

CPC**COOPERATIVE PATENT CLASSIFICATION****E05Y****INDEXING SCHEME RELATING TO HINGES OR OTHER SUSPENSION DEVICES FOR DOORS, WINDOWS OR WINGS AND DEVICES FOR MOVING WINGS INTO OPEN OR CLOSED POSITION, CHECKS FOR WINGS AND WING FITTINGS NOT OTHERWISE PROVIDED FOR, CONCERNED WITH THE FUNCTIONING OF THE WING****E05Y 2201/00****Constructional elements; Accessories therefore**

E05Y 2201/10

. Covers; Housings

E05Y 2201/11

. . Covers

E05Y 2201/20

. Brakes; Disengaging means e.g. clutches; Holders e.g. locks; Stops; Accessories therefore

E05Y 2201/21

. . Brakes

E05Y 2201/212

. . . Buffers

E05Y 2201/214

. . Disengaging means

E05Y 2201/216

. . . Clutches

E05Y 2201/218

. . Holders

E05Y 2201/22

. . . Locks

E05Y 2201/222

. . . Stabilizers, e.g. anti-rattle devices

E05Y 2201/224

. . Stops

E05Y 2201/23

. . Actuation thereof

E05Y 2201/232

. . . by automatically acting means

E05Y 2201/234

. . . . direction dependent

E05Y 2201/236

. . . . using force or torque

E05Y 2201/238

. reaction force or torque

E05Y 2201/24

. . . . using lost motion

E05Y 2201/242

. . . . using threshold speed

E05Y 2201/244

. . . by manual operation

E05Y 2201/246

. . . by motors, magnets, springs or weights

E05Y 2201/248

. . . characterised by the transmission

E05Y 2201/25

. . Force or torque adjustment therefore ([E05Y 2400/21](#) takes precedence)

E05Y 2201/252

. . characterised by type of friction

E05Y 2201/254

. . . Fluid or viscous friction

E05Y 2201/256

. . . . with pistons or vanes

E05Y 2201/258

. . . Magnetic or electromagnetic friction

E05Y 2201/26

. . . Mechanical friction

E05Y 2201/262

. . characterised by type of motion

E05Y 2201/264

. . . linear

E05Y 2201/266

. . . rotary

E05Y 2201/40	. Motors; Magnets; Springs; Weights; Accessories therefore
E05Y 2201/404	. . characterised by the function
E05Y 2201/406	. . . for additional wing movements only
E05Y 2201/408	. . . for braking
E05Y 2201/41	. . . for closing
E05Y 2201/412	. . . . for the final closing movement
E05Y 2201/414	. . . . for the initial closing movement
E05Y 2201/416	. . . for counterbalancing
E05Y 2201/418	. . . for holding
E05Y 2201/42	. . . for locking
E05Y 2201/422	. . . for opening
E05Y 2201/424	. . . . for the final opening movement
E05Y 2201/426	. . . . for the initial opening movement
E05Y 2201/428	. . . for suspending or supporting
E05Y 2201/43	. . Motors
E05Y 2201/434	. . . Electromotors; Details thereof
E05Y 2201/438	. . . . Rotors
E05Y 2201/442	. . . . Stators
E05Y 2201/446	. . . . Windings
E05Y 2201/448	. . . Fluid motors; Details thereof
E05Y 2201/454	. . . . Cylinders
E05Y 2201/456	. . . . Pistons
E05Y 2201/458	. . . . Valves
E05Y 2201/46	. . Magnets
E05Y 2201/462	. . . Electromagnets
E05Y 2201/47	. . Springs; Spring tensioners
E05Y 2201/474	. . . Compression springs
E05Y 2201/476	. . . Disk springs
E05Y 2201/478	. . . Gas springs
E05Y 2201/48	. . . Leaf springs
E05Y 2201/482	. . . Ribbon springs
E05Y 2201/484	. . . Torsion springs
E05Y 2201/486	. . . . Torsion rods
E05Y 2201/488	. . . Traction springs
E05Y 2201/49	. . . Wrap springs
E05Y 2201/492	. . . Spring tensioners, tension sensors
E05Y 2201/496	. . . Double acting springs
E05Y 2201/50	. . Weights
E05Y 2201/502	. . . Wing weights
E05Y 2201/60	. Suspension or transmission members; Accessories therefore

