

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

CLASSIFICATION ORDER 1909

MAY 03, 2011

PROJECT MB180

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</u>
Abolished:	180	205-207	3616	OS0001
Established:	180	205.1-205.7, 206.1-206.8, 207.1-207.3	3616	OS0001

The following classes are also impacted by this order:

No other classes were impacted by this order.

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 USPC-TO-IPC CONCORDANCE
- D. DEFINITION CHANGES AND NEW OR ADDITIONAL DEFINITIONS

CLASSIFICATION ORDER 1909

MAY 03, 2011

PROJECT MB180

Project Leader(s): George Spisich

Examiner : Kevin Hurley

Editor(s): Varona Stevens

Publications Specialist(s): Yvonne Smith

164	WITH POWERED MEANS FOR CREATING FLUID FORCE TO ATTRACT VEHICLE TO SURFACE OF TRAVEL	169	.Radiation, force, or waves reflected from external object or surface
116	SURFACE EFFECT VEHICLES (I.E., GROUND EFFECT MACHINES)	170	WITH MEANS RESPONSIVE TO SPEED OF VEHICLE FOR MAINTAINING SPEED AT, OR PREVENTING IT FROM EXCEEDING, A PARTICULAR VALUE
117	.Having propulsion or control means	171	.Including device to signal to operator existence of unusual or unintended speed
118	..Responsive to instability condition	172	.Including device responsive to centrifugal force
119	..Surface contacting control	173	..And means to prevent tampering or unauthorized use
120	..Integrated with working fluid	174	..Having electrical switch
121	...With plural cushions	175	.Including fluid pressure actuated servomechanism
122	...With dynamic seal or fluid curtain	176	..And electrical quantities comparison means for development of input pressure
123	.Spray deflector	177	..And one or more electrical components for establishing or regulating input pressure
124	.Expansible chamber	178	.Including electrically actuated servomechanism
125	.Fluid bearing or fluid pad	179	..And electrical quantities comparison means for development of electrical input
126	.Rigid side walls	180	SKI- OR SKATE-TYPE VEHICLE FOR IMPARTING MOVEMENT TO A PERSON STANDING THEREON
127	.Flexible skirt	181	.With power means or a portion thereof affixed to or built into the ski or skate
128	..Having outlet for working fluid	182	INCLUDING ONE OR MORE SKI-LIKE OR RUNNER MEMBERS
129	.Dynamic seal or fluid curtain	183	.Member substitutable for wheel type support structure
130	..Recirculating	184	..With propulsion element of endless track type
165	WITH FLUID OR MECHANICAL MEANS TO ACCUMULATE ENERGY (I) DERIVED FROM MOTION OF VEHICLE OR (II) OBTAINED FROM OPERATION OF VEHICLE MOTOR, AND GIVE UP THE ENERGY (1) WHEN NEEDED FOR VEHICLE ACCELERATION OR (2) TO POWER AN AUXILIARY SYSTEM OF THE VEHICLE	185	...Track comprises substitute for or addition to propulsion element of traction wheel type
166	WHEELED INFANT CARRIAGE OR CRIB WITH DRIVEN MEANS FOR RECIPROCATING IT LONGITUDINALLY	186	.With at least one surface-engaging propulsion element
2.1	MOTOR SUPPLIED WITH POWER FROM EXTERNAL SOURCE	187	..Element shuffles along support surface
2.2	.Source comprises or includes energy derived from force of nature (e.g., sun, wind)	188	..Spiral type element
167	WITH MEANS FOR CONTROLLING OPERATION RESPONSIVE TO ELECTROMAGNETIC RADIATION, MAGNETIC FORCE, OR SOUND WAVES RECEIVED FROM SOURCE, OR REFLECTED FROM OBJECT OR SURFACE, LOCATED APART FROM VEHICLE	189	..Plural elements connected to and spaced along the plural throws of a common crankshaft
168	.Having controlling means adapted to interact with stationary means which describes course of vehicle's travel	190	..Endless track type element
		191	...Protruding from member

