

CPC COOPERATIVE PATENT CLASSIFICATION

E FIXED CONSTRUCTIONS

BUILDING

E05 LOCKS; KEYS; WINDOW OR DOOR FITTINGS; SAFES

(NOTE omitted)

E05Y INDEXING SCHEME ASSOCIATED WITH SUBCLASSES [E05D](#) AND [E05F](#), RELATING TO CONSTRUCTION ELEMENTS, ELECTRIC CONTROL, POWER SUPPLY, POWER SIGNAL OR TRANSMISSION, USER INTERFACES, MOUNTING OR COUPLING, DETAILS, ACCESSORIES, AUXILIARY OPERATIONS NOT OTHERWISE PROVIDED FOR, APPLICATION THEREOF

2201/00	Constructional elements; Accessories therefor	2201/416	. . . for counterbalancing
2201/10	. Covers; Housings	2201/418	. . . for holding
2201/11	. . Covers	2201/42	. . . for locking
2201/20	. Brakes; Disengaging means; Holders; Stops; Valves; Accessories therefor	2201/422	. . . for opening
2201/21	. . Brakes	2201/424	. . . . for the final opening movement
2201/212	. . . Buffers	2201/426	. . . . for the initial opening movement
2201/214	. . Disengaging means	2201/428	. . . for suspending or supporting
2201/216	. . . Clutches	2201/43	. . Motors
2201/218	. . Holders	2201/434	. . . Electromotors; Details thereof
2201/22	. . . Locks	2201/438	. . . . Rotors
2201/221	. . . . Touch latches	2201/442	. . . . Stators
2201/222	. . . Stabilizers, e.g. anti-rattle devices	2201/446	. . . . Windings
2201/224	. . Stops	2201/448	. . . Fluid motors; Details thereof
2201/23	. . Actuation thereof	2201/454	. . . . Cylinders
2201/232	. . . by automatically acting means	2201/456	. . . . Pistons
2201/234	. . . . direction dependent	2201/458	. . . . Valves
2201/236	. . . . using force or torque	2201/46	. . Magnets
2201/238	. . . . . reaction force or torque	2201/462	. . . Electromagnets
2201/24	. . . . using lost motion	2201/47	. . Springs
2201/242	. . . . using threshold speed	2201/474	. . . Compression springs
2201/244	. . . by manual operation	2201/476	. . . Disk springs
2201/246	. . . by auxiliary motors, magnets, springs or weights	2201/478	. . . Gas springs
2201/248	. . . Transmissions	2201/48	. . . Leaf or leg springs
2201/25	. . Mechanical means for force or torque adjustment therefor	2201/482	. . . Ribbon springs
2201/252	. . Type of friction	2201/484	. . . Torsion springs
2201/254	. . . Fluid or viscous friction	2201/486	. . . . Torsion rods
2201/256	. . . . with pistons or vanes	2201/488	. . . Traction springs
2201/258	. . . Magnetic or electromagnetic friction	2201/49	. . . Wrap springs
2201/26	. . . Mechanical friction	2201/496	. . . Double acting springs
2201/262	. . Type of motion, e.g. braking	2201/499	. . Spring tensioners; Tension sensors
2201/264	. . . linear	2201/50	. . Weights
2201/266	. . . rotary	2201/502	. . . Wing weights
2201/40	. Motors; Magnets; Springs; Weights; Accessories therefor	2201/60	. Suspension or transmission members; Accessories therefor
2201/404	. . Function thereof	2201/604	. . Transmission members
2201/406	. . . for a secondary movement of the wing	2201/606	. . Accessories therefor
2201/408	. . . for braking	2201/608	. . . Back-drive
2201/41	. . . for closing	2201/61	. . . Cooperation between suspension or transmission members
2201/412	. . . . for the final closing movement	2201/612	. . . . between carriers and rails
2201/414	. . . . for the initial closing movement	2201/614	. . . . . Anti-derailing means
		2201/616	. . . . . to ensure mutual engagement, e.g. counter- rollers

