

U. S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

CLASSIFICATION ORDER 1846

MAY 3, 2005

Project No. M-5141

The following classification changes will be effected by this order:

	<u>Class</u>	<u>Subclass</u>	<u>Art Unit</u>	<u>Ex'r Search Room No.</u>
Abolished:	74	570-574	3682	CPK5-6Y08
	464	61-68	3679	CPK5-7A10
	588	258	1754	REM-B15
Established:	74	5.95, 433.5, 570.1, 570.2, 570.21, 570.3, 571.1, 571.11, 572.1, 572.11, 572.12, 572.2, 572.21, 572.4, 573.1, 573.11-573.13, 574.1-574.4	3682	Not Applicable
	464	61.1, 62.1, 63.1, 64.1, 65.1, 66.1, 67.1, 68.1-68.4, 68.41, 68.5-68.9, 68.91, 68.92	3679	Not Applicable
Title Changes:	54	Class title	3643	Not Applicable
	588	249.5	1754	REM-B15
		250	3673	Not Applicable
	316	1754	REM-B15	

The following classes are also impacted by this order.

Classes: 2, 16, 24, 29, 33, 43, 53, 59, 68, 73, 112, 119, 123, 135, 164, 168, 182, 185, 188, 210, 226, 241,
248, 254, 256, 278, 280, 297, 305, 310, 318, 322, 335, 336, 403, 422, 434, 451, 482, 492, 494

This order includes the following:

- A. CLASSIFICATION MANUAL CHANGES;
- B. LISTING OF PRINCIPAL SOURCE OF ESTABLISHED AND DISPOSITION OF ABOLISHED SUBCLASSES;
- C. CHANGES TO THE U.S. - I.P.C. CONCORDANCE;
- D. DEFINITION CHANGES AND NEW OR ADDITIONAL DEFINITIONS.

CLASSIFICATION ORDER 1846

MAY 3, 2005

Project Leader: Matthew J. Smith

Project Classifiers: Matthew J. Smith, Shirish Desai

Examiners: David Fenstermacher, Gregory Binda

Editor: David Delzingaro

Editorial Assistant: Yvonne Smith

A. CLASSIFICATION MANUAL CHANGES

Additional and modified subclasses

MAY 2005

71	BREAKING AND TRAINING DEVICES	41.1	.Cushion
72	.Leg spreaders	42.1	.Saddle connecting means
77	OX YOKES	43.1	.Tug bearers
2	TRACK	44.1	RIDING SADDLE
3	YOKES	44.2	.Including supplemental child saddle
24	HALTERS	44.3	.Adjustable
85	.Connectors	44.4	.With spring
6.1	BRIDLE	44.5	.With padding
6.2	.With halter	44.6	..Pneumatic
7	.Bits	44.7	.Specific material
8	..Mouthpieces	45.1	.Side
9	...Double	46.1	.With stirrup strap or connector
10	.Blinds	46.2	.With rigging bar
11	..Covering and uncovering	47	STIRRUPS
12	.Brow bands	49	.Safety
13	.Crown loops	49.5	.With spurs
14	.Gag runners	48	.Elastic
15	.Stranglers	23	GIRTHS
57	UNDERCHECKS	4	BACKBANDS
16	CHECKREINS	5	BREECHING
17	.Hook loops	22	CRUPPERS
61	CHECKHOOKS	65	PADS
62	.Movable keeper	66	.Back
70	CHECKING AND UNCHECKING DEVICES	67	.Neck
35	MARTINGALES	68	.Fasteners
36	REINS	87	LOOPS
74	REIN HOLDS		TRIMMINGS
63	TERRETS	75	.Covered
73	REIN GUARDS	76	.Ornamental
34	HITCHING STRAPS	78	TAIL HOLDERS
64	HITCHING STRAP HOLDERS	79.1	BLANKET OR GARMENT
18.1	COMBINED COLLAR AND HAME	79.2	.With retaining means
18.2	.With padding	79.3	.With padding
18.3	..Adjustable	79.4	.Specific material
19.1	COLLAR	80.1	BONNET OR SHIELD
19.2	.Pneumatic	80.2	.Eye shield
19.3	.Adjustable	80.3	.Nose guard
20	.Breast	80.4	.Fly net
21	.Fasteners	80.5	..Face guard
25	HAMES	82	HORSE BOOTS
26	.Fasteners	83.1	SPUR
29	..Top	83.2	.Adjustable to operative position
27	..Lever	84	SUPPORTS
28	..Strap	1	MISCELLANEOUS
30	HAME AND TRACE CONNECTORS		*****
31	.Adjustable		FOREIGN ART COLLECTION
32	HAME TUGS		*****
33	.Adjustable	FOR 000	CLASS-RELATED FOREIGN DOCUMENTS
58	BREAST STRAPS		
59	.Shields and connectors		
50	THILL TUGS		
51	.Open		
52	TRACES		
53	.Whiffletree connectors		
54	TRACE CARRIERS		
55	.Hook		
56	TRACE END SUPPORTERS		
69	ATTACHING AND DETACHING DEVICES		
37.1	PACK SADDLE		
38.1	HARNESS SADDLE		
39.1	.Cart		
40.1	.Pivoted side plates		

Title Change
 * Newly Established Subclass

@ Indent Change
 & Position Change

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1 R	MISCELLANEOUS	10.39	...Rack and pinion
1 SS	.High frequency vibratory devices	10.41	..With detent or clicker
1.5	ESCAPEMENTS	10.45	.Plural shafts
2	AUTOMATIC OPERATION OR CONTROL (E.G., TRIPS)	10.5	.Plural speed
3	.Speed controlled	10.52	..Planetary
3.2	..Valve gear trips (e.g., steam engine "Corliss" type)	10.54	..Separate operators
3.5	.Retarded	10.6	.Cam and follower
3.52	..Plural, sequential, trip actuations	10.7	.Tensioned flexible operator
3.54	..Clock train	10.8	.Gear drive
3.56	...Winding knob trip (e.g., alarm mechanism)	10.85	..Worm or screw
4	.Hit and miss	10.9	.Lever and linkage drive
5 R	GYROSCOPES	10 A	.Remote control
5.1	.With caging or parking means	813 R	ROTARY MEMBER OR SHAFT INDEXING, E.G., TOOL OR WORK TURRET
5.12	..Rotor spin and cage release type	814	.With safety device or drive disconnect
5.14	..And resetting means	815	.With locating point adjusting
5.2	.With gimbal lock preventing means	816	.Preselected indexed position
5.22	.Combined	817	..Sequential
5.34	.Multiple gyroscopes	818	...Skip position
5.37	..With rotor drives	819	...Held by torque
5.4	.Gyroscope control	820	...Geneva or mutilated gear drive
5.41	..Erecting	821	...Velocity control
5.42	...By plural diverse forces	822	...Interlocked rotator and brake
5.43	...By jet	823	....Diverse-type brakes
5.44	...By weight	824	....With axially acting friction brake
5.45	...By friction	825	.Plural operators or input drives
5.46	...By magnetic field	826	.With means to axially shift shaft
5.47	...By motor torque	827	.Single revolution input effects desired fractional output
5.5	..Damping	813 C	.Control means
5.6 R	.With pick off	813 L	.Locking means
5.6 A	..Optical	11	POWER TAKE-OFF
5.6 B	..Pneumatic	12	.Speedometer
5.6 C	..Conducting liquid	13	.Wheel take-off
5.6 D	..Electrical	14	..Wheel bed type
5.6 E	..Electrical and magnetic	15	..Supported pulley
5.7	.With rotor drive	15.2	.Plural take-off shafts
5.8	.Vertical gyroscopes	15.4	.With independent change speed gearing
5.9	.Horizontal gyroscopes	15.6	.From shaft extension
5 F	.Flexure hinges for gyros	15.63	..Prime mover shaft, e.g., crank shaft
* 5.95	.Flywheel structure	15.66	..Change speed transmission shaft
6	ENGINE STARTERS	15.69	..Vehicle propeller shaft
7 R	.Automatic	15.8	.Intermediate ends of power transmitting line
7 A	..Separate power mesher	15.82	..Vehicle propulsion transmitting line
7 B	..Holders	15.84	...Between prime mover shaft and transmission
7 C	..Clutch connection	15.86	...Drive from transmission gear
7 D	..Worm and wheel	15.88	...Between transmission and propeller shaft
7 E	..Reduction gearing	16	POWER TABLES AND STANDS
8	.Radial meshing	17	WASHER AND WRINGER
9	.Cam operated	17.5	FULL STROKE MECHANISM
10 R	SHAFT OPERATORS (RADIO TUNER TYPE)	17.8	MOTION TRANSFER THROUGH IMPERFORATE FLEXIBLE SEAL
10.1	.Preselected position	18	FLEXIBLE SEALING DIAPHRAGM ATTACHED TO MOVING ROD AND TO CASING
10.15	..Step by step	18.1	.Pivoting or nutating rod
10.2	..Rotatable stop and projectable abutment	18.2	.Longitudinally reciprocating rod
10.22	..Digital dial type	828	ALTERNATING-MOTION DRIVEN DEVICE WITH MEANS DURING OPERATION TO ADJUST STROKE
10.27	..Plural operator		
10.29	...Cam and follower		
10.31	....Adjustable cam		
10.33	.....Sliding operator		
10.35	.....Adjustable follower		
10.37	.....Sliding operator		

Title Change
* Newly Established Subclass

@ Indent Change
& Position Change

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	ALTERNATING-MOTION DRIVEN DEVICE WITH MEANS DURING OPERATION TO ADJUST STROKE	50	...Slidable connections (e.g., scotch yoke)
		51	..Crank and multiple pitmans
829	.Constant length stroke with means to displace end limits	52	..Planetary gearing and slide
		53	..Cam, lever, and slide
830	..Cyclical displacement responsive to the alternating-motion	54	..Cam and lever
		55	..Cam and slide
831	.Stroke adjustable to zero and/or reversible in phasing	56	...Axial cam
		57	....Grooved
832	..Plural driving means to jointly drive the driven device	58	....Multiple screw
		59	....Alternately rotated screw
833	..Device driven from selected points on oscillating link	60	...Wabblers type
834	..Driving lever with adjustable pivot point	61	..Unbalanced weights
		62	..Trammel-pitman
835	..Eccentric and strap drive, shiftable eccentric	63	.Rotary to rotary
		64	..Inertia or centrifugal transmitters
836	...Changing the extent of eccentricity	65	..Crank, pitman, lever, and crank
837	..Crank pin drive, shiftable pin	66	..Crank, lever, and crank
838	..Cam and follower drive	67	..Crank, pitman, and crank
839	...Axial-type cam (e.g., wabblers type)	68	..Cranks, link connected
840	ROTARY DRIVEN DEVICE ADJUSTABLE DURING OPERATION RELATIVE TO ITS SUPPORTING STRUCTURE	69	..Cranks, slidable connections
		70	.Rotary to alternating rotary
		71	..Mangle connections
841	.Screw and nut adjusting means	72	...Shiftable driven gear
842	.Rack and pinion adjusting means	73	...Central teeth
	MECHANICAL MOVEMENTS	74	...Multilobed gearing connections
20	.Oscillating to reciprocating and alternating rotary	75	..Crank, pitman, and lever
		76	..Reciprocating rack connections
21	.Oscillating to reciprocating and intermittent rotary	77	...Crank and pitman actuator
		78	...Simple crank actuator
22 R	.Rotary to reciprocating and rotary	79	..Oscillating rack connections
22 A	..Rotary to reciprocating or rotary	80	...Mangle actuated
23	.Rotary to reciprocating and alternating rotary	81	...Crank and pitman actuator
		82	..Flexible connector type
24	.Rotary to reciprocating and intermittent rotary	83	..Associated inertia devices
25	.Rotary to or from reciprocating or oscillating	84 R	.Rotary to intermittent unidirectional motion
		84 S	..Space machines
26	..Head motions	86	.Rotary to gyratory
27	..Reciprocating carriage motions	87	..Unbalanced weight
28	...Phonograph type	88	.Reciprocating or oscillating to intermittent unidirectional motion
29	..Rack and pinion type		..Reciprocating or oscillating to or from alternating rotary
30	...Shifting rack	89	..Including screw and nut
31	...Shiftable pinion	89.23	...Shaft shorter than nut
32	...Segmental pinion	89.24	...Auxiliary drive (e.g., fluid piston, etc.) for load
33	...Alternately rotated pinion	89.25	...Alternate power path operable on failure of primary
34	...Clutchable gears	89.26	...Single input split into two intermediate outputs that are subsequently superposed into a single output
35	....Bevel	89.27	...Single input, plural outputs
36	..Overcoming dead center	89.28	...Plural inputs, single output
37	..Belt or chain carried member	89.29	....Plural nuts driving shaft
38	..Crank, lever, toggle, and slide	89.3	....Shaft and nut driven
39	..Crank, lazy-tong, and slide	89.31	...Carriage surrounding, guided by, and primarily supported by member other than screw (e.g., linear guide, etc.)
40	..Crank, pitman, lever, and slide	89.32	
41	...Pump jack type		
42	..Crank, pitman, and lever		
43	...Multiple levers		
44	..Crank, pitman, and slide		
45	..Crank, lever, and slide		
46	...Rack connections		
47	..Crank and lever		
48	...Slidable connections		
49	..Crank and slide		