192	...Plural tracks with interconnected drive or support means	6.48	.Independently operable drive motors
193	...With vertically movable track support located intermediate the forward and rearward extremities of the track	6.5 6.54 6.58	..Electrical .Variable contact .Controlled from rotatably mounted superstructure
194	..Plural discrete elements protruding from a wheel, hub, or shaft	6.6 6.62 6.64	..Steering responsive to rotary movement of superstructure .Combined .Swinging traction frame responsive to differential drive
195	...Each element moves relative to wheel, hub, or shaft	6.66	.Reversing drive to traction element
196	..Element comprises traction wheel	6.7	.Endless flexible track
197	WITH MEANS FOR DETECTING WHEEL SLIP DURING VEHICLE ACCELERATION AND CONTROLLING IT BY REDUCING APPLICATION OF POWER TO WHEEL	7.1 7.2 7.3 7.4 7.5	SPECIAL DRIVING DEVICE .Spiral type element .Reaction jet propulsion .Propeller type .Vehicle mounted winch for pulling vehicle
198	PORTABLE CARRIER SUPPORTS MOTOR VEHICLE IN TOTO AND IS PROPELLED THEREBY	8.1 8.2	.Stepper ..Step or abutment ascending/desending type vehicle
199	WITH POWERED, GROUND-ENGAGING MEANS FOR PRODUCING, OR ASSISTING IN THE PRODUCTION OF, LATERAL MOVEMENT OF THE VEHICLE (E.G., FOR PARKING)	8.3 8.4	..Wheel and stepper type ...Nonsupporting pusher type stepper
200	.Comprising rotatably driven auxiliary wheel or endless track	8.5	..With alternately lifted supporting base and leg
201	..Driven by frictional engagement with tire of vehicle traction wheel	8.6 8.7	..With alternately lifted feet or skid ..Endless or rotary type
202	..Driven by auxiliary electric or fluid motor	9 9.1	.Portable track ..Endless, flexible
203	.Comprising reciprocally driven stepper or rotatably driven cam	9.21 9.22 9.23 9.25	...Track substituted for drive wheel ...Guided by walking attendant ...With attendant station ...Rider straddles vehicle (e.g., motorcycle)
204	WITH DEVICE FOR PROGRAMMABLY OPERATING VEHICLE`S STEERABLE WHEELS	9.26 9.28 9.3 9.32	...Convertible from wheel type ...Track remains with vehicle....Wheel or track contacts ground ...With auxiliary obstacle surmounting means
6.2	STEERING BY DRIVING	9.34 9.36 9.38 9.4 9.42 9.44	...With ground wheel ...Opposite and laterally spaced....Steering ...With hitch ...Combined ...With track-related steering means
6.24	.Combined with manual steering		
6.26	..Interlocked		
6.28	...Electrical		
6.3	...Fluid		
6.32	...Lever and/or linkage		
6.34	....With controller cam		
6.36	....Lost motion type		
6.38	....Geared		
6.4	....With flexible and/or yieldable link		
6.44	.Auxiliary steering motor		

9.46	....Pivoted track frame	24.09	..With interaxle differential
9.48	...Laterally extendable track	24.1	..With drive interrupt means to either tandem drive wheel
9.5	...Track support mounted for vertical movement	24.11	..Driven tandem wheels
9.52	....Adjustable	24.12	...One serially driven by other
9.54	....With spring	24.13	..Spring rocker beam
9.56	.....Longitudinally extending coil spring	205.1	.Rider propulsion with additional source of power, e.g., combustion engine or electric motor(IPC)
9.58	.....Leaf or torsion spring	205.2	..Rider propelled cycle with auxiliary combustion engine(IPC)
9.6	.....Transversely extending	205.3	...Control or actuating device therefore; Arrangement thereof(IPC)
9.62	...Toothed wheel drive	205.4	...Power driven at crank shaft(IPC)
9.64	...Belt or chain driven	205.5	...Power driven at axle(IPC)
10	..Annular	205.6	...Power driven at endless flexible drive member, e.g., chain(IPC)
11	MOTOR-CARRYING ATTACHMENTS	205.7	...Power driven by friction roller or gear engaging the ground wheel(IPC)
12	.Driven steering wheel type	206.1	..Rider propelled cycle with auxiliary electric motor(IPC)
13	..Single wheel	206.2	...Control or actuating device therefore(IPC)
14.1	VEHICLE TRAINS	206.3	...Characterized by detector or sensor; Arrangement thereof(IPC)
14.2	.Motorized trailer	206.4	...Power driven at crank shaft(IPC)
14.3	..All motors supplied from power plant of a single vehicle	206.5	...Power driven at axle(IPC)
14.4	.Drive means between vehicles through coupling	206.6	...With axle driving shaft arranged coaxially with motor output shaft(IPC)
14.6	.Tractor drive effort varied by pull exerted by trailer	206.7	...Power driven at endless flexible drive member, e.g., chain(IPC)
14.7	.Vehicle drive drives other vehicle wheel	206.8	...Power driven by friction roller or gear engaging the ground wheel(IPC)
14.5	.Overload release	207.1	..Accessories; Arrangement thereof(IPC)
15	ADDITIONAL TRACTION WHEEL	207.2	...Solar cell; Arrangement thereof(IPC)
16	TRACTION WHEEL ATTACHMENTS	207.3	...Battery; Arrangement thereof(IPC)
19.1	STEERED BY WALKING ATTENDANT	208	.Collapsible or knockdown for storage or transport
19.2	.Who steerably controls steerable wheel		
19.3	.Handle movement controls vehicle drive		
20	WITH ROLLERS		
21	SPECIAL WHEEL BASE		
22	.Five or more wheels		
23	..Driven steering wheel type		
24	...Stub-axle type		
24.01	..Having tandem steerable or translatable wheels or wheel sets		
24.02	..Displaceable wheel shifts or proportions load		
24.03	..Independently rotatable side-by-side dual wheels		
24.04	..With differential housing integrally fixed to vehicle frame		
24.05	..Rocker beam houses drive means		
24.06	..Plural propelling motors		
24.07	...Separate driving motor for each drive wheel		
24.08	..Each wheel positively driven		