2201/618	. . .	Transmission ratio variation	2400/3013	. . .	during manual wing operation
2201/62	. . .	Synchronisation of suspension or transmission members	2400/3014	. . . .	Back driving the transmission or motor
2201/622	. .	Suspension or transmission members elements	2400/3015	. . . .	Power assistance
2201/624	. . .	Arms	2400/3016	. . . .	Overriding existing wing movement
2201/626	. . . .	Levers	2400/3017	. . . .	Safety means therefor
2201/628	. . .	Bearings	2400/302	. . .	during electric motor braking
2201/63	. . . .	Races	2400/304	. . .	Voltage control
2201/632	. . . .	Sleeves	2400/306	. . .	Temperature control
2201/636	. . . .	Universal or ball joints	2400/31	. . .	Force or torque control
2201/638	. . .	Cams; Ramps	2400/315	. . . .	Curve setting or adjusting
2201/64	. . .	Carriers	2400/32	. .	Position control, detection or monitoring
2201/642	. . . .	Trackless carriers	2400/322	. . .	by using absolute position sensors
2201/644	. . .	Flexible elongated pulling elements	2400/324	. . . .	Switches
2201/646	. . . .	continuous, e.g. closed loops	2400/326	. . . .	of the angular type
2201/648	. . . .	having teeth	2400/328	. . . .	of the linear type
2201/652	. . . .	Belts	2400/33	. . .	by using load sensors
2201/654	. . . .	Cables	2400/332	. . . .	Switches
2201/656	. . . .	Chains	2400/334	. . .	by using pulse generators
2201/658	. . .	Members cooperating with flexible elongated pulling elements	2400/336	. . . .	of the angular type
2201/66	. . . .	Deflectors; Guides	2400/337	. . . . .	Encoder wheels
2201/662	. . . . .	Cable sheaths	2400/338	. . . . .	of the linear type
2201/664	. . . . .	Drums	2400/34	. . . . .	Pulse count limit setting
2201/666	. . . . .	Magazines	2400/342	. . . . .	Pulse count value setting or correcting
2201/668	. . . . .	Pulleys; Wheels	2400/35	. . .	related to specific positions
2201/67	. . . . .	in tackles	2400/354	. . . . .	End positions
2201/672	. . . . .	Tensioners, tension sensors	2400/356	. . . . .	Intermediate positions
2201/674	. . .	Friction wheels	2400/358	. . . . .	in the proximity of end positions
2201/676	. . .	Transmission of human force	2400/36	. .	Speed control, detection or monitoring
2201/678	. . . . .	Hand chains	2400/37	. . .	by using acceleration sensors
2201/68	. . . . .	Handles, cranks	2400/40	. .	Control units therefor
2201/682	. . .	Pins	2400/41	. . .	for multiple motors
2201/684	. . .	Rails; Tracks	2400/415	. . . . .	for multiple wings
2201/686	. . .	Rods, links	2400/42	. . . . .	for multiple openings
2201/688	. . .	Rollers	2400/44	. .	Sensors not directly associated with the wing movement
2201/69	. . . . .	having inclined axes	2400/445	. . .	Switches
2201/692	. . . . .	having vertical axes	2400/446	. . .	Vehicle state sensors, e.g. parked or inclination
2201/694	. . .	Scissor mechanisms	2400/447	. . .	Moisture or submergence sensors
2201/696	. . .	Screw mechanisms	2400/449	. . .	Pollutant or particulate sensors
2201/70	. . . . .	Nuts	2400/45	. .	Control modes
2201/702	. . . . .	Spindles; Worms	2400/452	. . .	for saving energy, e.g. sleep or wake-up
2201/704	. . . . .	Worm wheels	2400/454	. . .	for accommodating handicapped users
2201/706	. . .	Shafts	2400/456	. . .	for programming, e.g. learning or AI [artificial intelligence]
2201/708	. . .	Sliders	2400/458	. . .	for generating service signals
2201/71	. . .	Toothed gearing	2400/50	. .	Fault detection
2201/712	. . . . .	with incomplete toothing	2400/502	. . .	of components
2201/716	. . . . .	Pinions	2400/504	. . .	of control, of software
2201/718	. . . . .	Bevelled pinions	2400/506	. . .	of counterbalance
2201/72	. . . . .	Planetary gearing	2400/508	. . .	of detection
2201/722	. . . . .	Racks	2400/51	. . .	of position, of back drive
2201/724	. . . . .	Flexible	2400/512	. . .	of electric power
2201/726	. . . . .	Ring gears; Internal gears	2400/514	. . .	of speed
2400/00		Electronic control; Electrical power; Power supply; Power or signal transmission; User interfaces	2400/52	. .	Safety arrangements associated with the wing motor
2400/10	. .	Electronic control	2400/522	. . .	Back-drive prevention
2400/20	. .	of brakes, disengaging means, holders or stops	2400/525	. . .	Car-jacking prevention
2400/202	. . .	Force or torque control	2400/528	. . .	Overheating or overcooling prevention
2400/21	. . . .	by controlling the viscosity	2400/53	. . .	Wing impact prevention or reduction
2400/30	. .	of motors	2400/532	. . . .	Emergency braking or blocking
			2400/54	. . . .	Obstruction or resistance detection

