

1	COMBINED DIVERSE SWITCHES (E.G., MANUAL-ACTUATED AND ART TYPE)	27	....Automatic combined with manual
2	ELECTROMAGNETICALLY ACTUATED SWITCHES	28	....Automatic combined with timing or delay means
3	..Utilizing magnetostrictive elements	29	.....Fluid-controlled
4	..Radio frequency switch (e.g., T/ R switch)	30	.....Mechanical motor-controlled (e.g., clock movement)
5	..With coaxial components	31	.....Thermally actuated
6	..Automatic circuit-interrupting devices (e.g., circuit- protective devices)	32	.....With counting or integrating means (e.g., repetitive for given number of reclosures)
7	..Responsive to plural diverse circuit conditions (e.g., voltage and current)	33	.....With means providing for operation after variable intervals or fixed intervals of different duration (e.g., first reset occurs) instantaneously, with other at longer intervals)
8	..Multipole or polyphase	34	.....With lockout
9	..With individual latch or trip means in each leg	35	...Plural trips or combined operating means for single trip (e.g., magnetic with thermal)
10	..With common latch or trip means	36	...With common structural elements
11	..Plural switches	37	...With thermal element comprising magnetic flux source
12	..With shunting contacts	38	...Magnetic
13	..With auxiliary switch means (e.g., for energizing coil)	39	...With time delay (e.g., thermal)
14	..With direct connected contact separating means	40	....Responsive to or proportional to degree of overload condition
15	..With contact biasing, holding or pressure control means	41	...With magnetic flux winding directly in series with main contacts
16	..Magnetic or electrodynamic (e.g., blowon or blowoff)	42	...With adjusting or calibrating means
17	..With switch condition signalling, indicating or alarm means	43	...Thermal
18	..Responsive to predetermined or abnormal current condition (e.g., direction, phase angle or amplitude)	44	...Including ambient temperature compensating means
19	...Zero current	45	...With regulating, adjusting or calibrating means
20	..Voltage responsive (under, over or no voltage)	46	..With contact rebound or other undesirable motion prevention means
21	..With latch or trip means	47	..Utilizing conductive liquid (e.g., mercury)
22	...Plural latch or combined latch operating means for single latch	48	..Comprising three or more electrodes or circuit- completion means
23	....With diverse-type actuating means (e.g., magnetic and thermal)	49	..With liquid-displacement means
24	...Trip-free (i.e., cannot be manually reclosed while overload exists)		
25	....With disabling means (for contact-actuator)		
26	...Reclosing or resetting		

50	...Comprising plural interconnected liquid containers	84	..Magnetic structure (e.g., saturable)
51	...Magnetic	85	...Pole structure
52	...Piston or plunger	86	..With adjusting means
53	....Combined with timing or delay means	87	.Periodic (e.g., vibrators)
54	..Tilttable or rotating liquid chamber	88	..Plural periodic switches or with plural pairs of contacts
55	..Armature structure	89	...Selectively, alternately, or consecutively actuated
56	...Comprising freely movable floating slug or mass	90	..With vibrating or oscillating element damping, frequency adjusting or vibration control
57	..Contact or electrode structure	91	..Actuating magnet structure or material
58	..Mercury or mercury wetted	92	...Plural magnets
59	..Retarded or delayed type	93	..Vibratory reed or other periodic contact actuator
60	..Plural sets of contacts alternately, consecutively or selectively opened or closed	94	...Tuned or resonant at a particular frequency
61	..With pneumatic delay means (e.g., dashpot, etc.)	95	..Armature
62	..With hydraulic delay means	96	...Adjustable
63	..With magnetic or electromagnetically actuated delay means	97	..Contact arrangement or composition
64	..With mechanical delay means	98	...Adjustable contacts
65	..Motor or motor-controlled (e.g., clockwork)	99	.Alternating or fluctuating current type
66	..Electrothermal delay means	100	..Induction or eddy current (e.g., vane or closed conductive loop)
67	..Adjustable or regulatable	101	..Preselected or synchronous frequency responsive
68	..With motor	102	..Polyphase
69	..Reversible or oscillatable	103	..With plural magnetic-actuating structures
70	..Frequency-responsive or synchronous	104	..With chatter, bounce or vibration-prevention means
71	..Contact actuating structure	105	..With damping or adjustment means
72	...Plural contacts	106	.Multiple contact type
73	...Eccentric or cam	107	..Contacts-selectively, sequentially, alternately, or intermittently actuated
74	...Including brake, clutch or detent	108	...Automatic telephone type
75	....Magnetically actuated	109	....Plural or multidirection mechanical selector motions
76	..Comprising energy storage means (e.g., wound spring)	110	....With motion-conversion means
77	..With locking, latch or tripping structure	111	....Selector structure
78	..Polarity-responsive	112	.....Crossbar type
79	..Storage or memory type (e.g., bistable)	113	....With holding, locking or latching means
80	..Armature structure	114	....Rotary selector motion
81	...Freely movable within coil or magnetic field between poles	115	....Reciprocating selector motion (e.g., sliding)
82	...Floating (i.e., no fixed pivot)		
83	..Contact structure of composition		