E05Y 2201/602	. .	Suspension members
E05Y 2201/604	. .	Transmission members
E05Y 2201/606	. .	Accessories therefore
E05Y 2201/608	. . .	Back-drive
E05Y 2201/61	. . .	Cooperation between suspension or transmission members
E05Y 2201/612	. . . .	between carriers and rails
E05Y 2201/614	. . . . .	Anti-derailing means
E05Y 2201/616	. . . .	to ensure mutual engagement e.g. counter-rollers
E05Y 2201/618	. . .	Transmission ratio variation
E05Y 2201/62	. . .	Synchronisation of transmission members
E05Y 2201/622	. .	Suspension or transmission members elements
E05Y 2201/624	. . .	Arms
E05Y 2201/626	. . . .	Levers
E05Y 2201/628	. . .	Bearings
E05Y 2201/63	. . . .	Races
E05Y 2201/632	. . . .	Sleeves
E05Y 2201/636	. . . .	Universal or ball joints
E05Y 2201/638	. . .	Cams; Ramps
E05Y 2201/64	. . .	Carriers
E05Y 2201/642	. . . .	Trackless carriers
E05Y 2201/644	. . .	Flexible elongated pulling elements; Members cooperating with flexible elongated pulling elements
E05Y 2201/646	. . . .	continuous, e.g. closed loops
E05Y 2201/648	. . . .	having teeth (toothed gearing E05Y 2201/71)
E05Y 2201/652	. . . .	Belts
E05Y 2201/654	. . . .	Cables
E05Y 2201/656	. . . .	Chains
E05Y 2201/658	. . . .	Members cooperating with flexible elongated pulling elements
E05Y 2201/66	. . . . .	Deflectors; Guides
E05Y 2201/662	. . . . .	Cable sheaths
E05Y 2201/664	. . . . .	Drums
E05Y 2201/666	. . . . .	Magazines
E05Y 2201/668	. . . . .	Pulleys; Wheels
E05Y 2201/67	. . . . .	in tackles
E05Y 2201/672	. . . . .	Tensioners, tension sensors
E05Y 2201/674	. . .	Friction wheels
E05Y 2201/676	. . .	Transmission of human force
E05Y 2201/678	. . . .	Hand chains
E05Y 2201/68	. . . .	Handles, cranks
E05Y 2201/682	. . .	Pins

E05Y 2201/684	. . . Rails
E05Y 2201/686	. . . Rods, links
E05Y 2201/688	. . . Rollers
E05Y 2201/69	. . . . having inclined axes
E05Y 2201/692	. . . . having vertical axes
E05Y 2201/694	. . . Scissor mechanisms
E05Y 2201/696	. . . Screw mechanisms
E05Y 2201/70	. . . . Nuts
E05Y 2201/702	. . . . Spindles; Worms
E05Y 2201/704	. . . . Worm wheels
E05Y 2201/706	. . . Shafts
E05Y 2201/708	. . . Sliders (E05Y 2201/64 takes precedence)
E05Y 2201/71	. . . Toothed gearing
E05Y 2201/712	. . . . with incomplete toothing
E05Y 2201/716	. . . . Pinions
E05Y 2201/718	. . . . . Bevelled pinions
E05Y 2201/72	. . . . Planetary gearing
E05Y 2201/722	. . . . Racks
E05Y 2201/724	. . . . . Flexible
E05Y 2201/726	. . . . Ring gears; Internal gears
E05Y 2400/00	Electronic control; Power supply; Power or signal transmission; User interfaces
E05Y 2400/10	. Electronic control
E05Y 2400/20	. . of brakes, disengaging means, holders or stops
E05Y 2400/202	. . . Force or torque control (mechanical aspects E05Y 2201/25)
E05Y 2400/21	. . . . by controlling the viscosity
E05Y 2400/30	. . of motors
E05Y 2400/302	. . . during electromotoric braking
E05Y 2400/31	. . . Force or torque control
E05Y 2400/315	. . . . Curve setting or adjusting
E05Y 2400/32	. . . Position control, detection or monitoring
E05Y 2400/322	. . . . by using absolute position sensors (sensors for electronic control of hinges, wings, windows as such E05Y 2400/44)
E05Y 2400/324	. . . . . Switches
E05Y 2400/326	. . . . . of the angular type
E05Y 2400/328	. . . . . of the linear type
E05Y 2400/33	. . . . by using load sensors (sensors for electronic control of hinges, wings, windows as such E05Y 2400/44)
E05Y 2400/332	. . . . . Switches
E05Y 2400/334	. . . . by using pulse generators