- 2400/55 by using load sensors
- 2400/552 Switches
- 2400/554 sensing motor load
- 2400/56 by using speed sensors
- 2400/562 Switches
- 2400/564 sensing motor speed
- 2400/57 Disabling thereof
- 2400/58 Sensitivity setting or adjustment
- 2400/60 Electrical power characteristics, e.g. pulsed or alternating powered and powerless modes
- 2400/61 Power supply
- 2400/612 Batteries
- 2400/614 charging thereof
- 2400/616 Generators
- 2400/628 Solar cells
- 2400/65 Power or signal transmission
- 2400/652 by bus
- 2400/654 by electrical cables
- 2400/656 by travelling contacts
- 2400/658 with current rails
- 2400/66 Wireless transmission
- 2400/662 by optical waves
- 2400/664 by radio waves
- 2400/80 User interfaces
- 2400/81 Feedback to user, e.g. tactile
- 2400/812 Acoustic
- 2400/814 Sound emitters, e.g. loudspeakers
- 2400/816 Voice
- 2400/818 Visual
- 2400/82 Images; Symbols
- 2400/822 Light emitters, e.g. light emitting diodes [LED]
- 2400/83 Travel information display
- 2400/85 User input means
- 2400/8505 User authentication, e.g. biometric
- 2400/851 Voice
- 2400/8515 Smart phones; Tablets
- 2400/852 Sensors
- 2400/854 Switches
- 2400/856 Actuation thereof
- 2400/858 by body parts, e.g. by feet
- 2400/86 by hand
- 2600/00** **Mounting or coupling arrangements for elements provided for in this subclass**
- 2600/10 Adjustable
- 2600/11 by automatically acting means
- 2600/12 by manual operation
- 2600/13 by motors, magnets, springs or weights
- 2600/14 with position retaining means
- 2600/20 with specific transmission movement
- 2600/30 Adjustment motion
- 2600/31 Linear motion
- 2600/312 Horizontal motion
- 2600/314 Vertical motion
- 2600/32 Rotary motion
- 2600/322 around a horizontal axis
- 2600/324 around a vertical axis
- 2600/33 Stepwise motion
- 2600/40 Mounting location; Visibility of the elements
- 2600/41 Concealed
- 2600/412 in the rabbet
- 2600/45 in or on the fixed frame
- 2600/452 in or on the floor or wall
- 2600/454 in or on the motor
- 2600/456 in or on a suspension member
- 2600/458 in or on a transmission member
- 2600/46 in or on the wing
- 2600/50 Mounting methods; Positioning
- 2600/502 Clamping
- 2600/504 Expansion
- 2600/506 Plastic deformation
- 2600/508 Riveting
- 2600/51 Screwing or bolting
- 2600/52 Toolless
- 2600/522 Axial stacking
- 2600/524 Friction
- 2600/526 Gluing or cementing
- 2600/528 Hooking, e.g. using bayonets; Locking
- 2600/53 Snapping
- 2600/54 Welding
- 2600/56 Positioning, e.g. re-positioning, or pre-mounting
- 2600/58 by using indicators or markings, e.g. scales
- 2600/60 Mounting or coupling members; Accessories therefor
- 2600/61 Threaded members
- 2600/62 Bolts
- 2600/622 Dowels; Pins
- 2600/624 Nuts
- 2600/626 Plates or brackets
- 2600/628 Profiles; Strips
- 2600/63 Retainers
- 2600/632 Screws
- 2600/634 Spacers
- 2600/636 Washers
- 2800/00** **Details, accessories and auxiliary operations not otherwise provided for**
- 2800/10 Additional functions
- 2800/102 Additional wing movements
- 2800/104 Heating
- 2800/106 Lighting
- 2800/108 Lubrication
- 2800/12 Sealing
- 2800/122 Telescopic action
- 2800/13 Sequential actions
- 2800/15 Applicability
- 2800/16 Applicable on combinations of fixed and movable wings
- 2800/162 the wings being coplanar when the movable wing is in the closed position
- 2800/17 Universally applicable
- 2800/172 on different wing or frame locations
- 2800/174 on the left or right side
- 2800/176 on different wing types, weights or sizes
- 2800/178 on wings having different thicknesses
- 2800/20 Combinations of elements
- 2800/205 forming a unit
- 2800/21 of identical elements, e.g. of identical compression springs
- 2800/22 of not identical elements of the same category, e.g. combinations of not identical springs
- 2800/23 of elements of different categories
- 2800/232 of motors and transmissions