116	....With reset or selector-restoring means	151	.Vacuum or hermetically sealed type (e.g., reed switch)
117	....With operational mode-varying means	152	..Plural
118	....Motor-driven	153	..With permanent magnet structure
119	...Plural armatures	154	..Armature, contact or contact-actuating means (e.g., sealed reed)
120	....With interlocking or mechanical connection	155	.With predetermined current or voltage value-responsive actuator
121	...Contact-actuation means	156	.With protective means for switch or contacts
122	....With rotary or compound motion device (e.g., rack and pinion)	157	.With operation-inhibiting means (shock resistant)
123	.....Pawl and ratchet	158	..From open position
124	....Armature structure	159	.Plural independently operable switches
125	.....Rotary armature	160	..Interlocking
126	....Reciprocating or linearly sliding	161	...With cooperative-actuating means
127	..Simultaneously actuated	162	..With unitary housing, support or flux path
128	...By pivotal or rockable armature	163	..With unitary or common magnetic flux source
129	....Movable contacts or slidable card bar or comb	164	.Manually or gravity-operated latch with electromagnetic trip
130	....Movable contacts on circular card or comb structure	165	.Contact-actuating means unitary with latch or trip
131	...By reciprocating armature	166	.With latch- or trip-reset means
132	..With adjustable, replaceable or interchangeable structural features	167	.Latching means
133	..Contact structure or arrangement	168	..With positive lock (against movement)
134	...Grid or coordinate	169	..Plural or with auxiliary latch
135	...In pile or stack	170	..Magnetically operated
136	..With plural magnet or coil means	171	..Including spring-biasing or energy-storage means
137	...Of diverse type	172	.Tripping means
138	.Step-by-step type (e.g., closure responsive to predetermined number of control pulses)	173	..Plural diverse (e.g., manual plus electromagnet)
139	..With timing or indexing means (e.g., clock mechanism)	174	..Magnetically operated
140	..Ratchet and pawl-type actuator	175	...Utilizing hammer or other impacting means
141	.With electrothermal-actuating means (e.g., expansible wire)	176	...With adjusting or regulating means
142	..Fusible element	177	.Plural magnets or flux sources
143	..Independently operative	178	..Of diverse electrical characteristics
144	..With armature positioning or adjusting	179	..Of diverse magnetic characteristics (e.g., permanent plus electromagnet)
145	..Bimetallic element	180	..With common core or single armature
146	..Thermomagnetic (e.g., device whose magnetic permeability changes with temperature)	181	...Pivoted armature
147	.Electrodynamically actuated		
148	..Moving coil type		
149	...Plural coils		
150	...With reset or restoring means		

