1	THERMAL RELEASER OR ACTUATOR	33	CLOSURE SHIFTABLE TO PIT OR
2	.Nonfusible		OBSTACLE BRIDGING POSITION
3	.Common fuse releases closures	34	DISTORTABLE; E.G., FLEXIBLE
	for plural openings		STRAND-TYPE BARRICADE
4	.Pull cable with fusible	35	CHECK OR KEY CONTROLLED
	connection	36	CONTINUOUS CLOSURE OPENING IN
5	.Terminates counterweight		INTERSECTING BARRIERS
	condition	37	CONVERTIBLE
6	Overbalanced by released weight	38	REGISTERABLE OPENING IN FACIALLY
	supplementing counterweight		OPPOSED CLOSURE AND BARRIER
7	.Fusible closure latch or	39	.Radially positioned
	retainer	40	CONVEX OR CONCAVE CLOSURE AND
8	Fusible connector disengages		OPENING
	pawl or catch	41	ARCUATE CLOSURE ROTATES ACROSS
9	IMPACT ABSORBING FLEXIBLE		ARCUATE OPENING
	BARRICADE	42	PLURAL WINGS RADIATE FROM COMMON
10	FLOOD ACTUATED		PIVOT; I.E., REVOLVING
11	.Float or vane controlled latch	43	.With speed regulator
	release	44	.Wings fold for through passage
12	Axially pivoted picket pole.	45	Move laterally of opening
13	CLOSURE CONDITION SIGNAL OR	46	.Successive position-type; e.g.,
	INDICATOR		turnstile
14	.Indicator at remote station	47	Drop-arm type
15	JAIL-TYPE CLOSURE WITH REMOTE	48	WITH SECTION FOR HAND SIGNALLING
	CONTROL STATION	49	WITH TRAFFIC DIRECTOR OR
16	.Additional key or combination		CONTROLLER; E.G., ONE-WAY
	control of individual closure	50	WITH PROTECTIVE GRILLE OR SAFETY
17	.Enclosure for remote control		GUARD
18	.Motor operated control	51	.Facing interconnected movable
19	.Rotary gang bar		louvers
20	.Ganged closures with selector	52	.Closure operator extends through
	means		grille
21	RESPONSIVE TO OR DIRECTLY	53	Swinging handle actuator
	ACTUATED BY AMBIENT FLUID	54	.Carried by closure to vacated
22	.Fluid softenable or soluble		opening
	latch release	55	.Adjustable to various size
23	.Water accumulator-type		opening
24	WITH MASTER CONTROL FOR	56	.Moves relative to primary
	INDIVIDUALLY CONTROLLED		closure
	CLOSURES	57	.Removable
25	RADIANT ENERGY CONTROL	58	WITH ANIMAL BLOCKER REPELLER OR
26	SAFETY MEANS RESPONSIVE TO		CHASER
	OBSTRUCTION TO CLOSURE	59	.Electrically charged
27	.Sensing shoe on leading edge	60	.Actuated by closure movement
28	.Closure drive stopping or	61	FACIALLY OPPOSED PRIMARY AND
	reversal		AUXILIARY CLOSURE FOR COMMON
29	TIME CONTROLLED		OPENING
30	.Predetermined delay governs	62	.Auxiliary movable or removably
	start of closure movement		mounted on primary
31	CONDITION RESPONSIVE CONTROL	63	.Auxiliary mounted for movement
32	INITIAL MANUAL DISPLACEMENT	64	Of interconnected movable
	ENERGIZES MOTOR DRIVE; E.G.,		louvers
	TOUCH PLATE INITIATOR		

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# 49 - 2 CLASS 49 MOVABLE OR REMOVABLE CLOSURES