E05Y 2400/336	. . . . . of the angular type
E05Y 2400/337	. . . . . Encoder wheels
E05Y 2400/338	. . . . . of the linear type
E05Y 2400/34	. . . . . Pulse count limit setting
E05Y 2400/342	. . . . . Pulse count value setting or correcting
E05Y 2400/35	. . . . . related to specific positions
E05Y 2400/354	. . . . . End positions
E05Y 2400/356	. . . . . Predefined intermediate positions
E05Y 2400/358	. . . . . in the proximity of end positions
E05Y 2400/36	. . . Speed control, detection or monitoring
E05Y 2400/40	. . . Control units therefore
E05Y 2400/41	. . . . for multiple motors
E05Y 2400/415	. . . . . for multiple wings
E05Y 2400/42	. . . . . for multiple openings
E05Y 2400/44	. . Sensors therefore (E05Y 2400/322 , E05Y 2400/33 , E05Y 2400/55 , E05Y 2400/56 , E05Y 2400/852 take precedence)
E05Y 2400/445	. . . Switches
E05Y 2400/45	. . Control modes
E05Y 2400/452	. . . for saving energy
E05Y 2400/454	. . . for accommodating handicapped users
E05Y 2400/456	. . . for programming
E05Y 2400/458	. . . for generating service signals
E05Y 2400/50	. . Fault detection
E05Y 2400/502	. . . of components
E05Y 2400/504	. . . of control
E05Y 2400/506	. . . of counterbalance
E05Y 2400/508	. . . of detection
E05Y 2400/51	. . . of position, of back drive
E05Y 2400/512	. . . of electric power
E05Y 2400/514	. . . of speed
E05Y 2400/52	. . Safety arrangements (Safety means for manual wing operation E05Y 2800/116)
E05Y 2400/522	. . . Back-drive prevention
E05Y 2400/525	. . . Car-jacking prevention
E05Y 2400/53	. . . Wing impact prevention or reduction
E05Y 2400/532	. . . . Emergency braking
E05Y 2400/54	. . . . Obstruction or resistance detection
E05Y 2400/55	. . . . . by using load sensors (sensors for electronic control of hinges, wings, windows as such E05Y 2400/44)
E05Y 2400/552	. . . . . Switches
E05Y 2400/554	. . . . . sensing motor load

E05Y 2400/56	. . . . . by using speed sensors (sensors for electronic control of hinges, wings, windows as such E05Y 2400/44)
E05Y 2400/562	. . . . . Switches
E05Y 2400/564	. . . . . sensing motor speed
E05Y 2400/57	. . . . . Disabling thereof
E05Y 2400/58	. . . . . Sensitivity setting or adjustment
E05Y 2400/59	. . . Travel display
E05Y 2400/60	. Power supply; Power or signal transmission
E05Y 2400/61	. . Power supply
E05Y 2400/612	. . . Batteries
E05Y 2400/614	. . . . charging thereof
E05Y 2400/616	. . . Generators
E05Y 2400/628	. . . . Solar cells
E05Y 2400/65	. . Power or signal transmission
E05Y 2400/652	. . . by bus
E05Y 2400/654	. . . by electrical cables
E05Y 2400/656	. . . by travelling contacts
E05Y 2400/658	. . . . with current rails
E05Y 2400/66	. . . Wireless transmission
E05Y 2400/662	. . . . by optical waves
E05Y 2400/664	. . . . by radio waves
E05Y 2400/80	. User interfaces
E05Y 2400/81	. . User displays
E05Y 2400/812	. . . with acoustic display
E05Y 2400/814	. . . . Sound emitters, e.g. speakers
E05Y 2400/816	. . . . . Voice emitters
E05Y 2400/818	. . . with visual display
E05Y 2400/82	. . . . Images, Symbols
E05Y 2400/822	. . . . Light emitters, e.g. LEDs
E05Y 2400/85	. . User input means
E05Y 2400/852	. . . Sensors
E05Y 2400/854	. . . . Switches
E05Y 2400/856	. . . . Actuation thereof
E05Y 2400/858	. . . . . by body parts
E05Y 2400/86	. . . . . by hand
E05Y 2600/00	Mounting or coupling arrangements for elements provided for in this subclass
E05Y 2600/10	. Adjustable or movable
E05Y 2600/11	. . by automatically acting means
E05Y 2600/12	. . by manual operation

