,783,953	LOW FRICTION SEAL FOR BEARINGS
US	8,876,390	SLOTTED BEARINGS WITH WEAR-RESISTANT TREATMENTS FOR GEARBOX MOUNTING IN A GEARED TURBOFAN ENGINE
US	9,221,475	SELF LUBRICATED SPHERICAL TRANSOM BEARING
US	9,157,480	TWO STAGE SEAL FOR A BEARING ASSEMBLY
US	9,371,861	Swaged Bearing Assembly with a Flange Mounted Thereon
US	9,702,411	Bearing Assembly with Split Outer Ring Having Interference Fit Tabs and Method of Assembly of Bearing
US	10,208,658	TURBOCHARGER WASTEGATE ACTUATOR HIGH TEMPERATURE ROD END WITH A SPHERICAL BEARING AND A METHOD FOR OPERATING THE ACTUATOR
US	9,958,011	BEARING ASSEMBLY HAVING SURFACE PROTRUSIONS AND A SEAL
US	9,562,567	SPHERICAL BEARING WITH AXIALLY COMPRESSED ANNULAR SEAL
US	10,393,179	A VARIABLE FIXED INSTALLATION TORQUE BEARING
US	9,482,269	System for Isolating Electrical Current in a Bearing for Use in an Aircraft Structure
US	9,829,044	SPHERICAL BEARING WITH ANNULAR SEAL HAVING AN AUXILIARY SEAL LEG EXTENDING THEREFROM
US	10,520,012	A Rod End Having Wear Mitigation Features for an Augmenter Nozzle on a Jet Engine Turbine
US	9,926,972	SPHEROIDIAL JOINT FOR COLUMN SUPPORT IN A TUNED MASS DAMPER SYSTEM
US	10,487,878	Multiple Stage Seal for a Bearing Assembly
US	10,655,733	Elastomeric Seal Having Impact Protecting Protrusions
US	10,480,569	HYBRID LINED TRUNNION BEARING FOR AIRCRAFT LANDING GEAR

### Spherical Plain Bearings (cont.)

Country	Patent No.	Title
US	10,598,219	BEARING AND SEALING ARRANGEMENT FOR A HAUL TRUCK ARTICULATED JOINT
US	10,788,073	Rapid Movement Loader Slot Bearing Suitable for Use on Munitions Deployment Structures
US	10,724,575	HYBRID LINED TRUNNION BEARING FOR AIRCRAFT LANDING GEAR
US	11,441,604	Rapid movement loader slot bearing suitable for use on munitions deployment structures
US	11,391,323	Spherical plain bearing for dampers
US	11,009,063	Spherical plain bearing for dampers
US	2023-0151852A1	SELF-LUBRICATING BEARING

**Other Patents May Be Pending**

### Track Roller Bearings

Country	Patent No.	Title
US	8,025,257	ACTUATION SYSTEM FOR A LIFT ASSISTING DEVICE AND ROLLER BEARINGS USED THEREIN
US	8,387,924	ACTUATION SYSTEM FOR A LIFT ASSISTING DEVICE AND ROLLER BEARINGS USED THEREIN
US	10,023,302	ACTUATION SYSTEM FOR A LIFT ASSISTING DEVICE AND ROLLER BEARINGS USED THEREIN
US	8,851,755	SELF-ALIGNING TRACK ROLLER BEARING
US	10,400,818	SPLIT INNER OR OUTER RACE ROLLER BEARING WITH ROLLING ELEMENTS
US	10,443,650	A TWO PART SEAL FOR A TRACK ROLLER BEARING

**Other Patents May Be Pending**

### Valves

Country	Patent No.	Title
US	11,028,928	Interflow limiting valve assembly

**Other Patents May Be Pending**

<b>Couplings</b>		
<b>Country</b>	<b>Patent No.</b>	<b>Title</b>
US	11,226,010	Flexible Sleeve Coupling Radial Tooth Support Cap and Method
US	10,344,816	Pressure Plate with Phase Change Material
US	10,228,025	Sleeve Coupling with Flange Having Internal Tooth Design for Increasing Useful Life of Flexible Insert
US	8,758,149	Elastomeric Coupling Having Clamp Ring with Flanges Providing Torsional Stiffness Characteristics
US	9,845,830	Profiled Adjustment Nut
US	D789187	Coupling
US	9,166,456	SYSTEM AND METHOD TO ALLOW A SYNCHRONOUS MOTOR TO SUCCESSFULLY SYNCHRONIZE WITH LOADS THAT HAVE HIGH INERTIA AND/OR HIGH TORQUE
US	9,780,620	SYSTEM AND METHOD TO ALLOW A SYNCHRONOUS MOTOR TO SUCCESSFULLY SYNCHRONIZE WITH LOADS THAT HAVE HIGH INERTIA AND/OR HIGH TORQUE
US	9,476,783	System and Method for Magnetically Coupling Loads to Prime Movers and Detecting Transmitted Torque
US	9,249,837	Winged Elastomeric Coupling with Minimized Separation Forces Between Elastomer and Clamp Ring
US	11,199,228	GRID COUPLING SEAL AND METHOD
<b>Other Patents May Be Pending</b>		