65	Connected for movement with	101	Lever interconnected
	primary	102	Cable interconnected
66	Sliding primary imparts	103	.Sequential movement
	swinging movement	104	.Closures mounted for swinging
67	Pivoted	105	Treadle or treadle bar
68	SEQUENTIAL CLOSURES FOR		interconnector
	PASSAGEWAY	106	Common interconnector actuated
69	MAIN CLOSURE ACTUATES		from opposite approaches
	SUPPLEMENTAL CLOSURE FOR	107	Geared, interconnector or
	TRACKWAY		interconnector operator
70	COMBINED	108	Drives lever pivoted on
71	WITH SIDE PANELS; E.G., AWNING		closure
72	WINDOW POSITION OR MOVEMENT	109	Link or link system
	INTERRELATED WITH DOOR LATCH		interconnected
73.1	CLOSURES INTERCONNECTED FOR	110	With operator or energy stored
	CONCURRENT MOVEMENT		opening means
74.1	.Louver-type closures (e.g.,	111	Allochiral link system from
	slats or panels)		closures to input connection
77.1	Distinct groups of louver-type	112	Input acts at pivot of
	closures		diverging links
79.1	Manipulation of control louver	113	Links sliding carriage
	panel connects or disconnects		mounted
	remaining louver panels	114	Actuating force applied
80.1	Louver panels move sequentially		through one closure to other
	or independently		closure
81.1	Multidirectional louver panel	115	Cable interconnector sheaved on
	movement		closure pivots
82.1	Geared, interconnector or	116	.Opposed similar movement
	operator	117	With actuator on opposite
86.1	Cable, interconnector or		approaches
	operator	118	Motor driven
87.1	Operating system includes a	119	Counterbalance effect derived
	handle		from opposed closure
89.1	Operating system includes	120	Bipartite, center-opening
	biasing means		type; e.g., elevator door
90.1	With position holder for	121	Cable interconnected
	operating system	122	Lever interconnected
91.1	With weather seal feature	123	Cable interconnected
92.1	Specific louver structure	124	EXTENSIBLE BAR SECTIONS
93	.Closures on opposite approaches	125	MOUNTED FOR MOVEMENT TO FACIALLY
	to crossing		STACKED POSITION
94	.Closures on opposite or	126	.From vertical to horizontal
	angularly related barriers		overhead stacked position
95	.Closures in spaced openings	127	.From collinear to stacked
	along barrier		position
96	Levers acting between	128	COLLINEAR CLOSURES, ONE MOVES TO
	interconnector and closures		OFFSET POSITION
97	Rock shaft interconnector	129	.Moved closure has additional
98	.One closure with complete		movement
	independent movement	130	.Horizontal sliding
99	Counterbalancing closures with	131	CLOSURE SURFACE MOVED TO
	adjustable or detachable cable		INOPERATIVE POSITION FLUSH-
	interconnector		WITH-GROUND
100	.Moves at different speeds		