209	.With means for changing number of supporting wheels, or for adjusting relative location thereof	232	WITH MEANS FOR (1) PROTECTING MOTOR FROM IMPACT OF COLLISION, (2) UTILIZING MASS OF MOTOR TO ABSORB FORCE THEREOF, OR (3) PROTECTING OCCUPANT REGION OF VEHICLE FROM IMPACT-INDUCED SHIFTING OF MOTOR
210	.Having only three wheels		
211	..Including steerable and driven wheel		
212	...All wheels motor driven	41	WITH LEVELING DEVICE
213	...Having motor mounted to swing with steerable wheel	233	HAVING FOUR WHEELS DRIVEN
214	...Electrical-type motor	234	.With means for steering all driven wheels
215	..Including two wheels driven and having common axis of rotation	235	..Comprising articulated frame and means for pivoting one portion of frame relative to other portion about vertical axis located centrally of vehicle
216	...Electrical-type motor		
217	..Including endless element for transmitting drive to wheels		
218	.Having only two wheels		
219	..Arranged in tandem	236	..In a path of travel other than that produced by turning the front wheels and the rear wheels substantially equally and oppositely
220	...Electrical-type motor		
221	...Including rotating element for frictionally engaging and driving a wheel	237	..Comprising swingable, plural-wheel-carrying axles on individual, vertical axes of pivot
222	...And means for steering that wheel		
223	..Including steerable and driven wheel		
224	...Both wheels motor driven	238	...At least one axle being offset from its pivotable axis
225	..Having frame element or fender constituting also exhaust or fuel passageway or fuel reservoir	239	...Including longitudinally extending, endless element for transmitting drive to wheels
226	..Including longitudinally extending shaft for transmitting drive to wheel	240	..Including rotatable shaft extending longitudinally from wheels at one end of vehicle to wheels at other end for transmitting steering force thereto
227	..Including resilient means for mounting driven wheel		
228	..Including resilient means for mounting motor	241	..Including longitudinally extending, endless element for transmitting drive to wheels
229	...With means for cooling motor		
230	...With change-speed means between motor and driven wheel	242	.Including pump and fluid motor, or generator and electric motor, for driving one or more wheels
231	...Including endless element for transmitting drive and means for adjusting tension of element	243	..And another means for driving the remaining driven wheels
36	STEAM TRACTION ENGINES		
37	.Driven steering wheel type	244	.With means for braking either (1) one or more driven wheels or (2) structure transmitting drive to wheel
38	..Four wheels driven		
39	.With boiler leveler		
40	.Spring mounted on axle	245	.Including separate mechanical assemblies for transmitting drive to each of two wheels at one end of vehicle