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	MECHANICAL MOVEMENTS	117	...Adjustable
	.Reciprocating or oscillating to or from alternating rotary	118	...Lever transmitter
	..Including screw and nut	119	...Adjustable leverage
89.33	...Carriage surrounded, guided, and primarily supported by member other than screw (e.g., linear guide, etc.)	120	...Rack and pinion transmitter
89.34	...Shaft moves through rotary drive means	121	...Adjustable throw
89.35	...Plural screws in series (e.g., telescoping, etc.)	122	...Rotary cam drive
89.36	...Deflection related	123	...Adjustable throw
89.37	...Limit stop	124	....Radial cam
89.38	...Including means to selectively transmit power (e.g., clutch, etc.)	125	....Radial cam
89.39	...Means to selectively lock or retard screw or nut	125.5	..Intermittently engaged clutch
89.4	...Contamination related	126	.Oscillation or reciprocation to intermittent unidirectional motion
89.41	....Imperforate enclosure	127	..Screw and nut devices
89.42	...Backlash	128	..Slide actuator
89.43	...Pressurized fluid introduced between nut and screw	129	...Multiple acting
89.44	...Lubrication	130	..Rack actuator
89.45	...Manually driven	131	...Multiple acting
89.1	..Including inertia device	132	....Inwardly facing racks
89.11	...With rack and pinion	133	...Oscillating
89.12	....Rectilinear rack	134	...Multiple acting
89.13	..Including bevel gears	135	....Inwardly facing racks
89.14	..Including worm	136	..Strap actuator
89.16	..Including spur gear	137	...Multiple acting
89.17	...With rack	138	...Spring or weight return
89.18	....Curvilinear rack	139	...Single acting
89.19	....With biasing means	140	....Engine starter type
89.2	..Including flexible drive connector (e.g., belt, chain, strand, etc.)	141	....Spring or weight return
89.21	...With sprocket wheel	141.5	...Spring or weight return
89.22	...With pulley	142	..Lever actuator
96	.Oscillating to oscillating	143	...Rotary driven element
97.1	..Snap action	144	...Multiple acting
97.2	...Plate spring	145	.Grip units and features
98	..Geared connections	146	..Compound movement handle
99 R	.Reciprocating to or from oscillating	147	...Reversible
100.1	..Snap action	148	...Transverse pivots
100.2	...Plate spring	149	..Gripper releasing devices
101	..Compound lever and slide	150	...Power pawl lifter
102	..Lever and slide	151	....Automatic
103	...Straight line motions	152	....Idle stroke
104	...Slidable connections	153	.....Cooperating holding pawl
105	...Link connections	154	.....Power stroke
106	...Toggle transmissions	155	...Cooperating holding pawl
107	...Cam connections	156	..Holding pawl lifter
108	...Flexible connections	157	..Gripper mountings, lever
109	..Rack and pinion	158	...Reversible
99 A	..Inclined ramp	159	..Multiple acting
110	.Reciprocating to reciprocating	160	...Single ratchet or clutch
111	MECHANICAL MOVEMENTS (INTERMITTENT GRIP TYPE)	161	..Gripper mountings, slide
112	..Rotary to intermittent unidirectional motion	162	..Multiple acting
113	..Automatically controlled	163	..Grip features
114	...Speed	164	...Driving band
116	..Rotary crank or eccentric drive	165	...Clamping
		166	...Driven band and gripper
		167	....Positive grip
		168	...Driving ratchet-bar or rack
		169	....Multiple acting
		625	...Driven ratchet-bar and power dog
		640	ALTERNATE MANUAL OR POWER OPERATORS
		650	GEARING
			..Nonplanetary gearing differential type (e.g., gearless differentials)

Title Change
* Newly Established Subclass

@ Indent Change
& Position Change

GEARING			
655	.Single gearing unit includes fluid drive	336 R	...Automatic
		336.5	....Speed responsive
661	.Plural prime movers selectively coupled to common output	336 B	....Governor
		337	....With belt gearing
664	.Plural power paths from prime mover	337.5	....Torque responsive
665 R	.Plural power paths to and/or from gearing	339	...Cam operated
		340	..Meshing assisters
670	..Alternate input connections single hand crank		...Double clutch and interposed transmission
			..Longitudinally slidable
718	..Fluid drive divides or combines alternate paths		...Multiple spur gears
		341	....With tumbler gear
720	..One path includes fluid drive	342	....Selective
721	..Friction-type gearing	343	....Direct clutch and drive
724	..Worm-type gearing	344	....Progressive
665 A	..Single driven plural drives	345	....Direct clutch and drive
665 B	...Parallel	346	....Fluid operated
665 C	...Nonparallel	347	...Multiple bevel gears
665 D	...Aligned		...Single spur gear
665 E	...Parallel and aligned	348	....Tumbler and cone
665 F	..Single drive plural driven	349	....Multiple cone
665 G	...Parallel	350	...Single bevel gear
665 GA	....Spur	351	...Pin or crown gears
665 GB	....Bevel	352	..Laterally slidable gears
665 GC	....Spur and bevel	353	...Rotary carriage
665 GD	....Helical	354	...Swinging carriage
665 GE	....Belt or chain	355	..Single forward and reverse speeds
665 H	...Nonparallel		..Slidable keys or clutches
665 S	...Aligned		...Alternative clutch shaft
665 T	....Vehicle	356	...Multiple clutch shafts
665 K	...Concentric		....Progressive
665 L	..Plural drivers plural driven	357	....Keys simultaneously slidable
665 M	...Bevel	358	....Selective
665 N	...Spur	359	...Multiple forward and reverse
665 Q	..Alternate drivers and driven	360	....Single forward and reverse
665 P	..Miscellaneous (plural power paths)	361	...Single clutch shaft
730.1	.With fluid drive		...Progressive
731.1	..Condition responsive control	362	....Multiple key
732.1	..With one or more controllers for gearing, fluid drive, or clutch	363	.....Spur
		364	.....Fluid operated
733.1	...With interrelated controls	365	.....Electrically operated
745	.In series plural interchangeably locked nonplanetary units	366	....Single key
		368	.....Clutch and ratchet
810.1	.Reversal of direction of power flow changes power transmission to alternate path	369	.....Spur gears
		370	.....Intermediate clutch
810.2	..Input and output exchange functions	371	.....Sliding clutch carrier
216.3	.Toothed gear and recirculated unconnected elements	372	.....Sliding clutch operator
		373	....Selective
318	.Alternating rotary or continuous	374	....Multiple key
319	.Alternating rotary	375	.....Spur gears
320	..Progressive	376	....Single speed forward and reverse
321	..Shiftable and/or slidable gears	377	....Spur gears
322	..Clutchable gears	378	....Bevel gears
323	...On single driven member	379	....Bevel and idler gears
324	...On single driving member	380	.Pivotally supported
325	.Interchangeably locked	381	..Windmill turntable
329	..Disconnectable counter shaft	383	..Screw
330	..Multiple concentric clutch shafts	384	..Spur
331	..Plurality of counter shafts	385	..Bevel
332	..Internal-external gears	386	...Wheel type
333	..Combined gear and clutch		
334	...Preselector		
335	..Control mechanism		

Title Change
* Newly Established Subclass

@ Indent Change
& Position Change

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	GEARING		
	.Pivotaly supported	424.88Interconnected or cooperating rollers or roller structure
	..Bevel	424.89	....Non-recirculating rolling elements
387	...Wringer type	424.9	.....Captured sphere
388 R	.Follow-up mechanism	424.91	.....Cylindrical or quasi-cylindrical roller element (e.g., inclined roller, etc.)
388 PS	..Power steering		
390	.Eccentric driving shaft and axle	424.92	.....Parallel to shaft
391	.Central driving shaft in axle	424.93	.....Perpendicular to shaft
392	.Parallel shafts, adjustable gear mesh	424.94	....Less than 360 degrees of contact between nut and screw
393	.Varying speed ratio	424.95	.....Independent nut segments
395	.Adjustable	424.96	.....Integral deformable tangs engaging screw
396	..Relative movable axes		
397	...Parallel shafts	424.6	...Driven rack or shaft
398	...Automatic control	424.7	...Screw
399	....Parallel shafts	425	...Worm
400	..Fixed axes	425.5	....Variable speed
401	...Parallel shafts	426	....Intermittent motion
402	...Automatic control	427	....Distribution of pressure
403	...Parallel shafts	412 TA	..Torque actuated safety devices
404	.Reversing means	431	.Gear and rotary bodies
404.5	..Governor control	432	..Laterally-spaced wheels
405	.Disconnecting means	433	..Radially-spaced wheels
406	.Displaceable elements	* 433.5	..With flywheel
409	.Backlash take-up	434	.Rotary bodies
410	.Pressure distributing	435	..Mutilated
411	.Yieldability in gear trains	436	..Geneva
411.5	.With brake means for gearing	437	..Irregular teeth and bodies
412 R	.Directly cooperating gears	438	..External and internal teeth
413	..Parallel axes or shafts	439	..Sectional
414	...External type	440	..Backlash take-up
415	....Pin teeth	441	....Screw and nut
416	..Intersecting axes	443	...Sound deadening
417	...Bevel gear type	444	...Differential disks
422	..Rack and pinion	445	...Multiple disks
420	..Spur and bevel	446	...Separate rim
421 R	..Spur	447	....Detachable
421 A	...Motor and gearing	448	...Segmental rim
423	..Bevel	449	...Sheet metal
424	...Motor vehicle drive	450	...Diametrically split
424.5	..Spiral	451	...Shaft-admitting insert
424.71	...Screw and nut	457	.Teeth
424.72	....Plural longitudinally variably spaced nuts	458	..Worm and helical
424.73	....Threadless	459.5	..Bevel
424.74	....Non-linear screw	460	..Spur
424.75	....Thread geometry	461	...Yieldable
424.76	.....Thread pitch varies over axial length	462	...Form
424.77	.....Shaft thread is spirally wound wire	464	....Antifriction
424.78	....Nut disengageable from screw	465	....Roller
424.79	.....Nut segments hinged parallel to shaft (e.g., clam shell-type, etc.)	466	....Twisted
424.81	....Rolling element engaging thread	467	.Lubrication
424.82	....Recirculating rolling elements	468	..Teeth
424.83	.....Plural independent recirculating element paths	469	CONTROL LEVER AND LINKAGE SYSTEMS
424.84	.....Single thread common to plural paths	470	.Resilient connections
424.85	.....Roller return path in shaft	471 R	.Multiple controlled elements
424.86	.....Return path geometry	473.1	..Transmission control
424.87	.....Rolling element deflector	473.11	...Fluid actuator
		473.12	...Electrical actuator
		473.13	...Occupant propelled vehicle
		473.14	....Transmission controlled by flexible cable

