

## **US Patents**

Cam Foll	Cam Followers				
Country	Application No.	Patent No.	Title		
US	15046158	10,274,013	CAM FOLLOWER WITH TIRE HAVING AXIAL MOVEMENT MITIGATION FEATURES		
US	14211916	0.001.251	NEEDLE ROLLER CAM FOLLOWER FOR HIGHER MILEAGE APPLICATIONS OF LIGHT, MEDIUM		
03	14211916	8,991,351	AND HEAVY DUTY VEHICLES		
US	16276492	10,697,493	CAM FOLLOWER WITH MULTIPLE ROWS OF INDEPENDENTLY OPERATING BEARINGS		
US	14993620	9,835,123	ROLLER FOR A FUEL PUMP ACTUATOR		
US	15416173	10,167,896	Triple Row Yoke Roller Assembly		
US	15824335	10,731,743	CAM FOLLOWER AND YOKE ROLLER ASSEMBLIES		
US	16249255	10,458,468	CAM FOLLOWER FOR HIGH THRUST LOAD APPLICATIONS		
Other Pate	Other Patents Pending				

Collets a	Collets and Tool Holders				
Country	Application No.	Patent No.	Title		
US	14345360	9,248,508	ADJUSTABLE CLAMPING DEVICE		
US	14894725	9,999,931	Locking Mechanism for a Collet Assembly and Collet Assembly Including a Locking Mechanism		
US	15/618,389	10,639,726	FLEXIBLE COUPLING FOR ATTACHING A COLLET TO A DRAW BAR		
Other Pate	Other Patents Pending				

<b>Duct Cou</b>	Duct Couplings					
Country	Application No.	Patent No.	Title			
US	15330214	10,625,871	Dynamic Movement Tube Connection System			
US	10/456075	6,880,863	Flexible Coupling for Gas Conduits			
US	10612498	6,905,144	Spring-Loaded 'L'-Shaped Seal Ring			
US	US 12193898 7,883,094 Offset Stacked Sealing System					
Other Pate	Other Patents Pending					

Elastome	Elastomeric Bearings					
Country	Country Application No. Patent No. Title					
Patents Per	Patents Pending					

Fastener	Fasteners				
Country	Country Application No. Patent No. Title				
Patents Per	Patents Pending				

Hydrauli	Hydraulics				
Country	Country Application No. Patent No. Title				
Patents Per	Patents Pending				

Plain Jou	Plain Journal Bearings					
Country	Country Application No. Patent No. Title					
US	11842994	7,828,482	Tungsten Carbide Enhanced Bearing			
US	12056538	8,038,351	SELF-LUBRICATED BEARING ASSEMBLY			
US	US 12133741 8,033,389 CONVEYOR CHAIN HAVING A LOW FRICTION LINER					
Other Pate	Other Patents Pending					

Plain Be	Plain Bearings				
Country	Application No.	Patent No.	Title		
US	13945575	8,764,034	STEERING AXLE ASSEMBLY WITH SELF-LUBRICATED BEARINGS		
US	15359828	9,856,910	SELF-LUBRICATED THRUST BEARING FOR A HINGED AIRCRAFT WING		
US	09/764474	6,485,181	THRUST BEARING ASSEMBLY		
US 10/302155 6,799,895 CARTRIDGE-TYPE THRUST BEARING					
Other Pate	Other Patents Pending				

Country	Application No.	Patent No.	Title
US	14686413	9,909,613	COMPRESSION ROD HAVING A BUCKLING INITIATING FEATURE
US	15060702	9,841,048	ROTATION ROD ASSEMBLY WITH SELF LUBRICATING LINER OR GROOVED BUSHINGS

<b>Rolling E</b>	Rolling Element Bearings				
Country	Application No.	Patent No.	Title		
US	10/897,515	7,007,787	HIGH ENDURANCE HIGH CAPACITY BALL TRANSFER UNIT		
US	11704762	8,021,053	ROTARY WING AIRCRAFT BALL BEARING		
US	11714484	8,215,845	TANDEM STACK ANGULAR CONTACT BEARING FOR ROTARY WING AIRCRAFT		
US	13273756	8,690,446	Thermally Stable Bearings		
US	11937538	8,104,779	BEARING FOR FOLLOWER OR CAM		
US	13081066	8,132,964	BEARING FOR FOLLOWER OR CAM		
US	12170725	8,033,736	SWASHPLATE BEARING ASSEMBLY WITH ENHANCED ALLOYS		
US	12170738	7,703,746	Ground-Based Power Generator with Ball-Roller Bearing Butterfly Valve		
US	12967400	8,651,810	Ball Bearing and Pump for Cryogenic Use		
US	14888968	9,599,151	DOUBLE ROW PRELOADED BALL BEARING WITH SPACER BALLS		
US	14/167,466	9,033,587	CAGE FOR A ROLLER BEARING AND A METHOD OF MANUFACTURING		
US	14264793	9,303,689	Non-Rhythmically Spaced Rolling Elements for Reduction in Bearing Non-Repeatable Run-Out		
US	14/294,947	9,227,720	Composite Annular Seal Assembly for Bearings in Aircraft		
US	14468677	9,453,531	Integrated Bearing Assemblies for Guided Attack Rockets		
US	14327912	9,695,875	Top Drive Bearing Made of Non-Vacuum Arc Remelted Steel		
US	14572260	10,077,808	ROLLER PROFILE FOR HOURGLASS ROLLER BEARINGS IN AIRCRAFT		
US	14728402	10,012,265	CORROSION RESISTANT BEARING		
LIC	44/720 426	0.000.044	PRONG CAGE FOR A DOUBLE-ROW CONCAVE ROLLER BEARING FOR THE SUPPORT STRUCTURE		
US	14/728,426	9,890,814	OF A FLAP AT THE REAR OF AN AIRCRAFT WING		
	4.4720.452	9,561,845	SUPPORT STRUCTURE OF A FLAP AT THE REAR OF AN AIRCRAFT WING WITH DOUBLE-ROW		
US	14728452		CONCAVE ROLLER BEARING		
US	14/967,632	10,082,179	Seal for Self Aligning Roller Bearing		
Other Pate	nts Pending				