132	.Treadle actuated	163	.One closure movable separately
133	Actuation raises closure to		from or with other closure
	blocking position	164	Closure slide within swingable
134	Treadle on opposite approaches		frame
135	WITH WIND VANE OR SAIL	165	Divided frame with pivoted
136	SINGLE ACTUATOR SELECTIVELY MOVES		section
	INDIVIDUAL CLOSURES	166	Upper closure mounted on
137	UNITARY OR INTERRELATED FLUID		horizontally swinging closure;
	OPERATOR AND CLOSURE CHECK		e.g., sliding window on
138	WITH MEANS TO VARY OPENING SPAN		swinging door
	OR SPEED DURING MOVEMENT	167	Power conduit for upper
139	OPTIONALLY MOVED, MANUALLY, OR BY		closure extends across hinge
	MOTOR	168	Plural independently mounted
140	.With manually actuated operator		movable closures
141	WITH SPECIFIED MEANS TO EFFECT	169	Within encompassing closure
	EMERGENCY RELEASE TO CLOSURE	170	With common edge
142	PLURAL CLOSURES, EACH WITH	171	Viewing, ventilating, or
	INDEPENDENT DIVERSE MOVEMENT		packet passage
143	.One sliding and other swinging	172	.Edgewise separable stile-slide
144	One slides up to close, other		supports closure for vertical
	vents about vertical axis		swinging
145	One slides vertically, other	173	Coil spring bias coaxial of
	swings about horizontal axis		closure pivot
146	VERTICALLY RECIPROCABLE,	174	.Edgewise retractable bearing
	ADDITIONAL SIDEWARD VENTING		acting between closure and
	MOVEMENT FROM CLOSED POSITION		portal frame
147	CLOSURE HANGS ON FLACCID	175	Towards closure
	CONNECTOR	176	.Pivot mounted on sliding member;
148	DISPARATE SUPPORT FOR DISPLACED		e.g., slide-stile
-	CLOSURE	177	Vertical axis pivot
149	MOUNTED FOR OPTIONAL MOVEMENTS	178	With free stile slide-portal
150	.Common counterbalance for		latch
	sliding and swinging movements	179	Displaceable stop strip
151	Cable guide changes direction	180	Free stile slide-closure
	of counterbalancing force		latch, closure carried
152	.One movement multidirectional	181	Vertical position holder
153	Swings on link		actuated by pivoting closure
154	Other movement is sliding on	182	Diagonally opposed stop flanges
	link at balance point of		on stile slide or closure
	closure	183	Key or latch between closure
155	Other movement is sliding		and stile slide
	within portal frame	184	Longitudinal key
156	Slides on pivoted support,	185	Retractable edgewise towards
	other movement is relative		closure
	vertical adjustment	186	Cap-type latch
157	Other movement is vertical	187	Link-brace between closure and
-	sliding		stile slide
158	.Mounted on rod for sliding or	188	.Separable hinge permits sliding
-	swinging		of closure
159	With latch for sliding movement	189	Retractable portion
160	Rod latch	190	Means adjusting closure
161	.Pivoted closure within framework		vertically on vertical support
	of double hung sash		pivot
162	Vertical axis pivot	191	Angularly adjusted about
			horizontal pivot

## 49 - 4 CLASS 49 MOVABLE OR REMOVABLE CLOSURES

192	.On alternative axes	227	Permits movement from housing
193	On opposite ends of closure		to raised closed position
194	.Movable or removable guide	228	Gravitates on tilted track
195	Pivoted	229	Oscillating track
196	Closure swings with guide	230	Sectional or nonlinear
197	UP-AND-OVER TYPE; E.G., MOVES	231	Pendant closure
	FROM VERTICAL TO WITHDRAWN	232	Swings on coplanar pivotal link
	HORIZONTAL OVERHEAD POSITION		arm
198	.Independently movable closure sections	233	Longitudinal-spaced parallel links
199	.With operator	234	Closure actuated vertically to
200	And counterbalance		retard horizontal travel
201	.Upward sliding followed by	235	By track roller-closure
-	distinct swinging		displacement
202	Pivoted guide	236	.One direction imparts
203	.On lever or link		gravitational bias to swinging
204	Pivoted at closure		closure; e.g., rising hinge
205	Multiple links angularly	237	Biased by inclined cam and
205	related		descending slide or roller
206	Actuating spring codirectional	238	Shiftable cam
200	with or acts on links	239	Mating inclined cam and slide
207	SUPERIMPOSED CLOSURES,	200	surfaces
207	INDEPENDENT EDGEWISE MOVEMENT	240	Shiftable pivot
	TO SIDE OF OPENING	241	On crank arm
208	MOUNTED FOR MULTIDIRECTIONAL OR	242	Mounted on eccentric or lever
200	OBLIQUE MOVEMENT	243	Pivot on hinge post cap lever
209	.Initial or terminal movement	244	Pivot on vertically
205	transverse to sliding movement		oscillating lever
010	edgewise of portal	245	Pivot pin shifted in slot
210	Common operator for both	246	.Swings on plural axes; e.g.,
011	movements		pivotal link arms
211	Transverse movement aligns	247	Axes normal to each other
	closure for movement into housing	248	Multiple links angularly related
212	Transversely movable track	249	One link jointed
213	Skewed track	250	With additional slide guiding
214	Separate track section for		closure movement
	rear of closure	251	Friction slide mount; e.g.,
215	Rear of closure moves		biased
	transversly on crank arm	252	Guide on portal frame
216	Moves transversely on link	253	Link at closure balance point
217	Closure pivoted to tilting link-carriage	254	.Sequential translation and swinging
218	Crank arm-type link	255	Operated vertically to permit
219	Paired sets of crank arms		horizontal swinging
220	Operator interconnected with	256	Camming lever
	sets	257	Translation shifts pivot axis
221	Closure carried by track-	258	Translates on pivoted axis
	mounted carriage	259	Supporting frame extends
222	Tiltable carriage		laterally of its pivot
223	Closure hinged to carriage	260	.Pivot axis moves along guide
224	Inclined transverse movement	261	.Swings about seat on portal
225	Terminal cam		frame; e.g., indeterminate
226	.In plane of closure; e.g., oblique		axis