Title Change
* Newly Established Subclass

@ Indent Change
& Position Change

	CONTROL LEVER AND LINKAGE SYSTEMS	490.06	....Wrist
	.Multiple controlled elements	490.07	..Power elements as controlling elements
	..Transmission control	490.08	...Planar surface with orthogonal movement and rotation
473.15	...Transmission controlled by flexible cable	490.09	...Planar surface with orthogonal movement only
473.16	...Foot operated	490.1	...Pair of power elements
473.17	...Multiple foot-operated controls	490.11	..Power and manual controlling elements
473.18	...Control convertible between automatic and manual operation	490.12	..Manual controlling elements
473.19	...Control of plural mechanisms (e.g., control of transmission and control of 4 - wheel drive)	490.13	...Planar surface with orthogonal movement or rotation
473.2	....Separate control levers	490.14	...Levers
473.21	...Restriction of shift, gear selection, or gear engagement	490.15	....Pair of levers
473.22	....Prevention of reverse shift	491	.Hand operated
473.23	....Separate actuator to disengage restrictor	492	..Steering posts
473.24	....Shift element interlock	493	...Adjustable
473.25	.....With detent, recess, notch, or groove	494	...Auxiliary operators
473.26	.....Resiliently biased interlock	495	...Position controllers
473.27	....Spherical restrictor	496	...Motion translating mechanism
473.28	....Resiliently biased restrictor	497	....Cam type
473.29	...having vibration damper	498	....Gear type
473.3	...Manually operated selector (e.g., remotely controlled device, lever, push button, rotary dial, etc.)	499	.....Screw and nut
473.31	....Control lever on steering column	500	....Worm
473.32	.....Control lever movable through plural planes	500.5	..Flexible transmitter (e.g., Bowden cable)
473.33	....Control lever movable through plural planes	501.5 R	...Constant tension sustaining
473.34	.....Spherical mount (e.g., ball and socket)	501.5 H	....Hydraulic control
473.35	.....Resiliently biased control lever	501.6	...And hand operator
473.36	...Particular element (e.g., shift fork, template, etc.)	502	....Slidable
473.37	....Shift fork structure	502.1	....For moving a mirror
478	..Foot operated	502.2	...Single rotatable lever (e.g., for bicycle brake or derailleur)
478.5	...Offset extension	502.3	...Including rolling antifriction elements
471 XY	..Control moves in two planes	502.4	...And sheath support, connector, or anchor
479.01	.Multiple controlling elements for single controlled element	502.5	...Specific cable or sheath structure
480 R	..Interconnected	502.6	...Specific cable connector or guide
481	...Hand and foot	503	..Sliding rod
482	....Accelerator	504	..Rotatable rod, shaft, or post
480 B	...Marine	505	...Gear, drum, and cable
483 R	..Interlocked	506	...Drum and cable
483 PB	...Push button	507	...Gear
483 K	...Rod blocks actuation of rotary member	508	...Variable ratio
484 R	..Steering and controls assemblies	509	...Screw and nut
485	...Rotary control shaft	510	...Adjustable
486	...Reciprocating control elements	511 R	...Mountings
487	....Flexible	511 A	....Antenna
488	....Handle bar type	512	.Foot operated
489	.....Flexible control element	513	..Accelerator
484 H	...With horn control	514	..Signal
490	..Antirattling elements	515 R	.Knee operated
490.01	..Robotic arm	515 E	.Elbow
490.02	...Including power cable or connector	516	.Variable output force
490.03	...Including electric motor	517	..Flexible
490.04	...Including flaccid drive element	518	..Variable input leverage
490.05	...Joint between elements	519	.Elements
		520	..Levers
		521	...Toggle
			....Lazy tongs

Title Change
* Newly Established Subclass

@ Indent Change
& Position Change

MAY 2005

	CONTROL LEVER AND LINKAGE SYSTEMS	568 FS	...Flexible strip
	.Elements	568 M	...Memory devices
	..Levers	568 T	...Timer devices
522	...Adjustable	569	..Follower
522.5	...Swing posts	* 572.4	.Balancing for drum, e.g., washing machine or arm-type structure, etc., centrifuge, etc.
523	...Hand		
524	....Jointed		
525	....Adjustable	* 570.1	.Eccentric
526	...Stops	* 570.2	..Plural, movable relative to each other (including ball(s))
527	..Detents		
528	...Hand crank	* 570.21	...Concentric
529	...Interrelated lever release	* 571.1	..Adjustable
530	...Gear	* 571.11	...Radially
531	...Friction	* 570.3	..Having anti-friction means, e.g., roller bearing, lubrication, etc.
532	...Lever engaging		
533	...Lever engaging rack	* 572.1	.Power generating-type flywheel
534	....Pivoted	* 572.11	..Structural detail, e.g., material, configuration, superconductor, discs, laminated, etc.
535	....Lever carried pawl		
536	....Handle release	* 572.12	...Containing fiber or filament
537	....Finger lever release	* 572.2	.Flywheel, motion smoothing-type
538	.....Slidable	* 573.1	..With fluid balancing means
539	....Pedal controlled	* 573.11	...And pressure compensation
540	...Lever carried rack	* 573.12	...And elastic device
541	....Pivoted	* 573.13	...And bearings
542	....Pedal controlled	* 574.1	..With electrical or magnetic damping
543	..Handles	* 574.2	..Damping using swinging masses, e.g., pendulum type, etc.
544	...Extension		
545	...Hand crank	* 574.3	..Damping by increasing frictional force
546	....Extensible	* 574.4	..Damping by absorbing vibration force (via rubber, elastomeric material, etc.)
547	....Collapsible		
548	...Shaft connections		
550	....Engine starter type	* 572.21	..Structural detail, e.g., fiber, held by magnet, etc.
551	.....Holders		
551.1	...Handle bars	575	.Pawls and ratchets
551.2	....Spring biased or supported	576	..Noiseless
551.3	....Folding or adjustable	577 R	..Pivoted pawls
551.4	.....Sectional	577 S	...Single tooth
551.5	.....Simultaneously movable	577 SF	...Flexible single tooth
551.6	.....Continuous	577 M	...Multiple tooth
551.7	.....With handle latch	578	..Sliding pawls
551.8	....Attachments and accessories	579 R	.Pitmans and connecting rods
551.9	...Handholds and grips	580	..Radial
552	...Hand wheels	581	..Yieldable
553	...Knob or dial	582	...Longitudinal springs
554	....Slidable	583	...Fluid cushion
555	....Pivoted	584	...Automatic release
556	.....Releasable	585	....Toggle link type
557	....Handles	586	..Longitudinally adjustable
558	....Rim grips and covers	587	..Hollow rod, lubricated
558.5	...Caps and covers	588	..Sheet metal type
559	..Rocker arms	589	..Counterbalanced
560	..Pedals	590	..Weight type
561	...Treadles	591	...Rotating
562	...Extension	592	...Spring
562.5	....Offset	593	..Section coupled
563	...Pads and covers	594	..Bearings, adjustable
564	..Foot rests	579 E	..Engine type
565	..Controller checks	579 F	..Idler arm
566	..Slot closers and lever guards	594.1	.Crank and pedals
	ELEMENTS	594.2	..With attached gear
567	.Cams	594.3	..Variable
568 R	..Adjustable		

Title Change
* Newly Established Subclass

@ Indent Change
& Position Change

MAY 2005

ELEMENTS	# DIG 6	TRANSISTOR-ELECTRONIC GEARING CONTROLS
.Crank and pedals	# DIG 7	INDICATORS-SENSORS AND METERS
594.4 ..Pedals	# DIG 8	MARINE CONTROL-SHIP TRANSMISSION CONTROL MEANS
594.5 ...Counterbalanced	# DIG 9	PERPETUAL MOTION GIMMICKS
594.6 ...With toe or shoe clips	# DIG 10	POLYMER DIGEST - PLASTIC GEARS
594.7 ...Adjustable or folding	# DIG 11	CREEPER SPEED
595 .Crank and wrist pins	# DIG 12	NOVIKOV GEARS
596 ..Multiple throw		
597 ...Sectional		
598 ..Sectional		
599 ..Yieldable		
600 ..Adjustable		
601 ...Automatically		
602 ..Variable		
603 ..Counterbalanced		
604 ...Vibration dampers		
605 ..Lubricated		
606 R .Gear casings		
607 ..Axle and torque tubes		
606 A ..Cooling		
608 .Guards		
609 ..For rotary member		
612 .Guard mechanisms		
613 ..Automatic		
614 ...Oscillating member actuator		
615 ...Reciprocating member actuator		
616 ..Operator controlled		
617 ..Set screw		

CROSS REFERENCE ART COLLECTION		

900 PARTICULAR SHIFT PATTERN		

FOREIGN ART COLLECTIONS		

FOR 000 CLASS-RELATED FOREIGN DOCUMENTS		

Any foreign patents or non-patent literature from subclasses that have been reclassified have been transferred directly to FOR Collections listed below. These Collections contain ONLY foreign patents or non-patent literature. The parenthetical references in the Collection titles refer to the abolished subclasses from which these Collections were derived.

FOR 100 Transmission control (74/473 R)
 FOR 101 .Foot operated (74/474)
 FOR 102 .With detent mechanism (74/475)
 FOR 103 .With reverse lockout (74/476)
 FOR 104 .With interlocked elements (74/477)
 FOR 105 .Pivot mounting (74/473 P)
 FOR 106 .Near steering wheel (74/473 SW)

 DIGESTS

 # DIG 1 HYDRAULIC CONTROL SYSTEMS AUTOMATIC AUTOMOTIVE CONTROLS
 # DIG 2 MISCELLANEOUS CONTROL SYSTEMS (E.G., SHIP PROPULSION, MACHINE TOOLS, ETC.)
 # DIG 3 MOVABLE VAN OR BLADE TORQUE CONVERTERS
 # DIG 4 MAGNETIC GEARING
 # DIG 5 GAS TURBINE WITH GEARING

Title Change
 * Newly Established Subclass

@ Indent Change
 & Position Change

MAY 2005

1	SPEED RESPONSIVE DEVICE FOR ADJUSTING RELATIVE ROTATIONAL POSITION OF COUPLED MEMBERS	38	..Axially biased
		39	...By spring coiled about axis of rotation
2	.Actuated by fluid or electricity	40	.Torque transmitted via frictional engagement of coil spring
3	.Pivoted weight		
4	..Gear segment on pivoted weight	41	.Torque transmitted via plural circumferentially spaced friction elements
5	..Pivotal movement opposed by compression of coil spring along its axis	42	.Torque transmitted via frictional engagement of conical or frustoconical surfaces
6	..Pivotal movement opposed by expansion of coil spring along its axis		
7	HAVING LUBRICATING MEANS	43	..With separate resilient member for biasing surfaces into engagement
8	.Lubricant impregnated into material	44	...Coil spring
9	..Metallic material	45	.Torque transmitted via frictional engagement of planar radially extending surfaces
10	.For overload release coupling		
11	.For coupling having torque transmitted via radially directed pin received in conforming aperture	46	..With separate resilient member for biasing surfaces into engagement
12	..Lubricant supplied to plural pins via common ring which encapsulates pins	47	...Coil spring
13	...Pin includes longitudinally extending internal passage	48	....Plural, circumferentially spaced coil springs
14	..Pin includes longitudinally extending internal passage	49	COUPLING DEVICE INCLUDES ENDLESS CHAIN ENGAGED WITH CIRCUMFERENTIAL TEETH ON COUPLED MEMBERS
15	.For coupling having torque transmitted via a ball	50	COUPLING DEVICE INCLUDES ANGLED OR HINGED ROD HAVING OPPOSITE ENDS RELATIVELY RECIPROCAL AXIALLY IN BORES IN SPACED COUPLED MEMBERS
16	.For coupling having torque transmitted via intermeshing teeth		
17	HAVING HEATING OR COOLING MEANS	51	TORQUE TRANSMITTED VIA FLEXIBLE ELEMENT
18	FLEXIBLE COUPLING BETWEEN FLUID-CONDUCTING ROTARY SHAFTS (E.G., COUPLING BETWEEN SECTIONS OF DRILL STRING, ETC.)	52	.With stationary housing
		53	..And threaded annulus surrounding terminal end of housing for attachment to auxiliary housing
19	.Relative angular displacement of axes of shafts	54	.Element coiled sinusoidally about axially spaced driving and driven members
20	.Including member deformable by relative movement between shafts	55	.Element is flaccid and operates in tension during torque transmission (e.g., belt, cable, etc.)
21	..Member is coiled spring		
22	HAVING CLEANING MEANS		
23	WITH AUXILLIARY INDICATOR OR ALARM	56	..Element has circular cross section
24	FLUID COUPLING	57	.Element has plural convolutions wound about rotational axis
25	.For transmitting limited pulsating torque (e.g., fluid drive coupling for impulse tool)	58	..Plural radially overlapping convoluted elements
26	.Including piston axially movable in cylinder having axis coextensive with axis of rotation of coupled members	59	..Single element has plural radially overlapping convolutions
		60	..Convoluted element has noncircular cross section
27	.Including multiple piston-cylinder devices radially spaced from axis of rotation	* 61.1	.Coil spring
		* 62.1	..Plural
28	.Fluid confined in enclosure having flexible walls	* 64.1	...Concentric
		* 66.1	...Perpendicular to shaft
29	ELECTRICAL OR MAGNETIC COUPLING	* 68.1	....Between axially spaced plates
30	OVERLOAD RELEASE COUPLING	* 68.2	.....Speed responsive
31	.Including thermally responsive element	* 68.3	.....With fluid damping
32	.Torque transmitted via frangible element	* 68.4	.....Interposed friction or braking element
33	..Axially extending pin	* 68.41	.....With biasing means
34	.Torque transmitted via radially spaced deformable roller	* 68.5	.....Including bearing detail
		* 68.6	.....Specified bushing
35	.Torque transmitted via a ball	* 68.7	.....Axially spaced springs
36	..Axially biased	* 68.8	.....Radially spaced springs
37	.Torque transmitted via resiliently biased positive drive connection (e.g., cam and follower)		