E05Y 2600/13	. . by motors, magnets, springs, weights
E05Y 2600/14	. . with position retaining means
E05Y 2600/20	. . characterised by the movement transmission
E05Y 2600/30	. . characterised by the type of motion
E05Y 2600/31	. . . Linear motion
E05Y 2600/312	. . . . Horizontal motion
E05Y 2600/314	. . . . Vertical motion
E05Y 2600/32	. . . Rotary motion
E05Y 2600/322	. . . . around a horizontal axis
E05Y 2600/324	. . . . around a vertical axis
E05Y 2600/33	. . . Stepwise motion
E05Y 2600/40	. Mounting location; Visibility of the elements
E05Y 2600/41	. . Concealed
E05Y 2600/412	. . . in the rabbet
E05Y 2600/45	. . in or on the fixed frame
E05Y 2600/452	. . in or on the floor or wall
E05Y 2600/454	. . in or on the motor
E05Y 2600/456	. . in or on a suspension member
E05Y 2600/458	. . in or on a transmission member
E05Y 2600/46	. . in or on the wing
E05Y 2600/50	. Mounting methods; Positioning
E05Y 2600/502	. . Clamping
E05Y 2600/504	. . Expansion
E05Y 2600/506	. . Plastic deformation
E05Y 2600/508	. . . Riveting (in general B21J)
E05Y 2600/51	. . Screwing or bolting
E05Y 2600/52	. . Toolless
E05Y 2600/522	. . . Axial stacking
E05Y 2600/524	. . . Friction
E05Y 2600/526	. . . Glueing or cementing
E05Y 2600/528	. . . Hooking, e.g. using bayonets; Locking
E05Y 2600/53	. . . Snapping
E05Y 2600/54	. . Welding (in general B23K , B29C 65/02)
E05Y 2600/56	. . Positioning or pre-mounting
E05Y 2600/60	. Mounting or coupling members (devices for fastening or securing constructional elements or machine parts together, e.g nails, bolts, in general F16B); Accessories therefore
E05Y 2600/61	. . Threaded members
E05Y 2600/62	. . Bolts
E05Y 2600/622	. . Dowels; Pins

- E05Y 2600/624 . . Nuts
- E05Y 2600/626 . . Plates or brackets
- E05Y 2600/628 . . Profiles
- E05Y 2600/63 . . Retainers
- E05Y 2600/632 . . Screws
- E05Y 2600/634 . . Spacers
- E05Y 2600/636 . . . Washers

E05Y 2800/00**Details, accessories and auxiliary operations not otherwise provided for**