- 2800/234 . . . of motors and brakes; of motors and locks
- 2800/236 . . . of motors and springs
- 2800/238 . . . of springs and transmissions
- 2800/24 . . . of springs and brakes
- 2800/242 . . arranged in parallel relationship
- 2800/244 . . arranged in serial relationship
- 2800/246 . . with at least one element being redundant
- 2800/25 . Emergency conditions
- 2800/252 . . the elements functioning only in case of emergency
- 2800/254 . . the elements not functioning in case of emergency
- 2800/26 . Form or shape
- 2800/262 . . column shaped
- 2800/266 . . curved
- 2800/268 . . cylindrical; disc-shaped; circular
- 2800/269 . . ball shaped, e.g. spherical
- 2800/27 . . Profiles; Strips
- 2800/272 . . . hollow
- 2800/276 U-shaped
- 2800/278 C-shaped
- 2800/28 . . tubular, annular
- 2800/29 . . forming a unitary piece with another element
- 2800/292 . . having apertures
- 2800/296 . . . Slots
- 2800/298 . . having indentations
- 2800/30 . . inclined, angled
- 2800/31 . . eccentric
- 2800/33 . . having protrusions
- 2800/34 . Form stability
- 2800/342 . . Deformable
- 2800/344 . . . elastically
- 2800/35 . . . of specific parts
- 2800/352 . Frames; Posts
- 2800/353 . . fixed
- 2800/356 . . . horizontal frame members
- 2800/358 . . . vertical frame members or posts
- 2800/36 . . Movable frames
- 2800/362 . . . horizontal frame members
- 2800/364 . . . vertical frame members
- 2800/37 . Length, width or depth adjustment
- 2800/372 . . Telescopically
- 2800/40 . Physical or chemical protection
- 2800/402 . . against corrosion
- 2800/404 . . against component faults or failure
- 2800/406 . . against deformation
- 2800/407 . . . plastic deformation
- 2800/409 . . against faulty mounting or coupling
- 2800/41 . . against finger injury
- 2800/412 . . against friction
- 2800/414 . . against high or low temperatures
- 2800/416 . . . against fire
- 2800/42 . . against smoke or gas
- 2800/422 . . against vibration or noise
- 2800/424 . . against unintended use, e.g. protection against vandalism or sabotage
- 2800/426 . . . against unauthorised use, e.g. keys
- 2800/428 . . against water or ice
- 2800/43 . . against wear
- 2800/45 . Manufacturing
- 2800/455 . . Extrusion
- 2800/46 . . Injection moulding
- 2800/465 . . Pressing
- 2800/67 . Materials; Strength alteration thereof
- 2800/672 . . Glass
- 2800/674 . . Metal
- 2800/676 . . Plastics
- 2800/678 . . . Elastomers
- 2800/68 . . Combinations of materials creating distinct article parts
- 2800/682 . . Strength alteration by reinforcing, e.g. by applying ribs
- 2800/683 . . . by fibre reinforcement
- 2800/684 . . Strength alteration by weakening, e.g. by applying grooves
- 2800/69 . Permanence of use
- 2800/692 . . Temporary use, e.g. removable tools
- 2800/694 . . during manufacturing
- 2800/696 . . during transport or storage
- 2800/70 . Retrofitting of elements
- 2800/71 . Secondary wings, e.g. pass doors
- 2800/72 . Sets of mutually exchangeable elements, e.g. modular
- 2800/73 . Multiple functions
- 2800/74 . Specific positions
- 2800/742 . . abnormal
- 2800/744 . . . cleaning or service
- 2800/746 . . . emergency or extended
- 2800/748 . . end
- 2800/75 . . intermediate
- 2900/00 Application of doors, windows, wings or fittings thereof**
- 2900/10 . for buildings or parts thereof
- 2900/102 . . for cold-rooms
- 2900/104 . . for elevators
- 2900/106 . . for garages
- 2900/108 . . for hangars
- 2900/11 . . for industrial buildings
- 2900/112 . . for restrooms
- 2900/114 . . for showers
- 2900/116 . . for sluices
- 2900/13 . . Type of wing
- 2900/131 . . . Access panels
- 2900/132 . . . Doors
- 2900/134 Fire doors
- 2900/136 Screens; Insect doors
- 2900/14 Doors disappearing in pockets of a wall, e.g. so-called pocket doors
- 2900/142 . . . Partition walls
- 2900/144 . . . Security grills
- 2900/146 . . . Shutters
- 2900/148 . . . Windows
- 2900/15 Balcony glazing
- 2900/152 Roof windows
- 2900/154 Skylights
- 2900/20 . for furniture, e.g. cabinets
- 2900/202 . . for display cabinets, e.g. for refrigerated cabinets
- 2900/204 . . for display counters, e.g. for refrigerated counters
- 2900/208 . . for metal cabinets
- 2900/21 . . for safety cabinets
- 2900/212 . . Doors disappearing in pockets in the furniture body
- 2900/30 . for domestic appliances