Title Change
* Newly Established Subclass@ Indent Change
& Position Change

CLASS 464 ROTARY SHAFTS, GUDGEONS, HOUSINGS, AND FLEXIBLE COUPLINGS FOR ROTARY SHAFTS

MAY 2005

	TORQUE TRANSMITTED VIA FLEXIBLE ELEMENT	95	....With disparate spacer between plural separable elements
	.Coil spring		
	..Plural	96	...Laminated element or plural elements abutting or spaced along axis of rotation
	...Perpendicular to shaft		
	....Between axially spaced plates		
* 68.9	....Spring detail	97	.Element is a torsion bar having a longitudinal axis coincident with the rotational axis
* 68.91	.....Non-coiled or non-metallic		
* 68.92	.....With particular seat		
* 63.1	....And springs' centerlines spaced along shaft axis	98	.Element is plate with external edge completely surrounding rotational axis (e.g., disc)
* 67.1	....Along curved centerline	99	..Plural axially spaced plates
* 65.1	...Parallel to shaft	100	.Element is leaf spring
69	.Plural flexible links connected to circumferentially spaced axially directed pins on drive and driven members	101	..Bowed
		102	SEPARATE COUPLING DEVICE MOVABLE RADIALLY OF AXES OF TORQUE TRANSMITTING MEMBERS TO ACCOMMODATE PARALLEL, MISALIGNED AXES (E.G., OLDHAM COUPLING)
70	.Element is annular liner within radially spaced pin-receiving opening		
71	..Axially directed pin	103	.Coupling device includes rolling body for transmitting torque
72	...Plural axially spaced liners	104	.Coupling device has aperture or groove for receiving complementary driving projection on torque transmitting members
73	.Element positioned between intermeshing teeth on driving and driven members		
74	..Teeth on radially overlapping surfaces		
75	...Element is a continuous annulus extending around rotational axis	105	..Projection-receiving slot extends completely through thickness dimension of coupler
76	..Plurality of disparate elements		
77	.Element is an open loop spring curved about rotational axis	106	COUPLING ACCOMMODATES DRIVE BETWEEN MEMBERS HAVING MISALIGNED OR ANGULARLY RELATED AXES
78	.Element is tube with slot through wall to provide flexibility	107	.Coupling between wheel and vertically oriented shaft (e.g., millstone)
79	.Element includes diverging wall portions defining annular groove completely surrounding rotational axis (e.g., bellows)	108	..Wheel mounted on rolling body
80	..Nonmetallic	109	.Coupling includes relatively movable gear segments
81	.Plural circumferentially spaced elements	110	.Coupling transmits torque via semicylindrical segments separated by pivot pin (e.g., slipper bearing)
82	..Extending between radially overlapping surfaces on driving and driven members	111	.Tripod coupling
83	...Nonmetallic	112	.Coupling transmits torque via radially directed pin
84	..Elements are bowed leaf springs	113	..With additional axially spaced torque-transmitting coupling which facilitates relative movement between members
85	..Nonmetallic		
86	..Axially extending torsion bars		
87	.Nonmetallic element	114	...Radially directed pin in each coupling
88	..Element is hollow sleeve surrounding rotational axis and connected at opposite ends to axially spaced torque transmitting surfaces on driving and driven members	115	....Pin slidable axially in slot
		116	.....Axially spaced pin-carrying parts interconnected by pivotal head and socket centering joint
89	..Extending between radially overlapping surfaces on driving and driven members	117	....Plural pins in each coupling with pin ends spaced 90 degrees apart
90	...Plural elements radially overlapping	118	.....Axially spaced pin-carrying parts interconnected by pivotal head and socket centering joint
91	...Plural elements axially spaced along rotational axis		
92	..Annular element between and coincident with drive and driven members	119	....Pins in sequential couplings oriented at right angles to each other
93	...Including means to receive radially spaced axially extending projection on drive and driven members	120	..Pin slidable axially in slot
94	....Laminated element or plural elements abutting or spaced along rotational axis		

Title Change
* Newly Established Subclass

@ Indent Change
& Position Change

MAY 2005

	COUPLING ACCOMMODATES DRIVE BETWEEN MEMBERS HAVING MISALIGNED OR ANGULARLY RELATED AXES	150	..Intermediate element located between overlapping surfaces on drive and driven members
	.Coupling transmits torque via radially directed pin	151	...Intermediate element is externally grooved or ribbed sphere
	..Pin slidable axially in slot	152	...Plural circumferentially spaced intermediate elements
121	...Pin carried by intermediate element and slidable axially in slots in both coupled members	153	..Intermediate element includes internal openings at opposite ends for receiving axially spaced ends on drive and driven members
122	...Pin carries disparate sleeve engaged with slot walls	154	...Intermeshing teeth on element and members
123	....Sleeve rotatable about pin axis	155	..Intermediate element includes external surface at opposite ends received in complementary openings in axially spaced ends of driving and driven members
124	.....Sleeve has spherical or semi-spherical bearing surface	156	...Intermeshing teeth on element and members
125	..Plural pins received in conforming apertures in ring	157	.Torque transmitted via intermeshing teeth on drive and driven members
126	...Split ring	158	..Teeth on radially overlapping surfaces
127	..With particular balancing means	159	...Spherical or semispherical surfaces
128	..With particular bearing cup surrounding pin end	160	COUPLING FACILITATES RELATIVE ROTARY DISPLACEMENT BETWEEN COUPLED MEMBERS
129	...Spherical or semi-spherical cup	161	.Members coupled via axially movable, resiliently biased intermediate element
130	...And disparate device for securing cup to pin or receiver	162	COUPLING FACILITATES RELATIVE AXIAL MOTION BETWEEN COUPLED MEMBERS
131	...And flexible seal	163	.Coupling between rotary drive table and axially movable drill string
132	..With particular bearing or bushing mounted on pin	164	..Coupler includes endless belt or chain run engageable with drill string and moveable in direction of axial advance
133	..With particular flexible seal	165	..Coupler includes antifriction rolling body engageable with drill string
134	..With particular yoke providing pin-receiving aperture	166	...With screw device for adjusting radial position of rolling body
135	...Split yoke	167	.Coupler includes antifriction rolling body engageable with axially moveable member
136	..Plural pins carried by intermediate member with pin ends spaced 90 degrees apart	168	..Recirculating rolling bodies
137	.Coupling transmits torque via axially directed pin radially spaced from rotational axis	169	.Including spring to bias member in axial direction
138	..Particular pivotal mounting for pin	170	HOUSING
139	.Coupling transmits torque via radially spaced ball	171	.Rigid semispherical surface on one housing part slidably engaged with surface on mating housing part
140	..With additional axially spaced torque-transmitting coupling which facilitates relative movement between members	172	.Telescoping cylindrical housing members
141	..Ball mounted in groove for relative axial movement with respect to coupled member	173	.Flexible housing
142	...Mounted for relative axial movement with respect to both coupled members	174	..Helically coiled member
143	....Grooves formed in radially overlapping elements	175	..Corrugated structure
144	.....Intersecting grooves	176	.Pivotaly mounted housing supported for movement between open and closed positions
145	.....With intermediate positioning cage for ball		
146	.....Bottom wall of groove in outer member is parallel to axial centerline of outer member (e.g., internally grooved cylinder)		
147	.Torque transmitted via intermediate element		
148	..Element carries or receives hook on opposite ends for connection to drive and driven members (e.g., link chain)		
149	..Axially intermeshing teeth		

Title Change
* Newly Established Subclass

@ Indent Change
& Position Change

CLASS 464 ROTARY SHAFTS, GUDGEONS, HOUSINGS, AND FLEXIBLE COUPLINGS FOR ROTARY
SHAFTS

MAY 2005

HOUSING

177 .Separably connected housings for
separably connected shafts

178 .With rolling body supporting shaft in
housing

179 SHAFTING

180 .Particular vibration dampening or
balancing structure

181 .Nonmetallic shaft or component

182 .With disparate device for coupling
shaft to additional shaft or rotary
body

183 .Hollow or layered shaft

184 GUDGEONS

185 MISCELLANEOUS

CROSS-REFERENCE ART COLLECTIONS

900 ELECTRICALLY INSULATIVE MEMBER

901 RAPID ATTACHMENT OR RELEASE

902 PARTICULAR MATERIAL

903 .Nonmetal

904 HOMOKINETIC COUPLING

905 .Torque transmitted via radially
extending pin

906 .Torque transmitted via radially spaced
balls

FOREIGN ART COLLECTION

FOR 000 CLASS-RELATED FOREIGN DOCUMENTS

CLASS 588 HAZARDOUS OR TOXIC WASTE DESTRUCTION OR CONTAINMENT

MAY 2005

1	DESTRUCTION OR CONTAINMENT OF RADIOACTIVE WASTE	314	..By treatment in molten chemical reagent, e.g., salts or metals (EPO/JPO)
2	.By fixation in stable solid media		
3	..Cement, concrete, or hydraulic setting	315	..By chemical fixing the harmful substance, e.g., by chelation or complexation (EPO/JPO)
4	...With additional solid material to enhance fixation of radioactivity		
5	..Bituminous	# 316	..Dehalogenation using reactive chemical agents able to degrade (EPO/JPO)
6	..Resin or polymer; e.g., cellulose, polyethylene	317	..By hydrolysis (EPO/JPO)
7	...Ion exchange resin	318	..Detoxification by using acid or alkaline reagents (EPO/JPO)
8	...Polymer derived from ethylenically unsaturated monomer	319	..By reduction, e.g., hydrogenation (EPO/JPO)
9	..Clay or claylike		
10	..Ceramic or ceramiclike	320	..By oxidation; by combustion (EPO/JPO)
11	...Glass, glasslike, vitreous	321	..By heating to effect chemical change. e.g., pyrolysis (EPO/JPO)
12	...Boron containing		
13	..Ion exchange material		
14	..Silicon containing		
15	..Metal containing		
16	..Surrounding with specified material or structure		
17	..Geological or extraterrestrial		
18	..Chemical conversion to a stable solid for disposal	400	..Harmful chemical substances made harmless, or less harmful, by effecting chemical change (EPO/JPO)
19	..Incineration, calcination, pyrolyzing to obtain solid residue	401	..Chemical warfare substances, e.g., cholinesterase inhibitor (EPO/JPO)
20	..Treating radioactive liquid		
299	GERM WARFARE AGENTS DESTROYED	402	..Pesticides, e.g., insecticides, herbicides, fungicides, nematicides (EPO/JPO)
		403	..Explosives, propellants or pyrotechnics, e.g., rocket fuel, napalm (EPO/JPO)
		404	..Toxic combustion residues, e.g., toxic substances contained in fly ash from waste incineration (EPO/JPO)
300	PROCESSES FOR MAKING HARMFUL CHEMICAL SUBSTANCES HARMLESS, OR LESS HARMFUL, BY EFFECTING A CHEMICAL CHANGE IN THE SUBSTANCES (EPO/ JPO)	405	..Organic substances (EPO/JPO)
		406	...Containing halogen (EPO/JPO)
		407	...Containing heavy metals (EPO/JPO)
301	.By subjecting to electric or wave energy or particle or ionizing radiation (EPO/ JPO)	408	...Containing nitrogen or phosphorus (EPO/JPO)
		409	...Containing oxygen, sulfur, selenium or tellurium, i.e., chalcogen (EPO/JPO)
302	..Electrochemical processes, e.g., electrodialysis (EPO/JPO)		
303	...Electrolytic degradation or conversion (EPO/JPO)	410	..Inorganic substances (EPO/JPO)
		411	...Inorganic fibers, e.g., asbestos (EPO/JPO)
304	..Sonic energy (EPO/JPO)		
305	..Particle radiation, e.g., electron beam radiation (EPO/JPO)	412	...Containing heavy metals, in the bonded or free state (EPO/JPO)
306	..Electromagnetic radiation, e.g., laser (EPO/ JPO)	413	...Containing nitrogen phosphorus (EPO/JPO)
307	...Gamma rays (about 0.003nm-0.03nm) (EPO/JPO)	414	...Containing oxygen, sulfur, selenium or tellurium, i.e., chalcogen (EPO/JPO)
308	...X-rays (about 0.03nm-3nm) (EPO/JPO)		
309	...Ultraviolet radiations (about 3nm-400nm) (EPO/JPO)	415	...Containing halogen (EPO/JPO)
		249	CONTAINMENT
310	...Microwave radiations (about 0.3cm-30cm) (EPO/JPO)		
311	..Plasma (EPO/JPO)		
312	.By hydrolysis or destructive steam gasification, e.g., using water and heat or supercritical water, to effect chemical change (EPO/JPO)		
313	.By reacting with chemical agents (EPO/JPO)		

NOTE: SUBCLASSES 300 THROUGH 321 FORM PART OF A MULTIPLE ASPECT SCHEDULE. DOCUMENTS CLASSIFIED IN ONE OF THESE SUBCLASSES ARE NORMALLY ALSO CLASSIFIED IN SUBCLASSES 400 THROUGH 415 TO IDENTIFY THE HAZARDOUS MATERIAL.