- 246 ..And assemblies for each of two wheels at other end, also
- 247 .With manually operated means for disengaging drive to one or more, but fewer than all, of the four wheels
- 248 .With differential means for driving two wheel sets at dissimilar speeds
- 249 ..And means for locking out the differential means
- 250 ..Manually operated type of lockout means
- 251 .Including longitudinally extending, endless element for transmitting drive to wheels
- 252 **HAVING AT LEAST ONE WHEEL BOTH DRIVEN AND STEERABLE**
- 253 .Steerable wheel has exclusive axis of pivot (i.e., stub-axle type)
- 254 ..Including flexible, axially rotatable means having one portion fixed to vehicle and another portion pivotable with wheel for transmitting drive thereto
- 255 ...Pivotable portion of means has additional structure of gearlike nature in driving engagement with corresponding structure on wheel
- 256 ...Means comprises rotatable shaft containing plural universal joints
- 257Having at least one joint located on each side of axis of pivot
- 258 ...Pivotable portion of means includes ball or socket element of ball-and socket type universal joint
- 259Joint includes intermediate ball, floating in groove, for positively engaging ball with socket
- 260 ...Pivotable portion of means includes gear element of intermeshing gear type universal joint
- 261Joint includes at least one gear element rotatable on axis of pivot and intermeshing with gear element on pivotable portion
- 262Joint also includes gear element on fixed portion engaging gear element on axis of pivot and vertically offset from gear element on pivotable portion
- 263 ..Having axis of pivot disposed between parallel planes defined by opposite sides of wheel
- 264 .With driven axle, mounting two or more wheels, swingable about axis of pivot, and motor mounted to swing therewith
- 265 ..Having axle offset longitudinally from axis of pivot
- 266 .With driven axle, mounting two or more wheels, swingable about axis of pivot, and swingable also about a horizontal axis
- 267 .With driven axle, mounting two or more wheels, swingable about axis of pivot, and shaft for transmitting drive coincident with axis
- 268 **WITH BELT OR HARNESS FOR RESTRAINING OCCUPANT, AND MEANS WHEREBY THE BELT OR HARNESS CONTROLS, OR IS CONTROLLED BY, THE FUNCTIONING OF A VEHICLE SYSTEM OR COMPONENT**
- 269 .System comprises transmission or element thereof
- 270 .System comprises ignition circuit or starter circuit or element of one or other
- 271 **WITH MEANS FOR PROMOTING SAFETY OF VEHICLE, ITS OCCUPANT OR LOAD, OR AN EXTERNAL OBJECT**
- 272 .Responsive to absence or inattention of operator, or negatively reactive to attempt to operate vehicle by person not qualified mentally or physically to do so
- 273 ..Utilizing weight, or lack thereof, of operator on seat or other support to determine presence or absence
- 274 .Responsive to engagement of portion of perimeter of vehicle with external object

275	..And causing application of vehicle brake	53.5	.Electric drive to other machine
276	...Brake comprises or includes element moved or deformed into engagement with ground	53.6	.Drive to other machine by power take-off (PTO) driven by wheel or axle of motor vehicle
277	...And also interruption of at least one operational system of the vehicle or its motor	53.61	..PTO mounted directly on or engaging drive wheel to rotate therewith
278	...System comprises clutch	53.62	..PTO constantly driven with wheel selectively driven
279	..And causing interruption of an electrical system of the vehicle or its motor	53.7	.Drive to other machine by power take-off (PTO) at front end of vehicle
280	..And causing operation of vehicle steering system	53.8	.Other machine is vehicle accessory
281	.Comprising either movable closure member or fastening device therefor responsive to forward or rearward movement, or variations therein, of vehicle	54.1	POWER
282	.Responsive to sensing of acceleration, deceleration, or tilt of vehicle	54.2	.With spring powered motor
283	..And causing interruption of ignition circuit	55	.On lower running gear
284	...And also impeding flow of fuel	56	..Rear axle and body
285	..And causing disruption of drive train between motor and wheels	57	...Longitudinal shaft
286	.Comprising vehicle system or component responsive either to position of movable closure member or to status of fastening device therefor	58	..Frame
287	.By preventing unauthorized or unintended access or use	59	...Pivoted support on axle
288	..Reponsive to failure of taxicab operator to activate fare meter upon boarding of passenger	60	...Electric
289	..Comprising device, mechanism, or system for either repositioning a movable or removable closure member or operating a fastening device therefor	61	..Pivoted support on axle
290	.Responsive to weight of cargo load transported by vehicle	62	..Rear axle
53.1	MOTOR AS SOURCE OF POWER FOR OTHER MACHINE	63	.Motor moved by axle
53.2	.Other machine is creeper drive on motor vehicle	291	.Having specific motor-to-body-frame relationship
53.3	.Other machine is mounted by three point hitch (i.e., Ford-Ferguson hitch)	292	..Including change-speed gearing, or clutch, mounted in common with motor
53.4	.Hydraulic drive to other machine	293	...With member or mechanism for controlling gearing or clutch, and means for minimizing transfer of movement, caused by operation of motor, to member or mechanism
		294	..With means enabling repositioning of motor and gearing or clutch
		295	...With wheeled auxiliary frame, resiliently joined to body frame, for supporting motor and gearing or clutch
		296	..Including means on body frame or motor for handling exhaust
		297	..Having motor shaft parallel to rotational axis of driven wheel
		298	..Including means enabling repositioning of motor
		299	..Including auxiliary frame for motor and resilient means for connecting auxiliary frame to body frame