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- 2900/302 . . for built-in appliances
- 2900/304 . . for dishwashers
- 2900/306 . . for freezers
- 2900/308 . . for ovens
- 2900/31 . . for refrigerators
- 2900/312 . . for washing machines or laundry dryers
- 2900/40 . for gates
- 2900/402 . . for cantilever gates
- 2900/404 . . for railway platform gates
- 2900/50 . for vehicles
- 2900/502 . . for aircraft or spacecraft
- 2900/504 . . for armoured vehicles
- 2900/506 . . for buses
- 2900/508 . . for convertibles
- 2900/51 . . for railway cars or mass transit vehicles
- 2900/512 . . for recreational vehicles
- 2900/514 . . for ships
- 2900/516 . . for trucks or trailers
- 2900/518 . . for working vehicles
- 2900/53 . . Type of wing
- 2900/531 . . . Doors
- 2900/532 Back doors or end doors
- 2900/534 . . . Fuel lids, charger lids
- 2900/535 . . . Hatch covers, e.g. for recreational vehicles or armoured vehicles
- 2900/536 . . . Hoods
- 2900/538 . . . Interior lids
- 2900/54 . . . Luggage compartment lids for buses
- 2900/542 . . . Roof panels
- 2900/544 . . . Tailboards, tailgates or sideboards opening downwards
- 2900/546 . . . Tailboards, tailgates or sideboards opening upwards
- 2900/548 . . . Trunk lids
- 2900/55 . . . Windows
- 2999/00** **Subject-matter not otherwise provided for in this subclass**