NOTE: SUBCLASSES 401 THROUGH 404 FORM PART OF A MULTIPLE ASPECT SCHEDULE. DOCUMENTS CLASSIFIED IN ONE OF THESE SUBCLASSES ARE NORMALLY ALSO CLASSIFIED IN SUBCLASSES 405 THROUGH 415 TO IDENTIFY THE HAZARDOUS MATERIAL.

CONTAINMENT

- # 249.5 .Chemical or germ warfare agents, or pathogenic organisms (e.g., sarin, VX, anthrax, virus, bacteria and medical waste, etc.)
- # 250 .Geologic, marine, or extraterrestrial storage and containment (e.g., tectonic, volcanic, deep natural, manmade earth cavity, submarine placement sites, lunar, earth orbital, and solar placement, etc.)
- 251 .Treating a solid (e.g., clay, slag, spent sorbent, active carbon, etc.) to prevent gas emissions
- 252 .Solidification, vitrification, or cementation
- 253 ..In situ vitrification
- 254 ..Contains asbestos
- 255 ..Polymer or resin containing (e.g., foam, etc.)
- 256 ..Waste contains heavy metal (e.g., fly, ash, flue dust, and incinerator ash)
- 257 ...And confined in a cement type material (e.g., concrete)
- 259 .Secondary containment
- 260 .With sensing, detecting, or monitoring
- 261

MISCELLANEOUS

 CROSS-REFERENCE ART COLLECTIONS

900 APPARATUS

901 COMPOSITIONS

 FOREIGN ART COLLECTION

FOR 000 CLASS-RELATED FOREIGN DOCUMENTS

SOURCE CLASSIFICATION(S) OF PATENTS
 IN NEWLY ESTABLISHED SUBCLASSES REPORT
 PROJECT: M5141

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New Classification	Number Of ORs	Source Classification	Number Of ORs	Comments
100/280	1	74/572	290	
112/283	1	74/573 R	293	
116/144	1	74/572	290	
123/192.1	1	74/574	648	
123/192.2	1	74/574	648	
160/310	1	74/573 F	41	
175/320	2	74/574	648	
175/325.2	1	74/574	648	
188/189	1	74/570	84	
188/378	2	74/574	648	
192/104 B	1	74/572	290	
192/110 R	1	74/572	290	
192/111 A	1	74/572	290	
192/12 R	1	74/572	290	
192/13 R	1	74/572	290	
192/15	1	74/572	290	
192/20	1	74/570	84	
	1	74/572	290	
192/210.1	1	74/572	290	
192/213.21	1	74/574	648	
192/213.3	2	74/574	648	
192/24	1	74/570	84	
192/3.28	1	74/574	648	
192/3.33	1	74/574	648	
192/30 R	3	74/572	290	
	7	74/574	648	
192/31	1	74/572	290	
192/41 R	2	74/574	648	
192/48.1	1	74/573 R	293	
192/55.1	2	74/574	648	
192/55.2	1	74/574	648	
192/66.1	1	74/572	290	
	1	74/574	648	
192/70.17	1	74/574	648	
192/70.25	1	74/572	290	
192/84.92	1	74/574	648	
192/89.2	1	74/574	648	
242/349	1	74/574	648	
242/354	3	74/572	290	
244/53 R	2	74/574	648	
244/62	1	74/574	648	
248/559	2	74/574	648	
248/562	1	74/573 R	293	
248/605	1	74/574	648	

SOURCE CLASSIFICATION(S) OF PATENTS
IN NEWLY ESTABLISHED SUBCLASSES REPORT
PROJECT: M5141

Page: 2

Generated by: Data Control Division

New Classification	Number Of ORs	Source Classification	Number Of ORs	Comments
248/632	1	74/574	648	
301/1	1	74/571 L	70	
301/124.1	1	464/62	43	
301/5.21	1	74/573 R	293	
301/5.22	1	74/573 F	41	
310/156.74	1	74/574	648	
310/261	1	74/573 R	293	
310/326	1	74/574	648	
310/74	1	74/574	648	
318/41	1	74/572	290	
322/40	1	74/573 R	293	
352/26	1	74/572	290	
368/171	12	74/573 R	293	
384/292	1	74/570	84	
403/337	1	74/572	290	
403/338	1	74/572	290	
403/359.4	1	74/572	290	
408/23	1	74/570	84	
416/106	1	74/574	648	
416/135	2	74/574	648	
416/144	1	74/573 F	41	
	5	74/573 R	293	
416/145	1	74/573 R	293	
417/521	1	74/570	84	
417/533	1	74/572	290	
440/52	2	74/574	648	
440/83	2	74/574	648	
451/343	1	74/573 F	41	
454/162	1	74/574	648	
464/179	1	74/572	290	
464/180	5	74/572	290	
	9	74/573 F	41	
	27	74/574	648	
	30	74/573 R	293	
464/183	1	74/573 R	293	
464/24	1	74/574	648	
464/51	1	74/573 R	293	
464/61.1	1	74/574	648	
	23	464/61	23	
464/62.1	1	464/64	44	
	39	464/62	43	
464/63.1	1	464/68	227	
	4	74/574	648	
	8	464/63	45	

SOURCE CLASSIFICATION(S) OF PATENTS
 IN NEWLY ESTABLISHED SUBCLASSES REPORT
 PROJECT: M5141

Generated by: Data Control Division

New Classification	Number Of ORs	Source Classification	Number Of ORs	Comments
464/63.1	13	464/67	60	
464/64.1	1	464/63	45	
	2	464/68	227	
	2	74/574	648	
	43	464/64	44	
464/65.1	1	464/66	77	
	3	464/63	45	
	14	74/574	648	
	30	464/65	31	
464/66.1	1	464/62	43	
	1	74/573 R	293	
	3	74/574	648	
	60	464/66	77	
464/67.1	1	464/66	77	
	1	74/574	648	
	3	464/68	227	
	26	464/63	45	
	39	464/67	60	
464/68.1	1	464/66	77	
	1	74/572	290	
	1	74/573 R	293	
	10	74/574	648	
	14	464/68	227	
464/68.2	1	464/65	31	
	1	74/573 R	293	
	3	464/66	77	
	4	464/68	227	
	6	74/574	648	
464/68.3	1	74/572	290	
	3	464/67	60	
	11	74/573 F	41	
	19	464/68	227	
	38	74/574	648	
464/68.4	1	464/63	45	
	1	464/66	77	
	1	464/67	60	
	1	74/573 R	293	
	13	74/574	648	
	28	464/68	227	
464/68.41	1	74/573 F	41	
	2	74/572	290	
	4	464/63	45	
	4	464/66	77	
	24	74/574	648	

SOURCE CLASSIFICATION(S) OF PATENTS
 IN NEWLY ESTABLISHED SUBCLASSES REPORT
 PROJECT: M5141

Generated by: Data Control Division

New Classification	Number Of ORs	Source Classification	Number Of ORs	Comments
464/68.41	74	464/68	227	
464/68.5	1	464/63	45	
	2	74/572	290	
	8	464/68	227	
	10	74/574	648	
464/68.6	1	464/66	77	
	5	464/68	227	
464/68.7	1	464/63	45	
	2	464/68	227	
	2	74/574	648	
464/68.8	1	464/62	43	
	3	74/574	648	
	10	464/68	227	
464/68.9	1	464/67	60	
	2	464/66	77	
	6	464/68	227	
464/68.91	1	74/572	290	
	1	74/573 R	293	
	6	74/574	648	
	10	464/68	227	
464/68.92	1	74/572	290	
	3	464/66	77	
	3	464/67	60	
	9	74/574	648	
	41	464/68	227	
464/82	1	74/574	648	
464/87	1	74/573 R	293	
464/98	2	74/572	290	
473/112	1	74/572	290	
474/148	1	74/572	290	
474/152	1	464/90	1	
	1	74/574	648	
474/166	2	74/570	84	
	3	74/574	648	
474/168	1	74/574	648	
474/174	1	74/572	290	
474/197	1	74/574	648	
474/2	1	74/574	648	
474/237	1	74/574	648	
474/94	1	464/62	43	
474/97	2	74/573 R	293	
475/266	1	74/572	290	
475/267	1	74/574	648	
476/27	1	74/572	290	

SOURCE CLASSIFICATION(S) OF PATENTS
 IN NEWLY ESTABLISHED SUBCLASSES REPORT
 PROJECT: M5141

Generated by: Data Control Division

New Classification	Number Of ORs	Source Classification	Number Of ORs	Comments
482/57	1	74/572	290	
482/63	1	74/572	290	
482/64	1	74/572	290	
494/50	1	74/573 R	293	
494/82	4	74/573 R	293	
494/84	1	74/572	290	
60/638	1	74/574	648	
62/323.1	1	74/570	84	
68/23.1	1	74/573 F	41	
	1	74/573 R	293	
	1	74/574	648	
74/3	1	74/572	290	
74/40	1	74/572	290	
74/433.5	4	74/573 R	293	
	12	74/574	648	
	16	74/572	290	
74/434	1	74/573 R	293	
74/44	2	74/570	84	
74/5.5	1	74/573 R	293	
74/5.95	1	74/572	290	
74/502.6	1	74/570	84	
74/570.1	1	74/574	648	
	7	74/572	290	
	9	74/571 R	155	
	22	74/570	84	
	30	74/573 R	293	
74/570.2	1	74/570	84	
	5	74/573 F	41	
	5	74/574	648	
	8	74/572	290	
	11	74/571 R	155	
	15	74/571 L	70	
	17	74/571 M	65	
	49	74/573 R	293	
74/570.21	1	74/570	84	
	3	74/574	648	
	4	74/573 R	293	
	6	74/571 L	70	
	21	74/571 M	65	
	26	74/571 R	155	
74/570.3	1	74/571 L	70	
	1	74/573 R	293	
	4	74/571 R	155	
	37	74/570	84	

SOURCE CLASSIFICATION(S) OF PATENTS
 IN NEWLY ESTABLISHED SUBCLASSES REPORT
 PROJECT: M5141

Generated by: Data Control Division

New Classification	Number Of ORs	Source Classification	Number Of ORs	Comments
74/571.1	1	74/574	648	
	4	74/572	290	
	26	74/571 M	65	
	36	74/573 R	293	
	57	74/571 R	155	
74/571.11	1	74/571 M	65	
	2	74/574	648	
	4	74/570	84	
	9	74/572	290	
	26	74/573 R	293	
	47	74/571 L	70	
74/572.1	47	74/571 R	155	
	1	74/573 R	293	
74/572.11	30	74/572	290	
	3	74/573 R	293	
74/572.12	28	74/572	290	
	1	74/571 R	155	
74/572.2	1	74/574	648	
	43	74/572	290	
	3	74/574	648	
74/572.21	4	74/573 R	293	
	13	74/572	290	
	3	74/573 R	293	
74/572.4	3	74/574	648	
	50	74/572	290	
	1	74/570	84	
	3	74/573 F	41	
74/573.1	4	74/572	290	
	33	74/573 R	293	
	3	74/573 F	41	
	4	74/573 R	293	
74/573.11	5	74/572	290	
	29	74/574	648	
	2	74/573 F	41	
	3	74/572	290	
74/573.12	4	74/573 R	293	
	17	74/574	648	
	2	74/573 F	41	
74/573.13	29	74/574	648	
74/574.1	7	74/574	648	
74/574.2	1	74/573 R	293	
	7	74/574	648	
	3	74/572	290	
	6	74/573 R	293	

SOURCE CLASSIFICATION(S) OF PATENTS
 IN NEWLY ESTABLISHED SUBCLASSES REPORT
 PROJECT: M5141

Generated by: Data Control Division

New Classification	Number Of ORs	Source Classification	Number Of ORs	Comments
74/574.2	126	74/574	648	
74/574.3	5	74/572	290	
	7	74/573 R	293	
	64	74/574	648	
74/574.4	5	74/573 R	293	
	9	74/572	290	
	105	74/574	648	
74/591	1	74/570	84	
74/64	1	74/570	84	
74/835	1	74/570	84	
74/836	1	74/570	84	
92/13.3	1	74/570	84	
92/23	1	74/570	84	

