

CPC COOPERATIVE PATENT CLASSIFICATION

E FIXED CONSTRUCTIONS

BUILDING

E04 BUILDING

E04H BUILDINGS OR LIKE STRUCTURES FOR PARTICULAR PURPOSES; SWIMMING OR SPLASH BATHS OR POOLS; MASTS; FENCING; TENTS OR CANOPIES, IN GENERAL ([foundations E02D](#))

NOTES

1. This subclass deals primarily with the layout of buildings as a whole, but includes details which are peculiar to types of buildings or buildings for special purposes, specified in the groups. The word "buildings" does not exclude engineering structures and other constructions
2. This subclass provides for canopies in general and for canopies similar in construction to tents. For canopies having special application, see the relevant class, e.g. bed canopies [A47C 29/00](#); protecting chairs against the weather [A47C 7/66](#); sunshades or awnings for buildings [E04F 10/00](#)
3. In this subclass, the term "tent" means a tent or canopy having a supporting means, e.g. frame and a flexible cover

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:
[E04H 4/02](#) covered by [E04H 4/0018](#), [E04H 4/0075](#)
[E04H 4/04](#) covered by [E04H 4/0018](#), [E04H 4/0075](#)
2. {In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.}

1/00	Buildings or groups of buildings for dwelling or office purposes; General layout, e.g. modular co-ordination or staggered storeys (E04H 3/00 takes precedence)	1/1266	. . . {Cubicles for dressing; Toilets}
		1/1272	. . {Exhibition stands}
		1/1277	. . {Shelters for decontamination}
1/005	. {Modulation co-ordination}	2001/1283	. . {Small buildings of the ISO containers type}
1/02	. Dwelling houses; Buildings for temporary habitation, {e.g. summer houses } (small erections for limited occupation E04H 1/12 (; collapsible, erectable or rotatable buildings E04B 1/343))	2001/1288	. . {Sauna cabins}
		2001/1294	. . {Booths for smoking}
		1/14	. . Telephone cabinets
1/04	. . Apartment houses arranged in two or more levels	3/00	Buildings or groups of buildings for public or similar purposes; Institutions, e.g. infirmaries or prisons
1/06	. Office buildings; Banks (E04H 1/12 takes precedence)	3/02	. Hotels; Motels; Coffee-houses; Restaurants; Shops; Department stores
1/12	. Small buildings or other erections for limited occupation, erected in the open air or arranged in buildings, e.g. kiosks, waiting shelters for bus stops or for filling stations, roofs for railway platforms, watchmen's huts or dressing cubicles	3/04	. . Restaurants or shops having arrangements for self-service
1/1205	. . {Small buildings erected in the open air (E04H 1/1272 takes precedence)}	3/06	. Museums; Library buildings
1/1211	. . . {Waiting shelters for bus stops}	3/08	. Hospitals, infirmaries, or the like; Schools; Prisons
1/1216	. . . {Public W.C.s}	3/10	. for meetings, entertainments, or sports
1/1222	. . . {Sales kiosks}	3/12	. . Tribunes, grandstands or terraces for spectators
1/1227	. . . {Traffic control kiosks}	3/123	. . . {Telescopic grandstands}
1/1233	. . . {Shelters for filling stations}	3/126	. . . {Foldable, retractable or tiltable tribunes (E04H 3/123 takes precedence)}
1/1238	. . . {Shelters for engines, e.g. electrical meter housings}	3/14	. . Gymnasiums; Other sporting buildings
1/1244	. . . {Dressing or beach cabins}	2003/142	. . . {with vertically movable or tiltable playing field or sections}
1/125	. . {Small buildings, arranged in other buildings (E04H 1/1272 takes precedence)}	2003/145	. . . {with reconfigurable seating arrangement}
1/1255	. . . {Voting booths}	2003/147	. . . . {using horizontally movable sections of tribunes}
1/1261	. . . {Cubicles for fire-protection}	3/16	. . . for swimming
		3/165	. . . . {having movable parts}