Self Lubi	Self Lubricated Liners				
Country	Application No.	Patent No.	Title		
US	12433926	8,034,865	Self-Lubricating Surface Coating Composition for Low Friction or Soft Substrate Applications		
US	13053436	8,741,996	Self-Lubricating Surface Coating Composition for Low Friction or Soft Substrate Applications		
US	13224795	8,735,481	Self-Lubricating Surface Coating Composition for Low Friction or Soft Substrate Applications		
US	14692705	9,919,502	Method and Apparatus for Preparing a Surface for Bonding a Material Thereto		
US	14865998	9,982,768	Self Lubricating Cam Follower Assembly		
US	15189612	10,161,448	SELF-LUBRICATING COMPOSITE BEARING PAD FOR A RAILWAY TRUCK		
Other Pate	nts Pending				

Spherica	pherical Plain Bearings				
Country	Application No.	Patent No.	Title		
US	09/876552	6,626,575	SPHERICAL PLAIN BEARING WITH SPREAD LOCK DUAL SEALING MEANS		
US	13682886	8,926,185	SPHERICAL PLAIN BEARING WITH LUBRICATION GROOVE		
US	12420331	8,079,607	SPHERICAL BEARING FOR A STEERING JOINT		
US	14230512	9,261,132	LOW FRICTION BEARING ASSEMBLY AND LINK APPARATUS		
US	12/207649	0 721 104	COMBINATION SPLIT OUTER RING AND SEAL RETENTION METHOD FOR SPHERICAL PLAIN		
US	13/297648	8,721,184	BEARINGS		
ııc	12020574	9,316,257	Spherical bearing with sealing member, method of sealing a spherical bearing and steering		
US	13936574		assembly comprising said bearing		
US	13544458	8,783,953	LOW FRICTION SEAL FOR BEARINGS		
	12715215	8,876,390	SLOTTED BEARINGS WITH WEAR-RESISTANT TREATMENTS FOR GEARBOX MOUNTING IN A		
US	13715315		GEARED TURBOFAN ENGINE		
US	13939736	9,221,475	SELF LUBRICATED SPHERICAL TRANSOM BEARING		
US	14/099,121	9,157,480	TWO STAGE SEAL FOR A BEARING ASSEMBLY		
US	14619862	9,371,861	Swaged Bearing Assembly with a Flange Mounted Thereon		
US	14002200	9,702,411	Bearing Assembly with Split Outer Ring Having Interference Fit Tabs and Method of Assembly		
	14682266		of Bearing		
US	14616166	10,208,658	TURBOCHARGER WASTEGATE ACTUATOR HIGH TEMPERATURE ROD END WITH A SPHERICAL		
	14616166		BEARING AND A METHOD FOR OPERATING THE ACTUATOR		

Other Patents Pending					
US	15998157	10,788,073	Rapid Movement Loader Slot Bearing Suitable for Use on Munitions Deployment Structures		
US	16131867	10,598,219	BEARING AND SEALING ARRANGEMENT FOR A HAUL TRUCK ARTICULATED JOINT		
US	16007404	10,480,569	HYBRID LINED TRUNNION BEARING FOR AIRCRAFT LANDING GEAR		
US	15812576	10,655,733	Elastomeric Seal Having Impact Protecting Protrusions		
US	15/634,186	10,487,878	Multiple Stage Seal for a Bearing Assembly		
US	15295185	9,926,972	SPHEROIDIAL JOINT FOR COLUMN SUPPORT IN A TUNED MASS DAMPER SYSTEM		
US	14999260	10,520,012	A Rod End Having Wear Mitigation Features for an Augmenter Nozzle on a Jet Engine Turbine		
US	14967541	9,829,044	SPHERICAL BEARING WITH ANNULAR SEAL HAVING AN AUXILIARY SEAL LEG EXTENDING THEREFROM		
US	14857055	9,482,269	System for Isolating Electrical Current in a Bearing for Use in an Aircraft Structure		
US	14871061	10,393,179	A VARIABLE FIXED INSTALLATION TORQUE BEARING		
US	14616303	9,562,567	SPHERICAL BEARING WITH AXIALLY COMPRESSED ANNULAR SEAL		
US	14743353	9,958,011	BEARING ASSEMBLY HAVING SURFACE PROTRUSIONS AND A SEAL		

Track Roller Bearings						
Country	Application No.	Patent No.	Title			
US	12201062	8,025,257	ACTUATION SYSTEM FOR A LIFT ASSISTING DEVICE AND ROLLER BEARINGS USED THEREIN			
US	13114099	8,387,924	ACTUATION SYSTEM FOR A LIFT ASSISTING DEVICE AND ROLLER BEARINGS USED THEREIN			
US	13/719,541	10,023,302	ACTUATION SYSTEM FOR A LIFT ASSISTING DEVICE AND ROLLER BEARINGS USED THEREIN			
US	14084999	8,851,755	SELF-ALIGNING TRACK ROLLER BEARING			
US	14959589	10,400,818	SPLIT INNER OR OUTER RACE ROLLER BEARING WITH ROLLING ELEMENTS			
US	15952897	10,443,650	A TWO PART SEAL FOR A TRACK ROLLER BEARING			
Other Patents Pending						

Valves						
Country	Application No.	Patent No.	Title			
Patents Pending						