DISPOSITION CLASSIFICATION(S) OF PATENTS
FROM ABOLISHED SUBCLASSES REPORT
PROJECT: M5141

Generated by: Data Control Division

Comments	Source Classification	Number Of ORs	New Classification	Number Of ORs
	464/61	23	464/61.1	23
	464/62	43	301/124.1	1
			464/62.1	39
			464/66.1	1
			474/94	1
			464/68.8	1
	464/63	45	464/63.1	8
			464/68.41	4
			464/68.7	1
			464/65.1	3
			464/67.1	26
			464/68.5	1
			464/68.4	1
			464/64.1	1
	464/64	44	464/62.1	1
			464/64.1	43
	464/65	31	464/65.1	30
			464/68.2	1
	464/66	77	464/65.1	1
			464/68.1	1
			464/68.4	1
			464/68.9	2
			464/68.92	3
			464/68.41	4
			464/68.6	1
			464/68.2	3
			464/66.1	60
			464/67.1	1
	464/67	60	464/63.1	13
			464/68.92	3
			464/68.9	1
			464/67.1	39
			464/68.4	1
			464/68.3	3
	464/68	227	464/63.1	1
			464/68.1	14
			464/68.3	19
			464/68.5	8
			464/68.7	2
			464/68.9	6
			464/68.91	10
			464/68.92	41
			464/68.41	74
			464/68.8	10
			464/68.6	5
			464/68.4	28

DISPOSITION CLASSIFICATION(S) OF PATENTS
FROM ABOLISHED SUBCLASSES REPORT
PROJECT: M5141

Generated by: Data Control Division

Comments	Source Classification	Number Of ORs	New Classification	Number Of ORs
	464/68	227	464/68.2	4
			464/64.1	2
			464/67.1	3
	464/90	1	474/152	1
	74/570	84	62/323.1	1
			74/44	2
			74/64	1
			74/591	1
			74/835	1
			74/836	1
			74/502.6	1
			74/570.1	22
			74/570.2	1
			74/570.3	37
			74/572.4	1
			74/570.21	1
			74/571.11	4
			92/23	1
			92/13.3	1
			188/189	1
			192/20	1
			192/24	1
			384/292	1
			408/23	1
			417/521	1
			474/166	2
	74/571 L	70	74/570.2	15
			74/570.3	1
			74/570.21	6
			74/571.11	47
			301/1	1
	74/571 M	65	74/570.2	17
			74/571.1	26
			74/570.21	21
			74/571.11	1
	74/571 R	155	74/570.1	9
			74/570.2	11
			74/570.3	4
			74/571.1	57
			74/570.21	26
			74/571.11	47
			74/572.12	1
	74/572	290	74/3	1
			74/40	1
			74/5.95	1
			74/433.5	16

DISPOSITION CLASSIFICATION(S) OF PATENTS
 FROM ABOLISHED SUBCLASSES REPORT
 PROJECT: M5141

Generated by: Data Control Division

Comments	Source Classification	Number Of ORs	New Classification	Number Of ORs
	74/572	290	74/570.1	7
			74/570.2	8
			74/571.1	4
			74/572.1	30
			74/572.2	13
			74/572.4	4
			74/573.1	5
			74/574.2	3
			74/574.3	5
			74/574.4	9
			74/571.11	9
			74/572.11	28
			74/572.12	43
			74/572.21	50
			74/573.11	3
			100/280	1
			116/144	1
			192/12 R	1
			192/13 R	1
			192/15	1
			192/20	1
			192/30 R	3
			192/31	1
			192/104 B	1
			192/110 R	1
			192/111 A	1
			192/66.1	1
			192/210.1	1
			192/70.25	1
			242/354	3
			318/41	1
			352/26	1
			403/337	1
			403/338	1
			403/359.4	1
			417/533	1
			464/98	2
			464/179	1
			464/180	5
			464/68.1	1
			464/68.3	1
			464/68.5	2
			464/68.41	2
			464/68.91	1
			464/68.92	1
			473/112	1

DISPOSITION CLASSIFICATION(S) OF PATENTS
 FROM ABOLISHED SUBCLASSES REPORT
 PROJECT: M5141

Generated by: Data Control Division

Comments	Source Classification	Number Of ORs	New Classification	Number Of ORs
	74/572	290	474/148	1
			474/174	1
			475/266	1
			476/27	1
			482/57	1
			482/63	1
			482/64	1
			494/84	1
	74/573 F	41	68/23.1	1
			74/570.2	5
			74/572.4	3
			74/573.1	3
			74/573.11	2
			74/573.12	2
			160/310	1
			301/5.22	1
			416/144	1
			451/343	1
			464/180	9
			464/68.3	11
			464/68.41	1
	74/573 R	293	68/23.1	1
			74/434	1
			74/5.5	1
			74/433.5	4
			74/570.1	30
			74/570.2	49
			74/570.3	1
			74/571.1	36
			74/572.1	1
			74/572.2	4
			74/572.4	33
			74/573.1	4
			74/574.1	1
			74/574.2	6
			74/574.3	7
			74/574.4	5
			74/570.21	4
			74/571.11	26
			74/572.11	3
			74/572.21	3
			74/573.11	4
			112/283	1
			192/48.1	1
			248/562	1
			301/5.21	1

DISPOSITION CLASSIFICATION(S) OF PATENTS
FROM ABOLISHED SUBCLASSES REPORT
PROJECT: M5141

Generated by: Data Control Division

Comments	Source Classification	Number Of ORs	New Classification	Number Of ORs
-----	-----	-----	-----	-----
	74/573 R	293	310/261	1
			322/40	1
			368/171	12
			416/144	5
			416/145	1
			464/51	1
			464/87	1
			464/180	30
			464/183	1
			464/66.1	1
			464/68.1	1
			464/68.2	1
			464/68.4	1
			464/68.91	1
			474/97	2
			494/50	1
			494/82	4
	74/574	648	60/638	1
			68/23.1	1
			74/433.5	12
			74/570.1	1
			74/570.2	5
			74/571.1	1
			74/572.2	3
			74/573.1	29
			74/574.1	7
			74/574.2	126
			74/574.3	64
			74/574.4	105
			74/570.21	3
			74/571.11	2
			74/572.12	1
			74/572.21	3
			74/573.11	17
			74/573.12	29
			74/573.13	7
			123/192.1	1
			123/192.2	1
			175/320	2
			175/325.2	1
			188/378	2
			192/30 R	7
			192/41 R	2
			192/3.28	1
			192/3.33	1
			192/55.1	2

DISPOSITION CLASSIFICATION(S) OF PATENTS
 FROM ABOLISHED SUBCLASSES REPORT
 PROJECT: M5141

Generated by: Data Control Division

Comments	Source Classification	Number Of ORs	New Classification	Number Of ORs
	74/574	648	192/55.2	1
			192/66.1	1
			192/89.2	1
			192/213.3	2
			192/70.17	1
			192/84.92	1
			192/213.21	1
			242/349	1
			244/53 R	2
			244/62	1
			248/559	2
			248/605	1
			248/632	1
			310/74	1
			310/326	1
			310/156.74	1
			416/106	1
			416/135	2
			440/52	2
			440/83	2
			454/162	1
			464/24	1
			464/82	1
			464/180	27
			464/61.1	1
			464/63.1	4
			464/64.1	2
			464/65.1	14
			464/66.1	3
			464/67.1	1
			464/68.1	10
			464/68.2	6
			464/68.3	38
			464/68.4	13
			464/68.5	10
			464/68.7	2
			464/68.8	3
			464/68.41	24
			464/68.91	6
			464/68.92	9
			474/2	1
			474/152	1
			474/166	3
			474/168	1
			474/197	1
			474/237	1

DISPOSITION CLASSIFICATION(S) OF PATENTS
FROM ABOLISHED SUBCLASSES REPORT
PROJECT: M5141

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Comments	Source Classification	Number Of ORs	New Classification	Number Of ORs
-----	74/574	648	475/267	1

MAY 3, 2005

PROJECT NO. M-5141

C. CHANGES TO THE U.S. – I. P. C. CONCORDANCE

	<u>U. S.</u>	<u>I. P. C.</u>	
<u>Class</u>	<u>Subclass</u>	<u>Subclass</u>	<u>Notation</u>
74	5.95	F16C	15/00
	433.5	F16H	33/02
	570.1	F16F	15/22
	570.2	F16F	15/22
	570.21	F16F	15/22
	570.3	F16F	15/22
	571.1	F16F	15/22
	571.11	F16F	15/22
	572.1	H02K	7/02
	572.11	H02K	7/02
	572.12	H02K	7/02
	572.2	F16C	15/00
	572.21	F16F	15/315
	572.4	F16F	15/32
	573.1	F16F	15/16
	573.11	F16F	15/16
	573.12	F16F	15/16
	573.13	F16F	15/16
	574.1	F16F	15/30
	574.2	F16F	15/14
	574.3	F16F	15/12
	574.4	F16F	15/12
464	61.1	F16F	15/121
	62.1	F16F	15/121
	63.1	F16F	15/121
	64.1	F16F	15/121
	65.1	F16F	15/121
	66.1	F16F	15/121
	67.1	F16F	15/121
	68.1	F16F	15/121
	68.2	F16F	15/121
	68.3	F16F	15/121
	68.4	F16F	15/129
	68.41	F16F	15/129
	68.5	F16F	15/121
	68.6	F16F	15/121
	68.7	F16F	15/121
	68.8	F16F	15/121
	68.9	F16F	15/121
	68.91	F16F	15/121
	68.92	F16F	15/121

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 16 – MISCELLANEOUS HARDWARE

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 404: Under SEE OR SEARCH CLASS:

Delete:

74, Machine Element or Mechanism, subclass 573 for a weight, a rotor, or flywheel.

Insert:

74, Machine Element or Mechanism, subclass 572.2 for a flywheel.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 29 – METAL WORKING

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 894: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclasses 572+ for flywheel and rotor structure.

Insert:

- 74, Machine Element or Mechanism, subclass 572.21 for flywheel structure.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 54 – HARNESS

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Class Title: The class title:

Delete:

HARNESS

Insert:

HARNESS FOR WORKING ANIMAL

Class 54 Title
Changes in

External Classes: Change Class 54 Title as indicated in the external classes below:

Delete the old title for Class 54:

HARNESS

Insert the following new title for Class 54:

HARNESS FOR WORKING ANIMAL

List of Classes and See or Search Class References with Class 54 Title Changes:

Class 2 (Class 54 title changes in See or Search Class (SC) locations below:

- 40, 171/SC 54
- 40, 209.3/SC 54

Class 24 (Class 54 title changes in See or Search Class (SC) locations below:

- 24, 19/SC 54
- 24, 68/SC 54
- 24, 164/SC 54
- 24, 165/SC 54
- 24, 182/SC 54
- 24, 183/SC 54
- 24, 598.4/SC 54
- 24, 698.1/SC 54

Class 33 (Class 54 title changes in See or Search Class (SC) locations below:

- 33, 511/SC 54

Class 43 (Class 54 title changes in See or Search Class (SC) locations below:)

43, 8/SC 54

Class 53 (Class 54 title changes in See or Search Class (SC) locations below:)

53, Class Definition References to Other Classes/SC 54

Class 59 (Class 54 title changes in See or Search Class (SC) locations below:)

59, 85/SC 54

59, 93/SC 54

Class 112 (Class 54 title changes in See or Search Class (SC) locations below:)

112, 400/SC 54

Class 119 (Class 54 title changes in See or Search Class (SC) locations below:)

119, Class Definition References to Other Classes/SC 54 (two occurrences)

119, 14.12/SC 54

119, 702/SC 54

119, 712/SC 54

119, 769/SC 54

119, 772/SC 54

119, 776/SC 54

119, 783/SC 54

119, 795/SC 54

119, 809/SC 54

119, 810/SC 54

119, 816/SC 54

119, 819/SC 54

119, 833/SC 54

119, 836/SC 54

119, 850/SC 54

119, 856/SC 54

119, 905/SC 54

119, 907/SC 54

Class 135 (Class 54 title changes in See or Search Class (SC) locations below:)

135, 88.01/SC 54

Class 168 (Class 54 title changes in See or Search Class (SC) locations below:)

168, 1/SC 54

168, 2/SC 54

168, 3/SC 54

168, 18/SC 54

168, 25/SC 54

Class 182 (Class 54 title changes in See or Search Class (SC) locations below:)

182, 3/SC 54

Class 185 (Class 54 title changes in See or Search Class (SC) locations below:)

185, 20/SC 54
185, 23/SC 54
185, 37/SC 54

Class 248 (Class 54 title changes in See or Search Class (SC) locations below:)

248, Class Definition References to Other Classes/SC 54

Class 254 (Class 54 title changes in See or Search Class (SC) locations below:)

254, 389/SC 54

Class 256 (Class 54 title changes in See or Search Class (SC) locations below:)

256, 39/SC 54

Class 278 (Class 54 title changes in See or Search Class (SC) locations below:)

278, 21/SC 54

Class 280 (Class 54 title changes in See or Search Class (SC) locations below:)

280, 1.5/SC 54

Class 297 (Class 54 title changes in See or Search Class (SC) locations below:)

297, 176/SC 54
297, 195.1/SC 54

Class 403 (Class 54 title changes in See or Search Class (SC) locations below:)

403, Class Definition References to Other Classes/SC 54

Class 434 (Class 54 title changes in See or Search Class (SC) locations below:)

434, Class Definition References to Other Classes/SC 54

Class 482 (Class 54 title changes in See or Search Class (SC) locations below:)

482, 43/SC 54

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 68 – TEXTILES: FLUID TREATING APPARATUS

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 12.06: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclasses 572+ for miscellaneous rotor structures including those having balancing means.