- 300 ..Including means of nonsupporting nature for minimizing operation-induced movement of motor
- 65.1 .Electric
- 65.21 ..Hybrid vehicle (IPC)
- 65.22 ...Specific vehicle architecture (IPC)
- 65.225Series and parallel (IPC)
- 65.23Switching type (IPC)
- 65.235Differential gearing type (IPC)
- 65.24Electrical distribution type (IPC)
- 65.245Series (IPC)
- 65.25Parallel (IPC)
- 65.26Motor assist (IPC)
- 65.265 ...Control of multiple systems specific to hybrid operation
- 65.27 ...Control of external device in conjunction with specific hybrid function
- 65.275 ...Control of individual subunit specific to hybrid operation
- 65.28Control of engine specific to hybrid operation
- 65.285Control of motor or generator specific to hybrid operation
- 65.29Control of battery specific to hybrid operation
- 65.31 ..With means on vehicle for generating power for the electric motor
- 65.51 ..With motor in or moveable with wheel
- 65.6 ..With gearing between electric motor and drive wheel
- 65.7 ...Gearing is a changeable ratio gearing
- 65.8 ..With electronic devices (logic gates, semi-conductors, vacuum tubes, etc.) in control circuit
- 301 .Including traction motor of turbine type driven by fluid product of combustion
- 302 .Including traction motor of kind driven by expansible fluid from source external of motor
- 303 ..Gas is product of treatment of a volatile fluid (e.g., gas is steam)
- 304 ..With means to condense gas discharged from motor
- 305 .Including traction motor of kind driven by noncompressible fluid received under pressure from a pump
- 306 ..Vehicle includes another system operated by same fluid
- 307 ..Having variable displacement type motor or pump
- 308 ..Having separate motor for each driven, surface-engaging member
- 309 .With means for handling motor exhaust
- 310 .With means to generate steam for a propulsion purpose
- 68.1 .With means to guide and/or control air for power plant cooling
- 68.2 ..With further means to utilize power plant cooling air for other purposes
- 68.3 .With means to guide and/or control combustion air for power plant
- 68.4 .Radiators and condensers, mounting
- 68.6 ..With protector for the radiator or condenser
- 68.5 .Battery mountings and holders
- 69.2 .Hoods
- 69.21 ..Pivoted about horizontal axis extending transversely of vehicle (e.g., alligator type or front end pivot)
- 69.22 ..With noise suppression means
- 69.23 ...Noise suppression means prevents hood from vibrating (i.e., anti rattlers)
- 69.24 ..With access openings having moveable or removeable closures
- 69.25 ..Water deflectors
- 69.3 .With means to increase idle speed of internal combustion engine to compensate for accessory load
- 69.4 .With fuel supply for internal combustion engine
- 69.5 ..Engine uses gaseous fuel
- 69.6 .Vehicle has plural power plants
- 69.1 .Underpans
- 337 **TRANSMISSION MECHANISM**
- 338 .Condition responsive (e.g., responsive to speed, load, etc.)

339	.With temperature control, lubrication or sealing	383	.With particular drive coupling
340	.With laterally movable wheel	384	..Relative axial movement
341	.Wheel drives parallel wheel	385	..Drive connection to wheel
342	.Tire directly driven	76	COMPENSATING DEVICES
343	..With particular gear structure	314	WITH PLURAL FUEL TANKS
344	.Assembly feature	315	MANUALLY ACTUATED CONTROLLING DEVICES
345	.Traction aid	316	.By other than hand or foot of operator
346	.With protective guard or casing	317	.On mine car vehicle
347	.Mechanical movement transmission	318	.On delivery-type vehicle
348	.Final drive axle movable	319	.With rein means
349	..Rigid axle	320	.With vehicle control extension
350	...Belt or chain drive	321	.With plural control stations
351	...With tensioning means	322	..Side-by-side
352	..With lateral support between the differential or axle housing and the vehicle frame	323	..For single control means
353	...With sprung differential	324	..With tool or equipment control
354	...And differential support feature	325	..Braking controllable by passenger
355	...And final gear drive	326	.With movable control station or seat position
356	...And final gear drive	327	..Movable cab
357	..Belt or chain drive	328	...Tilting
358	..Swinging axle, single pivot	329	..Simultaneously movable seat and control
359	..With sprung differential	330	..Seat on seat portion movable to alternate position
360	...And differential support feature	331	...With tool or equipment control
361	...And final gear drive	332	.With tiller-type handle
362	...And transverse leaf spring suspension	333	.Multiple vehicle functions controllable by single device
363	..And final gear drive	334	.With adjustable operator engageable control
364	.Variable speed or direction	335	.With fuel or air throttle control
365	..Plural	336	.With transmission control
366	..Belt or chain	78	.Steering shaft
367	..Fluid drive	400	STEERING GEAR
368	..Friction drive	401	.Steering by terrestrial guide
369	..Planetary	402	.No mechanical connection between steering shaft and steering gear
370	.With brake	403	..Hydraulic
371	.Final gear drive at each of two parallel wheels	404	.Power assist alarms or disablers
372	..Planetary	405	.With alternate emergency power means (e.g., pump, gearing, etc.)
373	..Belt or chain	406	..With fluid backup
374	.Gear transmission relationship to frame or axle	407	..With electrical backup
375	..Transmission is differential	408	.Each wheel steerable
376	.Shaft relationship to frame or shaft	409	..Occupant steered
377	.Transmission support	410	...With condition modulated steering
378	..Differential or axle housing		
379	..Shaft		
380	...With propeller shaft casing, (e.g., torque tube)		
381	..Vibration damping		
382	..Flexible support		