262	VEHICLE ACTUATED ROLLER OR CARRIAGE OR CARRIED COOPERANT	294	Duplicate links release common latch
263	TREADLE OR IMPACT INITIATED	295	Crank link-type interconnector
	OPERATOR	296	Bell crank-type interconnector
264	.Switch in approach to closure	297	Latch train includes closure
265	.Fluid controller in approach to		mounted cable guide
	closure	298	Link system interconnector
266	.With alternative hand operator	299	Allochiral actuators to common
267	.Two-stage operator		latch release
268	.Sequential initiators for latch release and operator	300	.Common input, diverse trains to latch and closure mover
269	.Spaced open and close initiators	301	.One direction pull cable-type
	on opposite sides of closure	302	.Actuator at remote station
270	Plural interconnected paired	303	CLOSURE MOVEMENT ACTUATED
	initiators	000	RETRACTABLE SEALING, GUIDING
271	Releases latch from either side		OR LOCKING STRIP
272	.Releases latch	304	.Strip mounted on sill
273	.Load maintained, self-returning	305	Interengages strip on closure
274	Spring return	306	.Strip movement in plane of
275	CLOSURE MOVED BY STEP-BY-STEP	500	closure
215	OPERATOR	307	Horizontally reciprocating
276	STARTER-TYPE OPERATOR; E.G., SEAL	507	plunger actuator
270	BREAKER	308	Lever interconnects or cams
277		200	strip
211	.Lever actuator engages strap- fastener or longitudinally	309	Oblique movement
	shiftable bar	310	-
278	.Handle-camming lever	310	.Resilient means swings strip to retracted position
278	5	311	-
219	OPERATOR INTERRELATED WITH CLOSURE LATCH RELEASE	JII	Offset or lever actuator, axis
280		312	parallel to strip axis
280 281	.Motor driven	312	Spring coaxial or strip axis
201	.Common actuator, different movements to unlatch and move		Deflector in path of strip
	closure	314	Jamb mounted
282		315	.Weight or gravity biased to
	Actuator or opposite approaches	210	retracted position
283	Latch for diverse positions of	316	OPERATOR FOR RETRACTABLE SEALING,
204	closure, separate trains	210	GUIDING OR LOCKING STRIP
284	Latch train and closure	317	.Opposed strips actuated
	operator train from diverse	210	concurrently
285	points on actuator Lever interconnector, separate	318	With interconnected strip on adjacent side
	trains to latch and closure	319	.Interrelated with closure latch
000	mover	320	.Rotating shaft normal to plane
286	Force applied at closure pivot		or strip movement
	releases latch	321	.Includes lever
287	Geared	322	WITH SAFETY BRAKE OR CATCH
288	Sheaved	323	CLOSURE GUIDED FROM HOUSING BY
289	Closure or latch interposed in		RETRACTABLE SUPPORT
	endless or looped cable	324	WITH OPERATOR FOR MOVABLY MOUNTED
290	Lost motion branched cable		CLOSURE
291	Lost motion pin or lever and slot	325	.Reversibly flexible and rigid rod
292	Lost motion cam drive	326	.Moves closure in either
293	Closure moving force applied		direction from closed position
	through latch releaser	327	.Actuated from opposite
			approaches