3/22	. . Theatres; Concert halls; Studios for broadcasting, cinematography, television or similar purposes	4/1281	. . {Devices for distributing chemical products in the water of swimming pools}
3/24	. . . Constructional features of stages	4/129	. . {Systems for heating the water content of swimming pools (solar collectors using pools F24S 10/17 , F24S 10/10 ; by solar radiation F24S 20/02)}
3/26	. . . . Revolving stages; Stages able to be lowered	4/14	. Parts, details or accessories not otherwise provided for
3/28	. . . . Shiftable or portable platforms	4/141	. . {Coping elements for swimming pools}
3/30	. . . Constructional features of auditoriums	4/142	. . . {with fixing means for sealing foil}
4/00	Swimming or splash baths or pools	4/143	. . {Swimming lane markers with or without wave suppressors}
4/0006	. {Devices for producing waves in swimming pools (generating current of water in swimming pools A63B 69/125)}	4/144	. . {Means for facilitating access, e.g. step units or slides (invalid-lifting devices for swimming pools A61G 7/1005)}
4/0012	. {Floating swimming pools}	4/145	. . {Dividing means for swimming pools, e.g. panels, bulkheads}
4/0018	. {Easily movable or transportable swimming pools}	2004/146	. . {Fixing of liners}
4/0025	. . {with inflatable parts}	2004/147	. . . {the liner edge being held in a slot}
4/0031	. . {with shell type elements}	4/148	. . {Lighting means}
4/0037	. . . {Mono-shell type}	4/16	. . specially adapted for cleaning
4/0043	. . {mainly made of panels (E04H 4/0031 takes precedence)}	4/1609	. . . {Hand-held strainers, non-powered brushes or scrubbers}
4/005	. . . {characterised by the framework for supporting the panels}	4/1618	. . . {Hand-held powered cleaners}
4/0056	. . {with a framework combined with a water retaining bag}	4/1627	. . . . {Powered gutter cleaners}
4/0062	. . {characterised by stacked planks or staves}	4/1636	. . . . {Suction cleaners}
2004/0068	. . {made of plastic shells or plastic elements including at least parts of walls and floors}	4/1645	. . . . . {Connections to the pool water circulation system}
4/0075	. {made of concrete (E04H 4/0012 takes precedence)}	4/1654	. . . . {Self-propelled cleaners}
4/0081	. . {with walls and floor cast <u>in situ</u> }	4/1663	. . . . . {the propulsion resulting from an intermittent interruption of the waterflow through the cleaner}
4/0087	. . {with walls prefabricated and floor cast <u>in situ</u> }	4/1672	. . . . . {Connections to the pool water circulation system}
4/0093	. . {with walls and floor prefabricated}	4/1681	. . . . {Cleaning whips}
4/06	. Safety devices; Coverings for baths	4/169	. . . . {Pool nozzles}
4/065	. . {Floors adjustable in height}	5/00	Buildings or groups of buildings for industrial or agricultural purposes
4/08	. . Coverings consisting of rigid elements {, e.g. coverings composed of separate or connected elements}	2005/005	. {Buildings for data processing centers}
4/082	. . . {composed of flexibly or hingedly-connected slat-like elements, which may or may not be wound-up on a fixed axis (E04H 4/088 takes precedence)}	5/02	. Buildings or groups of buildings for industrial purposes, e.g. for power-plants or factories (buildings forming part of cooling plants E04H 5/10)
4/084	. . . {with lifting mechanism}	5/04	. . Transformer houses; Substations or switchgear houses
4/086	. . . {Sliding covers (E04H 4/084 and E04H 4/088 take precedence)}	5/06	. . Pits or building structures for inspection or services
4/088	. . . {Covers made in concertina folds}	5/08	. Buildings or groups of buildings for agricultural purposes (silos E04H 7/22)
4/10	. . Coverings of flexible material	5/10	. Buildings forming part of cooling plants
4/101	. . . {wound-up on a fixed axis}	5/12	. . Cooling towers
4/103	. . . {with inflatable chambers}	6/00	Buildings for parking cars, rolling-stock, aircraft, vessels or like vehicles, e.g. garages
4/105	. . . {supported by air pressure under the cover}	6/005	. {Garages for vehicles on two wheels}
4/106	. . . {supported by separate buoyant bodies}	6/02	. Small garages, e.g. for one or two cars (attached to, or supported by, the vehicle B62D)
4/108	. . . {supported by frames}	6/025	. . {in the form of an overhead canopy, e.g. carports}
4/12	. Devices or arrangements for circulating water {, i.e. devices for removal of polluted water, cleaning baths or for water treatment}	6/04	. . wheeled, hinged, foldable, telescopic, swinging or otherwise movable
4/1209	. . {Treatment of water for swimming pools (filters B01D)}	6/06	. . with means for shifting or lifting vehicles
4/1218	. . . {Devices for removal of polluted water; Circumferential gutters}	6/065	. . . {using tiltable floors or ramps (in garages for many vehicles E04H 6/26)}
4/1227	. . . . {Circumferential gutters}		
4/1236	. . . {Bottom drains}		
4/1245	. . . {Recirculating pumps for swimming pool water}		
4/1254	. . . {Arm-mounted debris traps or flow diverters}		
4/1263	. . . {Floating skimmers}		
4/1272	. . . {Skimmers integrated in the pool wall}		