<b>Mounted Bearing Accessory</b>		
<b>Country</b>	<b>Patent No.</b>	<b>Title</b>
US	7,419,305	Sealing System for Bearing Assembly
US	216,746,212	Cover Assembly for Bearing
<b>Other Patents May Be Pending</b>		

<b>Sensors</b>		
<b>Country</b>	<b>Patent No.</b>	<b>Title</b>
US	11,414,276	Pulley Wear Sensor System and Method
<b>Other Patents May Be Pending</b>		

<b>Gearboxes</b>		
<b>Country</b>	<b>Patent No.</b>	<b>Title</b>
US	9,797,499	Method of Installing a Motor on a Gear Box
US	11,287,025	Cooling Units for Transmissions
US	10,876,800	Mechanical System with Cooling Apparatus
US	11,060,602	Convective Cooling Devices and Methods for Cooling Housings
US	10,458,534	Gearbox System with Add-On Cooling Fin Panels
US	10,859,091	System Having Machine and Fan with an Axial Flow Inducer
US	10,690,232	Machine and Gearbox System and Cooling Therefor
US	10,578,205	Machine and Gearbox System with Air Cooling
US	D775251	Gearbox Housing
US	11,174,937	Speed Reducer Cooling Fins and Method of Manufacturing
US	7,207,741	Bushing System for Power Transmission Products
US	7,314,330	Bushing System for Power Transmission Products
US	9,528,596	Gear Box with Clutch Having Spring Engagement and Hydraulic Disengagement
US	9,528,594	Lubrication System for a Gear Box and Associated Methods
US	9,416,866	Vertical Gear Motor Planetary Gear Lubrication System
US	11,227,078	Method and System for Automated Gear Reducer Design
<b>Other Patents May Be Pending</b>		

<b>Mounted Bearings</b>		
<b>Country</b>	<b>Patent No.</b>	<b>Title</b>
US	9,822,818	Bearing Assembly with Combination Set Screw and Concentric Shaft Locking Mechanism
US	7,788,786	Shaft Bearing Attachment System and Method
US	8,857,061	Permanent Visual Indicator and Diametrical to Axial Relation Gage and Method of Using Same
US	7,909,516	Shaft Bearing Attachment System and Method
US	9,284,979	Permanent Visual Indicator and Diametrical to Axial Relation Gage and Method of Using Same
US	7,866,894	Hydraulically Positioned Shaft Bearing Attachment System and Method
US	8,151,465	Hydraulically Positioned Shaft Bearing Attachment System and Method
US	7,147,926	Corrosion-Resistant and Stain-Resistant Component and Method for Manufacturing Same
<b>Other Patents May Be Pending</b>		

<b>Bearing Seals and Cages</b>		
<b>Country</b>	<b>Patent No.</b>	<b>Title</b>
US	8,506,170	Bearing Mounted Isolator Seal
US	8,408,808	Two-Piece Bearing Cage with Side Face Grease Carrying Cavities
US	D690748	Two-Piece Bearing Cage with Side Face Grease Carrying Cavities
US	8,061,901	Extension Member for a Flinger of a Bearing
<b>Other Patents May Be Pending</b>		

## Spherical Roller Bearings

Country	Patent No.	Title
US	9,033,585	Spherical Roller Bearing Cage with Cylindrical Guidance Contact Surfaces
US	9,062,715	Spherical Roller Bearing Cage with Cylindrical Guidance Contact Surfaces

**Other Patents May Be Pending**

## Pulleys and Drive Components

Country	Patent No.	Title
US	7,299,915	Motorized Pulley
US	11,130,639	Modular Pulley for Continuous Belt Conveyor System
US	10,578,202	Sprocket for a Synchronous Drive Belt System

**Other Patents May Be Pending**

## Circulating Oil Systems

Country	Patent No.	Title
US	7,413,054	Oil Circulation Retention System and Method

**Other Patents May Be Pending**