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

182	...Magnetic fields opposing (e.g., differential)	213	..With coil structure
183	..Magnetic fields or torques acting alternately in opposite directions	214	...With electric or magnetic- shielding means
184	..With plural reciprocating armatures aligned or rigidly connected	215	.Magnetostrictive-type device
185	.Contact-actuating means	216	.Superconductive type
186	..Plural or combined (e.g., manual with other)	217	.Temperature-responsive type (e.g., temp. compensation means)
187	..Unitary with armature	218	..With time-delay means
188	..Snap-action	219	.Combined with diverse-type art device
189	..Mechanical linkage	220	.With magneto-mechanical motive device (e.g., electromagnet with armature)
190	...Including cam, roller or eccentric means	221	..Frequency-responsive type
191	...Compound motion device (e.g., toggle)	222	..With relatively movable coil and permanent magnet (e.g., D'Arsonval type) position on the cathode ray tube)
192	..With biasing means (open or closed)	223	..With relatively movable conductors (e.g., dynamometer)
193	..With vibration-, bounce- or chatter-prevention means	224	...Induced current-type movable conductor (e.g., eddy current member)
194	..With pressure-maintaining or adjusting means	225	...Rotating disk
195	..Magnetic or electrodynamic force	226	...Short-circuited winding
196	.Contact composition or structure	227	..Saturable magnetic type
197	..Adjustable or readily detachable	228	..With motion-conversion means (e.g., reciprocating to rotary motion)
198	...Convertible from normally open to normally closed and vice versa	229	..With permanent magnet
199	..Printed circuit	230	...Polarized electromagnet
200	..Pivoted or relatively movable independently of the armature	231	...Varying alternating current amplitude responsive
201	.With arc-suppression or extinguishing means	232	...With plural armatures
202	.With housing or support means	233	....With armature-locking means
203	.With armature structure	234	...With reversible magnetic flux-type movement (e.g., bistable type)
204	.Through conductor type (i.e., conductor field actuates armature)	235	...With vibrating reed or spring bar-type armature
205	PERMANENT MAGNET-ACTUATED SWITCHES	236	..With a shunt path for magnetic flux
206	.Plural switches	237	...Adjustable
207	.Plural magnets	238	..With auxiliary armature- movement control means (e.g., manual)
208	.Thermomagnetic	239	..With time delay armature- movement control means
209	MAGNETS AND ELECTROMAGNETS	240	...Dashpot type
210	.Electron or ion beam deflecting type	241	...Auxiliary control coil
211	..With magnetic shunt	242	...With plural armatures selectively retarded
212	..With adjustable magnetic element (e.g., to change the air gap, or its position on the cathode ray tube)	243	..Alternating current type

244	...Flux phase displacement or varying means	272	...Rotating disk or cylindrical armature
245	...Shading coil	273	...With armature-adjusting means (e.g., means to adjust the relative distance between core and armature)
246	...Plural winding type	274	..With armature-biasing means or bias-adjustment means
247	..With chatter- or noise- preventing means	275	...Hinge joint type armature- mounting means
248	...Spring or cushion-type vibration absorber	276	...Pivot support type armature- mounting means
249	...Special armature construction or mounting means (e.g., to assure positive seating of armature)	277	..With shock absorption, vibration or bounce-preventing means
250	..Coil construction or mounting means	278	..With casing or enclosure
251	..With plunger-type armature	279	..Armature shape, structure or material
252	..With vibrating armature	280	...Balls, filings or granular material
253	..With armature latch means (e.g., means to retain armature in open or closed position)	281	..Core or pole shape, structure or material
254	..With latch-control winding	282	..Coil shape, structure or material
255	..With plunger-type armature	283	.Blade sharpening or conditioning type magnets
256	...Plural coils controlling a single armature	284	.For magnetizing or demagnetizing
257	..With shock-absorbing means (e.g., means to absorb the shock of armature or plunger)	285	.Work or object holding type
258	...With armature stroke adjustment	286	..With workpiece to magnet adapted or fixture (e.g., to bridge flux)
259	...Plural plungers	287	...Angularly adjustable fixture
260	..With sealed enclosure (e.g., dust or moistureproof)	288	..Rotary-type magnetic chuck (permanent or electromagnet type)
261	...Armature structure or material	289	..Electromagnet type (e.g., electromagnetic chuck)
262	...With centering or aligning or guiding means	290	...With circuit control means
263	...With plunger rotation preventing means (e.g., means to prevent undesired rotation of the plunger during movement)	291	...Lifting or attracting type (e.g., for lifting pigiron or pulling hairpins)
264	...Sectional plunger	292	...Hermetically sealed or moisture-proofed
265	..Plural armatures actuated by single electromagnetic coil	293	...Hand-held type
266	..Plural coils or magnets control armature movement	294	...With outer casing or housing
267	..With plural armatures	295	..With magnetic-hold control means (e.g., means to control the hold strength)
268	..Coils or magnets being separately or selectively controllable	296	.Magnet structure or material
269	..With dynamically balanced armature	297	..Core structure
270	..Armature-mounting means	298	...Movable or adjustable cores
271	...With armature bounce or vibration-preventing means	299	..Coil structure or material
		300	...With cooling means
		301	..With electric- or magnetic- shielding means

335 - 6

CLASS 335 ELECTRICITY: MAGNETICALLY OPERATED SWITCHES, MAGNETS,
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- 302 ..Permanent magnets
- 303 ...Enclosed in flexible plastic,
cloth or tape
- 304 ..With flux leakage-reducing
means
- 305 ...Magnetic plug type (e.g.,
crankcase plug)
- 306 ...Plural magnets

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