Insert:

- 310, Electrical Generator or Motor Structure, subclass 261 for miscellaneous rotor structures including those having balancing means.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 73 – MEASURING AND TESTING

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 66: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclasses 572+ for miscellaneous rotor structures including those having balancing means.

Insert:

- 310, Electrical Generator or Motor Structure, subclass 261 for miscellaneous rotor structures including those having balancing means.

Subclass 514.12: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclass 574, for rotor vibration dampening means of a more general application.

Insert:

- 74, Machine Element or Mechanism, subclass 573.1 for fluid or fluent material dampening of an inertial element.

Subclass 514.14: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclass 574 for rotor vibration dampening means of a more general application.

Insert:

- 74, Machine Element or Mechanism, subclass 574.1-.4 for flywheel vibration dampening.

Subclass 526: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclass 574, for rotor vibration dampening means of more general application.

Insert:

- 74, Machine Element or Mechanism, subclass 574.1-.4 for flywheel vibration dampening.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 74 – MACHINE ELEMENT OR MECHANISM

Definitions Abolished:

Subclasses:

570-574

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 5: Under SEE OR SEARCH THIS CLASS, SUBCLASS:

Delete:

572+, for rotors, per se.

Under SEE OR SEARCH CLASS:

Insert:

310, Electrical Generator or Motor Structure, subclass 261 for rotors, per se.

Subclass 117: Under SEE OR SEARCH THIS CLASS, SUBCLASS:

Delete:

571, for adjustable eccentrics.

Insert:

571.1, for adjustable eccentrics.

Subclass 589: Under SEE OR SEARCH THIS CLASS, SUBCLASS:

Delete:

572+, for flywheels and rotors.

Under SEE OR SEARCH CLASS:

Insert:

310, Electrical Generator or Motor Structure, subclass 153 for flywheels and rotors.

Subclass 591: Under SEE OR SEARCH THIS CLASS, SUBCLASS:

Delete:

573, for counterbalanced flywheels and rotors.

Under SEE OR SEARCH CLASS:

Insert:

310, Electrical Generator or Motor Structure, subclass 261 for counterbalanced flywheels and rotors.

Subclass 604:

Delete:

SEE OR SEARCH THIS CLASS, SUBCLASS:

574, for vibration damping means for flywheels and rotors.

Under SEE OR SEARCH CLASS:

Insert:

310, Electrical Generator or Motor Structure, subclass 261 for vibration damping means for flywheels and rotors.

Subclass 835: Under SEE OR SEARCH THIS CLASS, SUBCLASS:

Delete:

571, for features of the adjustable eccentric and strap, per se, and see (1) Note to subclass 828.

Insert:

571.1, for features of the adjustable eccentric and strap, per se, and see (1) Note to subclass 828.

Subclass 836: Under SEE OR SEARCH THIS CLASS, SUBCLASS:

Delete:

571, for features of the adjustable eccentric and strap, per se, and see (1)
Note to subclass 828.

Insert:

571.1, for features of the adjustable eccentric and strap, per se, and see (1)
Note to subclass 828.

Definitions Established: (Place established subclasses in numerical sequence.):

5.95 Flywheel structure:

Subject matter under subclass 5 including a motion-smoothing component generally made up of a massive disk-like member.

SEE OR SEARCH THIS CLASS, SUBCLASS:

572.2, for motion smoothing flywheel.

433.5 With flywheel:

Subject matter under subclass 431 including a motion-smoothing component generally made up of a massive disk-like member.

SEE OR SEARCH THIS CLASS, SUBCLASS:

572.2, for motion smoothing flywheel.

570.1 Eccentric:

Subject matter under subclass entitled ELEMENTS comprising a mass having a center of gravity offset from geometrical center.

SEE OR SEARCH THIS CLASS, SUBCLASS:

116, for eccentric drives for rotary to intermittent unidirectional movement.

570.2 Plural, movable relative to each other (including ball(s)):

Subject matter under subclass 570.1 having at least two masses that can travel independently.

570.21 Concentric:

Subject matter under subclass 570.2 wherein the plural movable eccentric masses are located one inside the other.

570.3 Having anti-friction means, e.g., roller bearing, lubrication, etc.:

Subject matter under subclass 570.1 wherein the eccentric has structure to facilitate the reduction of resistance generated by two moving parts.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 117, for adjustable eccentric drives for rotary to intermittent unidirectional movement.
- 835, for adjustable eccentric and strap changing a stroke "on the fly".

571.1 Adjustable:

Subject matter under subclass 570.1 wherein the eccentric has structure allowing the mass to change position relative to a fixed datum, e.g., a shaft, etc.

571.11 Radially:

Subject matter under subclass 571.1 wherein the eccentric has structure allowing the mass to change position relative to a radius of a fixed datum, e.g., a shaft radius, etc.

572.1 Power generating-type flywheel:

Subject matter under subclass entitled ELEMENTS comprising a mass used in a system to produce mechanical or electrical energy.

- (1) Note. Where additional characteristics are claimed which limit the wheel or other rotor to particular arts, e.g., gears, vehicle wheels, centrifugal separators, turbines, dynamos, etc., the patent will be placed with the appropriate art and cross referenced here, but the mere designation of the device by name will not exclude the same from this subclass or the indented subclasses.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 5, for gyroscopes.

SEE OR SEARCH CLASS:

- 123, Internal-Combustion Engines, subclass 179.22 for mechanical starting devices.
- 310, Electrical Generator or Motor Structure, subclass 74 for rotary dynamo-electric devices having a flywheel, and subclass 153 for magnetos built into a flywheel.
- 322, Electricity: Single Generator Systems, subclass 4 for generator systems where the generator is provided with flywheels or massive moving parts.

572.11 Structural detail, e.g., material, configuration, superconductor, discs, laminated, etc.:

Subject matter under subclass 572.1 for a power generating flywheel subcombination highlighting a specific feature of the mass, such as chemical, electrical, or mechanical make-up, etc.

572.12 Containing fiber or filament:

Subject matter under subclass 572.11 wherein the power generating flywheel specific feature is a thread-like or strand-like member.

572.2 Flywheel, motion smoothing-type:

Subject matter under subclass entitled ELEMENTS comprising a mass used to modulate or control the inertia or momentum of a mechanical system.

- (1) Note. Where additional characteristics are claimed which limit the wheel or other rotor to particular arts, e.g., gears, vehicle wheels, centrifugal separators, turbines, dynamos, etc., the patent will be placed with the appropriate art and cross referenced here, but the mere designation of the device by name will not exclude the same from this subclass or the indented subclasses.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 5.95, for flywheels in gyroscopes.
433.5, for flywheel and gear combination.

SEE OR SEARCH CLASS:

- 29, Metal Working, subclass 894 for wheel making.
73, Measuring and Testing, subclass 66 for rotor unbalance.

572.21 Structural detail, e.g., fiber, held by magnet, etc.:

Subject matter under subclass 572.2 highlighting a specific feature of the mass, such as chemical, electrical, or mechanical make-up, etc.

572.4 Balancing for drum, e.g., washing machine or arm-type structure, etc., e.g., centrifuge, etc.:

Subject matter under subclass entitled ELEMENTS comprising structure for maintaining the equilibrium of (a) a barrel-like structure rotatable about a single axis, used in a clothes cleaning system, or (b) a long, slender support rotatable at one end about a single axis, used in a spinning system to separate material.

573.1 With fluid balancing means:

Subject matter under subclass 572.2 in which the flywheel has a liquid or gas to maintain equilibrium or stability.

573.11 And pressure compensation:

Subject matter under subclass 573.1 in which the flywheel has fluid balancing including a device, e.g., a valve, etc., to regulate the force generated by the liquid or gas in the system.

573.12 And elastic device:

Subject matter under subclass 573.1 in which the flywheel has fluid balancing including a device, e.g. elastomeric blocks, etc., to absorb vibration.

573.13 And bearings:

Subject matter under subclass 573.1 in which the flywheel has fluid balancing including an anti-friction device comprising spheres movable inside a track.

574.1 With electrical or magnetic damping:

Subject matter under subclass 572.2 in which the flywheel utilizes the flow of electrons or the attractive-repulsive property of materials to suppress vibration.

574.2 Damping using swinging masses, e.g., pendulum-type, etc.:

Subject matter under subclass 572.2 wherein vibration is suppressed by the flywheel utilizing an additional movable mass mounted on a support, in which the mass moves away from the support to a rotating member, e.g. shaft, connection, etc.

574.3 Damping by increasing frictional force:

Subject matter under subclass 572.2 in which the flywheel utilizes resistance generated by two moving parts to suppress vibration.

574.4 Damping by absorbing vibration force (via rubber, elastomeric material, etc.)

Subject matter under subclass 572.2 in which the flywheel utilizes the property of some materials to suppress an asymmetric motion of the flywheel from a state of equilibrium.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 123 – INTERNAL-COMBUSTION ENGINES

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 192.1: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclass 36 for overcoming dead centers and subclass 573 for balanced flywheels.

Insert:

- 74, Machine Element or Mechanism, subclass 36 for overcoming dead centers; subclass 573.1 for fluid balanced flywheels; subclass 574.1 for flywheel with electrical or magnetic damping; subclass 574.2 for damping using swinging masses, e.g., pendulum type for damping, etc.; subclass 574.3 damping by increasing frictional force; and subclass 574.4 damping by absorbing the vibration force (via rubber, elastomeric material, etc.).

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 164 – METAL FOUNDRY

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 287: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclass 573 for flywheels and rotors with balancing means.

Insert:

- 74, Machine Element or Mechanism, subclass 573.1 for flywheels with fluid balancing means.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 188 – BRAKES

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 218: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclass 574 for vibration dampeners for flywheels and rotors.

Insert:

- 74, Machine Element or Mechanism, subclass 574.1 for flywheel with electrical or magnetic damping; subclass 574.2 for damping using swinging masses, e.g., pendulum type for damping, etc.; subclass 574.3 for damping by increasing frictional force; and 574.4 for damping by absorbing the vibration force (via rubber, elastomeric material, etc.).

Subclass 322.5: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclass 574 for a fluid vibration dampener for flywheels and rotors.

Insert:

- 74, Machine Element or Mechanism, subclass 573.1 for fluid balancing for flywheels.

Subclass 378: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, 574 for vibration dampening means for flywheels for rotors.

Insert:

- 74, Machine Element or Mechanism, subclass 574.1 for flywheel with electrical or magnetic damping; subclass 574.2 for damping using swinging masses, e.g., pendulum type for damping, etc.; subclass 574.3 damping by increasing frictional force; and subclass 574.4 damping by absorbing the vibration force (via rubber, elastomeric material, etc.).

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 210 – LIQUID PURIFICATION OR SEPARATION

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 144: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclasses 572+ for flywheels and rotors with balancing or vibration dampening means defining no specific feature of separator construction.

Insert:

- 74, Machine Element or Mechanism, subclasses 573.1 and 574.1-574.4 for flywheels and rotors with balancing or vibration dampening.

Subclass 363: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclasses 572+ for flywheels and rotors with balancing or vibration dampening means defining no specific feature of separator construction.

Insert:

- 74, Machine Element or Mechanism, subclasses 573.1 and 574.1-574.4 for flywheels and rotors with balancing or vibration dampening.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 226 – ADVANCING MATERIAL OF INDETERMINATE LENGTH

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 61: Under SEE OR SEARCH CLASS:

Delete:

74, Machine Element or Mechanism, subclasses 572+ for a flywheel, per se.

Insert:

74, Machine Element or Mechanism, subclasses 572.2 for a flywheel.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 241 – SOLID MATERIAL COMMINUTION OR DISINTEGRATION

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 292: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclass 573 for rotors and fly-wheels provided with balancing means.

Insert:

- 74, Machine Element or Mechanism, subclass 573.1 for flywheels provided with fluid balancing means.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 305 – WHEEL SUBSTITUTES FOR LAND VEHICLES

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 136: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclasses 572+ for a flywheel or rotor structure, per se.

Insert:

- 74, Machine Element or Mechanism, subclass 572.21 for a flywheel structure.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 310 – ELECTRICAL GENERATOR OR MOTOR STRUCTURE

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 51: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclass 573 for flywheel or rotor balancing means and subclass 574 for flywheel or rotor vibration damping means.

Insert:

- 74, Machine Element or Mechanism, subclass 573.1 for flywheel fluid balancing means; subclass 574.1 for flywheel with electrical or magnetic damping; subclass 574.2 for damping using swinging masses, e.g., pendulum type for damping, etc.; subclass 574.3 for damping by increasing frictional force; and subclass 574.4 damping by absorbing the vibration force (via rubber, elastomeric material, etc.).