411	..Independently controlled steerable wheels	447	.With mechanical power assist
412	..With electric power assist	448	..Swinging axle
413	..With electric power assist to all wheels	449	..Bogie truck having more than one axle
414	..With fluid power assist	84	DUST GUARDS
415	..With electrical control	89.1	BODIES
416	..With mechanical power assist	89.11	.With passenger compartment having article receiving or removing means
417	.With fluid power assist	89.12	.Tractor and similar vehicle cabs
418	..Between articulated wheeled vehicle sections	89.13	.Movable cab or operator's station
419	...Combined with another steering mode	89.14	..Tilting
420	...Reciprocating power assist	89.15	...Via power or power enhancing means
421	..With condition modulated steering	89.16	..Overmotor cab
422	..With electrical control	89.17	.Movable body portion facilitating engine access
423	...Vehicle speed condition only	89.18	..Cab portion
424	..With swinging axle	89.19	.Overmotor cab
425	..Including flexible power transmitting means	89.2	.With means for handling exhaust of a motor
426	..Steering column supported	90	.Dashboards
427	...Including rack gear means	90.6	.Footboards and pedal guards
428	..With rack and pinion gearing intermediate steering shaft and power assist	311	FRAME
429	..Having rotary working member	312	.With structure adapted to receive or support a motor, change-speed gearing, or other power train element
430	..Having flexible working member	313	MISCELLANEOUS
431	..Steering linkage includes interengaging gear means		
432	..With plural working members		
433	..Working member movement traverses vehicle path		
434	..Working member movement traverses vehicle path	<u>CROSS-REFERENCE ART COLLECTIONS</u>	
435	..Moves separate rod for each wheel steering arm	900	ARGICULTURAL-TYPE TRACTORS
436	...Working member part engages wheel steering arm	901	DEVICES FOR TRAVERSING VERTICAL SURFACES
437	..Working member part engages tie rod	902	SHOCK OR VIBRATION ABSORBING OR TRANSMITTING MEANS BETWEEN WHEEL SUSPENSION AND MOTOR
438	..Movable working member engages wheel steering arm	903	AIRSTREAM REACTIVE VEHICLE OR VEHICLE STRUCTURE
439	..Movable working member is a moving cylinder	904	TRACTION DOLLIES FOR AIRCRAFT (Cross Reference Art Collection created in companion project)
440	..With linkage intermediate working member and wheel steering arm	905	AXLES
441	..Device to control pressure (e.g., valve)	906	ADJUSTABLE AXLES
442	..Hydraulic circuit	907	MOTORIZED WHEELCHAIRS
443	..With electric power assist	908	MOTOR VEHICLES WITH SHORT WHEELBASE
444	..Specific mechanical feature		POWER (180/54.1)
445	..Controlling rear wheels		.Electric (180/65.1)
446	..Condition modulated		

FOREIGN ART COLLECTIONS**FOR 000 CLASS-RELATED FOREIGN DOCUMENTS**

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

FOR 100 ..Combined with nonelectric drive means (180/65.2)

FOR 101 ...Generating means is driven by a prime mover (180/65.4)

CLASSIFICATION ORDER 1909

MAY 03, 2011

PROJECT MB180

Source	Number	New	Number
Classification of ORs		Classification of ORs	
-----	-----	-----	-----
180/205	129	180/207.3	1
		180/206.1	9
180/206	72	180/206.5	4
180/207	30	180/206.7	1
180/205	129	180/206.2	7
		180/206.4	10
		180/205.1	8
		180/205.4	16
180/206	72	180/205.4	4
180/205	129	180/206.5	21
		180/206.3	2
180/206	72	180/206.3	9
		180/205.2	4
180/207	30	180/205.2	1
180/206	72	180/206.1	3
		180/206.2	16
		180/206.7	3
180/207	30	180/205.5	1
180/205	129	280/250.1	1
180/206	72	180/206.4	16
180/205	129	180/205.3	5
180/207	30	180/205.4	11
		180/206.3	1