## 49 - 6 CLASS 49 MOVABLE OR REMOVABLE CLOSURES

328 329	By vertically oscillating lever Link system connects lever to closure	365	CLOSURE MOUNT OR STOP ON INDEPENDENT MOVABLE OR REMOVABLE CENTER POST
330	Actuating force applied	366	BIPARTITE, CENTER OPENING
550	between link pivots; e.g.,	367	.Overlapping meeting edges
	over center toggle-type	368	With disparate seal
331	Pull cable, lever	369	Z-bar-type edge
331	interconnector	370	.Sliding closures
332	Cable with pulley or drum	371	SWINGING CLOSURES CLOSING SINGLE
333	.Coaxial of closure pivot	571	OPENING
334	Motor driven	372	STORED IN HOUSING
335	Coaxial gear	373	.With cover or lid for housing
336	Rack drive	575	opening
337	Worm drive	374	.Reciprocates vertically in and
338	Worm drive Link drives coaxial connector	574	out of housing
339		375	Vertical extension on closure
222	.Operating lever or link and closure swing about parallel		bottom edge guided with housing
340	axes Motor-driven lever	376	0
340 341	Gear-driven lever	570	Inclined guide on side edge of portal opening
		377	With cushioning means adjacent
342	Toothed lever end engages gear	511	housing opening
343	Lever carries screw gearing	378	One-piece housing facing and
244	component	570	portal frame contains guide
344	Reciprocating rod drives lever	379	LATCH RELEASE OF MOVEMENT-STORED
345	Multiple links	515	ENERGY
346	Lever end slide engages guide on closure	380	MOVABLE CLOSURE AND ITS SUPPORT
347	.One direction pull cable		TRANSFERABLE AS UNIT
348	.Drive within closure housing	381	WITH MEANS MOUNTING CLOSURE FOR
349	Motor driven		SWINGING
350	Gear-driven lever moves within	382	.Hinging position reversal means
	limits of housing	383	.Hinge edge, finger guard, lock
351	Multiple levers		or disparate seal
352	Cable drive	384	Cylinder and sleeve-type
353	Exposed handle drives concealed lever	385	.Transverse pivot; e.g., single pivoted corner
354	.Through wall type	386	.With biasing means
355	With weather seal or flap for	387	Distinct weight
	drive element	388	.Pivots on opposed portal members
356	.Push-rod actuator	389	Closure removable in inclined
357	.Remote actuating or initiating		position
	station	390	Closure portions on opposite
358	.Closure-mounted drive		sides of portal in open
359	Lever-actuated drive		position
360	.Operator drives closure along guide	391	<pre>Inclined opposed member; e.g., vent window-type</pre>
361	Common input for drives adjacent opposed guides	392	Diagonally opposed stops or seals
362	Rack or screw parallel to closure quide	393	On pivot carrying portal members
363	Lever	394	.With latch or lock
364	BUMP ACTUATED LATCH RELEASE FOR	395	Plural; e.g., gang
	BIASED CLOSURE	396	.Compensator for front end weight; e.g., sag preventer