- E05Y 2800/10 . Additional functions
- E05Y 2800/102 . . Additional wing movements
- E05Y 2800/104 . . Heating
- E05Y 2800/106 . . Lighting
- E05Y 2800/108 . . Lubrication
- E05Y 2800/11 . . Manual wing operation
- E05Y 2800/112 . . . Back driving the transmission or motor
- E05Y 2800/113 Power assistance
- E05Y 2800/114 Overriding existing wing movement
- E05Y 2800/116 . . . Safety means therefore
- E05Y 2800/12 . . Sealing
- E05Y 2800/122 . . Telescopic action
- E05Y 2800/15 . Applicability
- E05Y 2800/16 . . applicable on combinations of fixed and movable wings
- E05Y 2800/162 . . . the wings being coplanar when the movable wing is in the closed position
- E05Y 2800/17 . . Universally applicable
- E05Y 2800/172 . . . on different wing or frame locations
- E05Y 2800/174 on the left or right side
- E05Y 2800/176 . . . on different wing types
- E05Y 2800/178 . . . on wings having different thicknesses
- E05Y 2800/20 . Combinations of elements
- E05Y 2800/205 . . forming a unit
- E05Y 2800/21 . . of identical elements, e.g. of identical compression springs
- E05Y 2800/22 . . of not identical elements of the same category, e.g. combinations of not identical springs
- E05Y 2800/23 . . of elements of different categories
- E05Y 2800/232 . . . of motors and transmissions
- E05Y 2800/234 . . . of motors and brakes
- E05Y 2800/236 . . . of motors and springs
- E05Y 2800/238 . . . of springs and transmissions
- E05Y 2800/24 . . . of springs and brakes
- E05Y 2800/242 . . arranged in parallel relationship

- E05Y 2800/244 . . . arranged in serial relationship
- E05Y 2800/246 . . . with at least one element being redundant
- E05Y 2800/25 . Emergency conditions
- E05Y 2800/252 . . . the elements functioning only in case of emergency
- E05Y 2800/254 . . . the elements not functioning in case of emergency
- E05Y 2800/26 . Form, shape
- E05Y 2800/262 . . . column shaped
- E05Y 2800/264 . . . compact
- E05Y 2800/266 . . . curved
- E05Y 2800/268 . . . cylindrical
- E05Y 2800/27 . . . profiles
- E05Y 2800/272 hollow
- E05Y 2800/276 U-shaped
- E05Y 2800/278 C-shaped
- E05Y 2800/28 . . . tubular
- E05Y 2800/29 . . . forming a unitary piece with another element
- E05Y 2800/292 . . . having apertures
- E05Y 2800/296 Slots
- E05Y 2800/298 . . . having indentations
- E05Y 2800/33 . . . having protrusions
- E05Y 2800/34 . Form stability
- E05Y 2800/342 . . . Deformable
- E05Y 2800/344 elastically
- E05Y 2800/35 of specific parts
- E05Y 2800/352 . Frames; Posts
- E05Y 2800/353 . . . fixed
- E05Y 2800/356 horizontal frame members
- E05Y 2800/358 vertical frame members or posts
- E05Y 2800/36 . . . Movable frames
- E05Y 2800/362 horizontal frame members
- E05Y 2800/364 vertical frame members
- E05Y 2800/37 . Length, width adjustment
- E05Y 2800/372 . . . Telescopic
- E05Y 2800/40 . Protection ([E05Y 2400/50](#), [E05Y 2400/52](#) take precedence)
- E05Y 2800/402 . . . against corrosion
- E05Y 2800/404 . . . against component faults or failure
- E05Y 2800/406 . . . against deformation
- E05Y 2800/407 plastic deformation
- E05Y 2800/409 . . . against faulty mounting or coupling
- E05Y 2800/41 . . . against finger injury

E05Y 2800/412	. . against friction
E05Y 2800/414	. . against high or low temperatures
E05Y 2800/416	. . . against fire
E05Y 2800/42	. . against smoke or gas
E05Y 2800/422	. . against vibration or noise
E05Y 2800/424	. . against unintended use
E05Y 2800/426	. . . against unauthorised use (E05Y 2400/51 , E05Y 2400/522 take precedence)
E05Y 2800/428	. . against water
E05Y 2800/43	. . against wear
E05Y 2800/45	. Manufacturing
E05Y 2800/455	. . Extrusion (in general B29C 47/00 , B21C 23/00)
E05Y 2800/46	. . Injection moulding (in general B29C 45/00)
E05Y 2800/465	. . Pressing
E05Y 2800/67	. Materials; Strength alteration thereof
E05Y 2800/672	. . Glass
E05Y 2800/674	. . Metal
E05Y 2800/676	. . Plastics
E05Y 2800/678	. . . Elastomers
E05Y 2800/68	. . Combinations of materials
E05Y 2800/682	. . Strength alteration by reinforcing, e.g. by applying ribs
E05Y 2800/684	. . Strength alteration by weakening, e.g. by applying grooves
E05Y 2800/69	. Permanence of use
E05Y 2800/692	. . Temporary use
E05Y 2800/694	. . during manufacturing
E05Y 2800/696	. . during transport or storage
E05Y 2800/70	. Retrofitting of elements
E05Y 2800/71	. Secondary wings, e.g. pass doors
E05Y 2800/72	. Sets of mutually exchangeable elements
E05Y 2800/73	. Single use of elements
E05Y 2800/74	. Specific positions (E05Y 2400/35 takes precedence)
E05Y 2800/742	. . abnormal
E05Y 2800/744	. . . cleaning or service
E05Y 2800/746	. . . emergency or extended
E05Y 2800/748	. . . end
E05Y 2800/75	. . intermediate
E05Y 2900/00	Application of doors, windows, wings or fittings thereof
E05Y 2900/10	. for buildings or parts thereof
E05Y 2900/102	. . for cold-rooms
E05Y 2900/104	. . for elevators