CLASSIFICATION ORDER 1909

MAY 03, 2011

PROJECT MB180

Source	Number	New	Number
Classification of ORs		Classification of ORs	
-----	-----	-----	-----
180/205	129	180/206.6	3
180/206	72	180/220	2
180/205	129	180/206.7	5
180/206	72	180/206.8	2
180/207	30	180/206.8	1
		180/206.5	1
180/205	129	180/205.7	4
		180/205.2	16
180/207	30	180/206.4	3
180/206	72	180/205.3	1
		180/205.5	4
180/207	30	180/206.1	4
180/206	72	180/205.1	2
180/207	30	180/205.6	4
		180/206.2	2
180/205	129	180/206.8	5
		180/205.5	16
180/206	72	180/205.7	2

CLASSIFICATION ORDER 1909

MAY 03, 2011

PROJECT MB180

New Classification	Number of ORs	Source Classification	Number of ORs
-----	-----	-----	-----
180/205.1	2	180/206	72
	8	180/205	129
180/205.2	1	180/207	30
	4	180/206	72
	16	180/205	129
180/205.3	1	180/206	72
	5	180/205	129
180/205.4	4	180/206	72
	11	180/207	30
	16	180/205	129
180/205.5	1	180/207	30
	4	180/206	72
	16	180/205	129
180/205.6	4	180/207	30
180/205.7	2	180/206	72
	4	180/205	129
180/206.1	3	180/206	72
	4	180/207	30
	9	180/205	129
180/206.2	2	180/207	30
	7	180/205	129
	16	180/206	72
180/206.3	1	180/207	30

CLASSIFICATION ORDER 1909

MAY 03, 2011

PROJECT MB180

New Classification	Number of ORs	Source Classification	Number of ORs
-----	-----	-----	-----
	2	180/205	129
	9	180/206	72
180/206.4	3	180/207	30
	10	180/205	129
	16	180/206	72
180/206.5	1	180/207	30
	4	180/206	72
	21	180/205	129
180/206.6	3	180/205	129
180/206.7	1	180/207	30
	3	180/206	72
	5	180/205	129
180/206.8	1	180/207	30
	2	180/206	72
	5	180/205	129
180/207.3	1	180/205	129
180/220	2	180/206	72
280/250.1	1	180/205	129

MAY 03, 2011

PROJECT MB180

C. CHANGES TO THE USPC-TO-IPC CONCORDANCE

<u>Class</u>	<u>USPC</u> <u>Subclass</u>	<u>IPC</u> <u>Subclass</u>	<u>Notation</u>
180	205.1	B62M	6/00
	205.2		6/10
	205.3		6/15
	205.4		6/20
	205.5		6/25
	205.6		6/30
	205.7		6/35
	206.1		6/40
	206.2		6/45
	206.3		6/50
	206.4		6/55
	206.5		6/60
	206.6		6/65
	206.7		6/70
	206.8		6/75
	207.1		6/80
	207.2		6/85
	207.3		6/90

CLASS 180 - MOTOR VEHICLES

Definitions Abolished:

205 -207

Definitions Established:**205.1 Rider propulsion with additional source of power, e.g., combustion engine or electric motor (IPC):**

This subclass is indented under the subclass 21. Subject matter related to a rider propelled cycle, e.g., bicycle, tricycle having an additional source of power, and the use of an additional source of power of a rider propelled cycle, and a rider propelled cycle with an additional source of propulsion power different from a combustion engine or electric motor.

SEE OR SEARCH THIS CLASS, SUBCLASS:

- 210, for nonoccupant propelled cycles having three wheels.
- 218, 228 and 291, for a motorcycle having particular positioning of a motor or engine.
- 218, and 65.21, for a transmission characterized by two or more dissimilar sources of power, e.g., transmission for hybrid cycles.
- 65.1, and 907, for a motorized wheelchair.

SEE OR SEARCH CLASS:

- 280, Land Vehicles, subclass 281.1 for engine or motor driven cycle frames, steering wheel forks or handles bars.
- 476, Friction Gear transmission Systems or Components, subclass 65 for particular transmission details of a friction roller which engages a cycle ground wheel.

205.2 Rider propelled cycle with auxiliary combustion engine (IPC):

This subclass is indented under subclass 205.1. Subject matter related to a cycle propelled by a rider further having a combustion engine as an additional source of power in order to propel the cycle.

205.3 Control or actuating device therefore; arrangement thereof (IPC):

This subclass is indented under the subclass 205.2. Subject matter related to means, specifically adapted for application on a rider propelled cycle, for controlling the delivery of power to the cycle by sensing or detecting a parameter, e.g., rider pedaling force, torque, speed or braking force, and controlling the combustion engine output torque to the cycle, and the particular arrangement of a sensor or a detector on a cycle.