397	.Unitary structural member and hinge element	429	Cooperates with counterbalance hardware
398	.Concealed hinge	430	Counterbalance within jamb-
399	.Hinge leaf mounted on closure		guide gap
	edge surface	431	Interengaging sections on
400	.Closure nests within portal		portal and closure
	frame	432	On parting strip and adjacent
401	Marginal closure flange		closures
	overlaps portal frame	433	Plural interdigitants
402	.Closure overlies portal frame	434	Single guide or slide for
403	.Louver end caps; e.g., mounting		facially adjacent closures
	clips	435	Parting strip with integral,
404	WITH MEANS MOUNTING CLOSURE FOR		opposite wings
	RECIPROCATION	436	Bearing includes transverse
405	.By link mount		restrainer
406	.With plug, flap, or bridger for	437	Closure mounted
	meeting rail	438	On closure edge
407	.Guide mounted stop spaces	439	Cap-type
	closure from sill	440	Channel guide
408	.Drain or vent in guide or sash	441	Converging sides or ends
409	.Pendant from horizontal guide	442	Guide engages slot in closure
410	With guide for lower edge of	443	On closure face
	closure	444	Portion engages edge surface
411	Threshold or sill guide	445	.With counterbalance
412	Overlapping angles shield	446	Connected to slide mount of
	track-closure crevice	-	removable closure
413	.Horizontally sliding sashless-	447	Guide-concealed weight pocket
	type	448	Displaceable guide section
414	.With distinct biasing means for		permits access to weight
	slide or guide		pocket
415	Acting transversely of closure	449	.With latch or lock
	face	450	Plural open positions
416	Biased side guide or parting	451	Friction holder
	strip	452	.With means to adjust guide
417	With means to adjust or retract		position
	biaser	453	.Slide or guide feature for
418	Adjusting screw coaxial of		closure removal
	coil spring	454	Detachable or displaceable
419	Nonmetallic biaser		stile or slide strip
420	Ball or roller bearing	455	Guide mounted for repeated
421	Closure carried		movement
422	Biaser permits self-adjustment	456	Removable guide
	of single guide for plural	457	Interfitted retainers, guide,
	closures		and frame
423	Slide or guide with transverse	458	.Interengaging meeting rails
	restrainer	459	.Guide includes deformed or cast
424	.Baffle plate guided in chamber		component
	slot	460	HANDLE OR PROTECTOR
425	.Revolving guide component; e.g.,	461	.Receptor for pole handle
	roller or gear	462	.Edge protector
426	Offset from plane of portal;	463	REMOVABLE CLOSURE
	e.g., freight car door	464	.With separable closure sections
427	On support edgewise of passage	465	.Releasable means on closure
428	.Diverse or springy material		
	guide or slide		

## 49 - 8 CLASS 49 MOVABLE OR REMOVABLE CLOSURES

466	.Displaceable sealing or binding strip
467	THRESHOLD
468	Adjustable
469	.With diverse seal
470	Closure carried
471	.With drain or vent
472	COMBINED SEAL, STOP AND
1/2	STIFFENER; I.E., CLEAT
473	.With additional seal
474	.Eddy current or airspace trap
475.1	CLOSURE SEAL; E.G., STRIKER
1,3.1	GASKET OR WEATHERSTRIP
476.1	.With fluid drain, or closure
1,011	face mounted deflector; e.g.,
	sill seal
477.1	.Inflatable or fluid pressure
	responsive
478.1	.Magnetic
479.1	.With corner or corner forming
	portions; i.e., corner seal
480.1	.With distinct biasing means
482.1	.With feature for segmenting,
	replacing, adjusting, or severing
483.1	.Having complementary engaging
	portions on closure or closure
	and portal frame
484.1	.Plural distinct seals
489.1	.Anchored in channel or slot in
	closure or portal frame
490.1	.U-shaped member or portion
	mounts seal
492.1	.Held by snap fastener
493.1	.With holder; e.g., securing
	sheath
495.1	.Plural sealing contact points
496.1	.Spaced or superposed flange
	cantilevered from edge of base
	portion; e.g., leaf-spring
400 1	type
498.1	.Tubular or tubular portion
499.1	.Bulged sealing surface
500.1	intermediate securing ends
500.1	.Windlace-type PANEL WITH CLOSURE FEATURE
501	
J02	.With means to accommodate window accessory; e.g., automobile-
	type door
503	.Modified to accommodate lock or
	latch
504	FRAME WITH CLOSURE FEATURE
505	.Adjustable frame
506	PROCESSES
507	MISCELLANEOUS

### FOREIGN ART COLLECTIONS

FOR 000 CLASS-RELATED FOREIGN DOCUMENTS

### DIGESTS

DIG	1	THERMAL	BREAKS	FOR	FRAMES
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DIG 2 PLASTIC FRAME COMPONENTS