E05Y 2900/106	. . for garages
E05Y 2900/108	. . for hangars
E05Y 2900/11	. . for industrial buildings
E05Y 2900/112	. . for restrooms
E05Y 2900/114	. . for showers
E05Y 2900/116	. . for sluices
E05Y 2900/13	. . characterised by the type of wing
E05Y 2900/131	. . . Access panels
E05Y 2900/132	. . . Doors
E05Y 2900/134	. . . . Fire doors
E05Y 2900/136	. . . . Insect doors
E05Y 2900/14	. . . . Doors disappearing in pockets of a wall, e.g. so-called pocket doors
E05Y 2900/142	. . . Partition walls
E05Y 2900/144	. . . Security grills
E05Y 2900/146	. . . Shutters
E05Y 2900/148	. . . Windows
E05Y 2900/15	. . . . Balcony glazing
E05Y 2900/152	. . . . Roof windows
E05Y 2900/154	. . . . . Skylights
E05Y 2900/20	. for furnitures, e.g. cabinets
E05Y 2900/202	. . for display cabinets
E05Y 2900/204	. . for display counters
E05Y 2900/208	. . for metal cabinets
E05Y 2900/21	. . for safety cabinets
E05Y 2900/212	. . Doors disappearing in pockets in the furniture body
E05Y 2900/30	. for domestic appliances
E05Y 2900/302	. . for built-in appliances
E05Y 2900/304	. . for dishwashers
E05Y 2900/306	. . for freezers
E05Y 2900/308	. . for ovens
E05Y 2900/31	. . for refrigerators
E05Y 2900/312	. . for washing machines
E05Y 2900/40	. for gates
E05Y 2900/402	. . for cantilever gates
E05Y 2900/404	. . for railway platform gates
E05Y 2900/50	. for vehicles
E05Y 2900/502	. . for aircraft
E05Y 2900/504	. . for armored vehicles
E05Y 2900/506	. . for buses
E05Y 2900/508	. . for convertibles

E05Y 2900/51	. . for railway cars or mass transit vehicles
E05Y 2900/512	. . for recreational vehicles
E05Y 2900/514	. . for ships
E05Y 2900/516	. . for trucks or trailers
E05Y 2900/518	. . for working vehicles
E05Y 2900/53	. . characterised by the type of wing
E05Y 2900/531	. . . Doors
E05Y 2900/532	. . . . Back doors or end doors
E05Y 2900/534	. . . Fuel lids
E05Y 2900/536	. . . Hoods
E05Y 2900/538	. . . Interior lids
E05Y 2900/54	. . . Luggage compartment lids for buses
E05Y 2900/542	. . . Roof panels
E05Y 2900/544	. . . Tailboards or sideboards
E05Y 2900/546	. . . Tailgates
E05Y 2900/548	. . . Trunk lids
E05Y 2900/55	. . . Windows
E05Y 2900/60	. for other use
E05Y 2900/602	. . for containers
E05Y 2900/604	. . . for large containers
E05Y 2900/606	. . for electronic devices
E05Y 2900/608	. . for machines
E05Y 2900/612	. . for manhole covers
E05Y 2900/614	. . for toilet seats or covers