Subclass 74: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclasses 572+ for flywheels, per se, and for rotors, per se.

Insert:

- 74, Machine Element or Mechanism, subclasses 572.1 for energy storage-type flywheels.

Subclass 153: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclasses 572+ for flywheels and rotors, per se.

Insert:

- 74, Machine Element or Mechanism, subclass 572.1 for energy storage-type flywheels.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 318 – ELECTRICITY: MOTIVE POWER SYSTEMS

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 150: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclasses 572+ for details of structure of flywheels and rotors, per se.

Insert:

- 74, Machine Element or Mechanism, subclass 572.1 for energy storage-type flywheels.

Subclass 161: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclasses 572+ for details of structure of flywheels and rotors, per se.

Insert:

- 74, Machine Element or Mechanism, subclass 572.1 for energy storage-type flywheels.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 322 – ELECTRICITY: SINGLE GENERATOR SYSTEMS

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 4: Under SEE OR SEARCH CLASS:

Delete:

74, Machine Element or Mechanism, subclasses 572+ , for flywheel structure.

Insert:

74, Machine Element or Mechanism, subclasses 572.1, for flywheel structure.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 335 – ELECTRICITY: MAGNETICALLY SWITCHES, MAGNETS, AND
ELECTROMAGNETS

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 190: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, appropriate subclasses, especially subclasses 9, 10.29+, 10.6, 53, 54, 55+, 567+, 570+, 835, and 838+ for mechanical elements including cams and/or eccentric devices.

Insert:

- 74, Machine Element or Mechanism, appropriate subclasses, especially subclasses 9, 10.29+, 10.6, 53, 54, 55+, 567+, 570.1, 835, and 838+ for mechanical elements including cams and/or eccentric devices.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 336 – INDUCTOR DEVICES

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 100: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclass 574 for flywheels and rotors with vibration damping means.

Insert:

- 74, Machine Element or Mechanism, subclass 574.1 for flywheel with electrical or magnetic damping; subclass 574.2 for damping using swinging masses, e.g., pendulum type for damping, etc.; subclass 574.3 for damping by increasing frictional force; and subclass 574.4 for damping by absorbing the vibration force (via rubber, elastomeric material, etc.).

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 422 – CHEMICAL APPARATUS AND DISINFECTING, DEODORIZING,
PRESERVING, OR STERILIZING

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 1: Under SEE OR SEARCH CLASS:

Delete:

- 588, Hazardous or Toxic Waste Destruction or Containment, subclasses 300 through 321 for processes of destruction by any chemical means of hazardous or toxic waste to make such waste safe for landfill disposal, and subclasses 249-260 for processes of permanently storing hazardous or toxic waste per se, particularly subclass 258 for storage of pathogenic organisms (e.g., virus, bacteria, or medical waste).

Insert:

- 588, Hazardous or Toxic Waste Destruction or Containment, subclasses 300 through 321 for processes of destruction by any chemical means of hazardous or toxic waste to make such waste safe for landfill disposal, and subclasses 249-260 for processes of permanently storing hazardous or toxic waste per se, particularly subclass 249.5 for permanent storage of chemical or germ warfare agents, or pathogenic organisms (e.g., sarin, VX, anthrax, virus, bacteria, medical waste, etc.)

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 451 – ABRADING

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 343: Under SEE OR SEARCH CLASS:

Delete:

74, Machine Element or Mechanism, subclass 573 for miscellaneous rotor balancing means.

Insert:

74, Machine Element or Mechanism, subclasses 570.1 for an eccentric and subclasses 573.1 and 574.1-.4 for flywheel balancing.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 464 – ROTARY SHAFTS, GUDGEONS, HOUSINGS, AND FLEXIBLE COUPLINGS
FOR ROTARY SHAFTSDefinitions Abolished:Subclasses:

61-68

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Class definition: Under SECTION IV – REFERENCES TO OTHER CLASSES, SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclasses 15.6+ for a power take-off from a shaft extension; subclasses 18+ for motion transmitting means including a flexible sealing diaphragm connected to a moving rod and a casing; subclasses 380+ for pivotally supported gearing; subclass 411 for structure providing yield ability in gear trains; subclass 443 for sound deadening means associated with rotary bodies; subclasses 489 and 500.5+ for a flexible motion transmitter (e.g., Bowden cable); subclasses 572+ for a flywheel or rotor with balancing or vibration dampening means; and subclasses 606+ for a gear casing.

Insert:

- 74, Machine Element or Mechanism, subclasses 15.6+ for a power take-off from a shaft extension; subclasses 18+ for motion transmitting means including a flexible sealing diaphragm connected to a moving rod and a casing; subclasses 380+ for pivotally supported gearing; subclass 411 for structure providing yield ability in gear trains; subclass 443 for sound deadening means associated with rotary bodies; subclasses 489 and 500.5+ for a flexible motion transmitter (e.g., Bowden cable); subclasses 573.1 for a flywheel or rotor with balancing or vibration dampening means; and subclasses 606+ for a gear casing.

Subclass 127: Under SEE OR SEARCH CLASS:

Delete:

74, Machine Element or Mechanism, subclasses 572+ for a flywheel or rotor with vibration dampening or balancing means.

Insert:

74, Machine Element or Mechanism, subclasses 573.1, for a flywheel or rotor with vibration dampening or balancing means.

Subclass 180: Under SEE OR SEARCH CLASS:

Delete:

74, Machine Element or Mechanism, subclasses 572+ for a flywheel or rotor with balancing or vibration dampening means.

Insert:

74, Machine Element or Mechanism, subclasses 573.1, for a flywheel or rotor with balancing or vibration dampening means.

Definitions Established: (Place established subclasses in numerical sequence.):

61.1 Coil spring:

Subject matter under subclass 51 wherein said element is a resilient or elastic element, usually helically.

62.1 Plural:

Subject matter under subclass 61.1 further including at least two resilient or elastic elements.

63.1 And springs' centerline spaced along shaft axis:

Subject matter under subclass 66.1 wherein the centerline of one of the elements is spaced from the centerline of the other of the elements along the elongated member.

64.1 Concentric:

Subject matter under subclass 62.1 wherein one of the elements surrounds the other about a common centerline.

65.1 Parallel to shaft:

Subject matter under subclass 62.1 wherein the centerline of each of the elements is spaced radially an equal distance outwardly from elongated member.

- 66.1 Perpendicular to shaft:**
Subject matter under subclass 62.1 wherein the distance on a radial line extending from the rotational axis to the centerline of the element at one end of the element is the same as the distance on a radial line extending from the rotational axis to the centerline of the element at the opposite end of the element.
- 67.1 Along curved centerline:**
Subject matter under subclass 66.1 wherein the centerline of said element is arc-shaped and extends in circumferential direction radially spaced from the shaft.
- 68.1 Between axially spaced plates:**
Subject matter under subclass 66.1 wherein driving and driven members are resiliently connected by said elements, one of said members including a pair of plates spaced apart axially from each other along the rotational axis, said elements being received in the space between said plates, and the other of said members including a radial projection extending between said plates and engaging said elements for said radial projections to drive said plates via said elements.
- SEE OR SEARCH CLASS:
- 192, Clutches and Power-Stop Control, subclass 200 for a clutch element combined with means to resiliently mount such element on a hub.
- 68.2 Speed responsive:**
Subject matter under subclass 68.1 wherein axially spaced plates have structure to adjust for velocity changes.
- 68.3 With fluid damping:**
Subject matter under subclass 68.1 wherein axially spaced plates have vibration suppression with a system using air or liquid.
- 68.4 Interposed friction or braking element:**
Subject matter under subclass 68.1 wherein axially spaced plates (a) have structure to increase resistance to motion or (b) utilize a motion retarding between the plates to suppress vibration.
- 68.41 With biasing means:**
Subject matter under subclass 68.4 wherein axially spaced plates have either structure to increase resistance to motion or a motion retarding between the plates including a device to influence the element into contact.
- 68.5 Including bearing detail:**
Subject matter under subclass 68.1 wherein axially spaced plates have fluid balancing including an anti-friction device comprising spheres movable inside a track.
- 68.6 Specified bushing:**
Subject matter under subclass 68.1 wherein axially spaced plates have a particular lining.
- 68.7 Axially spaced springs:**
Subject matter under subclass 68.1 wherein axially spaced plates have the resilient or elastic elements gapped along the length of the shaft.
- 68.8 Radially spaced springs:**
Subject matter under subclass 68.1 wherein axially spaced plates have the resilient or elastic elements gapped along the line made by shaft radius.

68.9 Spring detail:

Subject matter under subclass 68.1 wherein axially spaced plates have particular structure, e.g. configuration, material, etc., of the resilient or elastic elements.

68.91 Non-coiled or non-metallic:

Subject matter under subclass 68.9 wherein axially spaced plates include a spring detail wherein the element is (a) straight, wavy, or other shape unlike a helix or (b) plastic, wood, ceramic, or other material having poor conductivity.

68.92 With particular seat:

Subject matter under subclass 68.9 wherein axially spaced plates include a spring detail having a specific connection of the element end or ends.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 492 – ROLL OR ROLLER

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Class definition: Under SECTION III, REFERENCES TO OTHER CLASSES, SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, particularly, subclass 214 for a friction wheel used in a friction transmission, the surface of the wheel frequently having a covering of friction material to enhance its frictional qualities and subclasses 572+ for a flywheel or rotor, such device being distinguished by features residing in and pertaining to inertia or momentum characteristics. (Roll or other rotary body, per se-Other Rotary Body, per se.)

Insert:

- 74, Machine Element or Mechanism, particularly, subclass 214 for a friction wheel used in a friction transmission, the surface of the wheel frequently having a covering of friction material to enhance its frictional qualities and subclass 572.2 for a flywheel, such device being distinguished by features residing in and pertaining to inertia or momentum characteristics. (Roll or other rotary body, per se-Other Rotary Body, per se.)

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 494 – IMPERFORATE BOWL: CENTRIFUGAL SEPARATORS

Definitions Modified: (Place modifications in numerical sequence, where applicable):

Subclass 82: Under SEE OR SEARCH CLASS:

Delete:

- 74, Machine Element or Mechanism, subclass 573 for a machine element in the nature of a flywheel or rotor which is provided with balancing means.

Insert:

- 74, Machine Element or Mechanism, subclass 572.4 for a machine element in the nature of a flywheel for balancing a centrifuge.

D. CHANGES TO THE DEFINITIONS (Project No. M-5141)

CLASS 588 – HAZARDOUS OR TOXIC WASTE DESTRUCTION OR CONTAINMENT

Definitions AbolishedSubclass

258

Definitions Modified (Place modifications in numerical sequence, where applicable):

Class Definition: Under Section III, References to Other Classes, SEE OR SEARCH CLASS

Delete:

- 423, Chemistry of Inorganic Compounds, subclasses 210 through 215.5 for chemically removing, modifying or destroying a hazardous or toxic component of normally gaseous mixture, except for the chemical destruction of chemical weapons which may gas, which is in this Class 588 (see Line With Other Classes That Provide for Destroying Hazardous or Toxic Waste); and for recovering inorganic elements or compounds from hazardous or toxic waste (See Line With Classes Producing Desired Useful Product).

Insert:

- 423, Chemistry of Inorganic Compounds, subclasses 210 through 215.5 for chemically removing, modifying or destroying a hazardous or toxic component of normally gaseous mixture, except for the chemical destruction of chemical weapons which may **be** gas, which is **covered** in this Class 588 (see Line With Other Classes That Provide for Destroying Hazardous or Toxic Waste); and for recovering inorganic elements or compounds from hazardous or toxic waste (See Line With Classes Producing Desired Useful Product).

Subclass 249.5:

Delete: The current subclass title**Chemical or germ warfare agents:**

Insert: New title

Chemical or germ warfare agents, or pathogenic organisms (e.g., sarin, VX, anthrax, virus, bacteria and medical waste, etc.):

Delete:

The (1) Note.

Subclass 250:

Delete: The current subclass title

Geologic marine or extraterrestrial storage and containment (e.g., tectonic, volcanic, deep natural, manmade earth cavity, submarine placement sites, lunar, earth orbital, and solar placement):

Insert: New title

Geologic, marine, or extraterrestrial storage and containment (e.g., tectonic, volcanic, deep natural, manmade earth cavity, submarine placement sites, lunar, earth orbital, and solar placement, etc.):

Subclass 258:

Delete:

The entire subclass title and definition and the references to SEE OR SEARCH CLASS: 210, 422, and 435.

Subclass 316:

Delete: The current subclass title

Dehalogenation using reactive chemical agents able to degrade (dehalogenation in molten chemical reagent 314) (EPO/JPO):

Insert: New title

Dehalogenation using reactive chemical agents able to degrade (EPO/JPO):