205.4 Power driven at crank shaft (IPC):

This subclass is indented under subclass 205.2. Subject matter related to a rider propelled cycle where the power output of the combustion engine is transmitted to the pedal crank shaft through a power transmission arrangement at the pedal crank shaft.

205.5 Power driven at axle (IPC):

This subclass is indented under subclass 205.2. Subject matter related to a rider propelled cycle where the power output of the combustion engine is transmitted to a wheel axle shaft through a power transmission arrangement at the wheel axle shaft.

- 205.6 Power driven at endless flexible drive member, e.g., chain (IPC):**
This subclass is indented under subclass 205.2. Subject matter related to a rider propelled cycle where the power output of the combustion engine is transmitted to an endless flexible member which connects the wheel axle shaft to the pedal shaft.
- 205.7 Power driven by friction roller or gear engaging the ground wheel (IPC):**
This subclass is indented under subclass 205.2. Subject matter related to a rider propelled cycle where the power output of the combustion engine is transmitted to a periphery or side of the ground or road wheel through a power transmission arrangement which includes a friction or pressure roller or gear.
- 206.1 Rider propelled cycle with auxiliary electric motor (IPC):**
This subclass is indented under subclass 205.1. Subject matter related to a cycle propelled by a rider further having an electric motor as an additional source of power in order to propel the cycle.
- 206.2 Control or actuating device therefore (IPC):**
This subclass is indented under the subclass 206.1. Subject matter related to means, specially adapted for application on a rider propelled cycle, for controlling the delivery of power to the cycle by sensing or detecting a parameter, e.g., rider pedaling force, torque, speed or braking force and controlling the output torque to the cycle.
- 206.3 Characterized by detector or sensor; arrangement thereof (IPC):**
This subclass is indented under the subclass 206.2. Subject matter related to a sensing device or detector specially adapted for the application on the cycle for sensing or detecting control parameters, e.g., rider pedaling force, torque, speed or braking force, or the arrangement or the specific location of a detector or sensor on a cycle.
- 206.4 Power driven at crank shaft (IPC):**
This subclass is indented under subclass 206.1. Subject matter related to a rider propelled cycle where the power output of the electric motor is transmitted to the pedal crank shaft through a power transmission arrangement at the pedal crank shaft.
- 206.5 Power driven at axle (IPC):**
This subclass is indented under the subclass 206.1. Subject matter related to a rider propelled cycle where the power output of electric motor is transmitted to the wheel axle shaft through a power transmission arrangement at the wheel axle shaft.
- 206.6 With axle driving shaft arranged coaxially with motor output shaft (IPC):**
This subclass is indented under subclass 206.5. Subject matter related to a rider propelled cycle where the power output of the electric motor is transmitted to the wheel axle shaft through a power transmission arrangement at the wheel axle shaft, with the motor output shaft being coaxial with the driven wheel axle shaft.
- 206.7 Power driven at endless flexible drive member, e.g., chain (IPC):**
This subclass is indented under subclass 206.1. Subject matter related to a rider propelled cycle where the power output of the electric motor is transmitted to the flexible member which connects the wheel axle shaft to the pedal shaft.
- 206.8 Power driven by friction roller or gear engaging the ground wheel (IPC):**
This subclass is indented under subclass 206.1. Subject matter related to a rider propelled cycle where the power output of the electric motor is transmitted to the periphery or the side of the ground or road wheel through a power transmission arrangement which includes a friction or pressure roller or gear.

207.1 Accessories; arrangement thereof (IPC):

This subclass is indented under subclass 205.1. Subject matter related to auxiliary equipment or an accessory, e.g., battery or fuel cell feeding the electric motor or device having special feature considered specially adapted for the application on a power assisted cycle, e.g., cooling system specially adapted for the auxiliary electric motor or the location or arrangement of the accessory on the cycle.

207.2 Solar cell; arrangement thereof (IPC):

This subclass is indented under subclass 207.1. Subject matter related to a solar cell on a rider propelled cycle providing a power source to a battery or electric propulsion motor or the arrangement of a solar cell on the cycle.

SEE OR SEARCH CLASS:

136, Batteries: Thermoelectric or Photoelectric, subclass 252 for particular detail to a photoelectric cell.

207.3 Battery; arrangement thereof (IPC):

This subclass is indented under the subclass 207.1. Subject matter related to a battery on a rider propelled cycle providing a power source for the electric propulsion motor or the arrangement of a battery on the cycle.

SEE OR SEARCH CLASS:

320, Electricity: Battery or Capacitor Charging or Discharging, subclass 137 for particular battery cell charging.

429, Chemistry: Electrical Current Producing Apparatus, Product, And Process, subclass 100 for a support for a battery having particular battery detail.