- 6/08 . Garages for many vehicles
- 6/10 . . without mechanical means for shifting or lifting vehicles, e.g. with helically-arranged fixed ramps, with movable ramps
- 6/12 . . with mechanical means for shifting or lifting vehicles
- 6/14 . . . with endless conveyor chains having load-carrying parts moving vertically, e.g. paternoster lifts {also similar transport in which cells are continuously mechanically linked together}
- 6/16 . . . Garages shaped as a wheel or drum rotatable about a horizontal axis
- 6/18 . . . with means for transport in vertical direction only or independently in vertical and horizontal directions (E04H 6/14 takes precedence)
- 6/181 {the cars rolling freely from the transfer means (E04H 6/282 takes precedence)}
- 6/182 {using car-gripping transfer means (E04H 6/285 takes precedence)}
- 6/183 {without transverse movement of the car after leaving the transfer means}
- 6/185 {using comb-type transfer means (E04H 6/287 takes precedence)}
- 6/186 {without transverse movement of the car after leaving the transfer means}
- 6/187 {using vertical parking loops}
- 6/188 {using only vertical transport means}
- 6/20 characterised by use of conveyor chains or rotatable rollers for horizontal transport
- 6/22 characterised by use of movable platforms for horizontal transport {, i.e. cars being permanently parked on palletes}
- 6/225 {without transverse movement of the parking palette after leaving the transfer means}
- 6/24 characterised by use of dollies for horizontal transport {, i.e. cars being permanently parked on wheeled platforms}
- 6/245 {without transverse movement of the wheeled parking platform after leaving the transfer means}
- 6/26 characterised by use of tiltable floors or floor sections; characterised by use of movable ramps
- 6/28 characterised by use of turntables or rotary rings for horizontal transport
- 6/282 {turntables, rotary elevators or the like on which the cars are not permanently parked}
- 6/285 {using car-gripping transfer means}
- 6/287 {using comb-type transfer means}
- 6/30 . . . with means for transport in horizontal direction only
- 6/302 {the cars rolling freely from the transfer means}
- 6/305 {using car-gripping transfer means}
- 6/307 {using comb-type transfer means}
- 6/32 characterised by use of conveyor chains or rotatable rollers
- 6/34 characterised by use of movable platforms
- 6/36 characterised by use of freely-movable dollies
- 6/38 characterised by use of tiltable floors or floor sections
- 6/40 characterised by use of turntables or rotary rings
- 6/42 . Devices or arrangements peculiar to garages, not covered elsewhere, e.g. securing devices, safety devices {, monitoring and operating schemes; centering devices}
- 6/422 . . {Automatically operated car-parks}
- 6/424 . . . {Positioning devices}
- 6/426 . . {Parking guides}
- 6/428 . . {Devices for collecting oil or other fluids under parked cars (servicing, maintaining, repairing or refitting of vehicles B60S 5/00)}
- 6/44 . for storing aircraft
- 7/00 Construction or assembling of bulk storage containers employing civil engineering techniques in situ or off the site (tower aspects E04H 12/00; storage aspects, e.g. floating roofs, sealing means, filling or discharging means B65D, B65G, F17B, F17C; foundations E02D 27/38)**
- 7/02 . Containers for fluids or gases; Supports therefor
- 7/04 . . mainly of metal
- 7/06 . . . with vertical axis
- 7/065 {roof constructions}
- 7/14 . . . ball-shaped
- 7/16 . . . with horizontal axis
- 7/18 . . mainly of concrete, e.g. reinforced concrete, or other stone-like material
- 7/20 . . . Prestressed constructions
- 7/22 . Containers for fluent solids, e.g. silos, bunkers; Supports therefor
- 2007/225 . . {Silos with retaining wall type wall elements, e.g. trench silos}
- 7/24 . . Constructions, with or without perforated walls, depending on the use of specified materials
- 7/26 . . . mainly of concrete, e.g. reinforced concrete or other stone-like materials
- 7/28 composed of special building elements
- 7/30 . . . mainly of metal
- 7/32 . . . mainly of wood
- 9/00 Buildings, groups of buildings or shelters adapted to withstand or provide protection against abnormal external influences, e.g. war-like action, earthquake or extreme climate (foundation aspects E02D)**
- 9/02 . withstanding earthquake or sinking of ground (foundations E02D 27/34)
- 9/021 . . {Bearing, supporting or connecting constructions specially adapted for such buildings}
- 9/0215 . . . {involving active or passive dynamic mass damping systems}
- 9/022 . . . {and comprising laminated structures of alternating elastomeric and rigid layers}
- 9/023 . . . {and comprising rolling elements, e.g. balls, pins}
- 9/0235 . . . {Anti-seismic devices with hydraulic or pneumatic damping}
- 9/0237 . . . {Structural braces with damping devices}
- 9/024 . . {Structures with steel columns and beams}
- 9/025 . . {Structures with concrete columns}
- 9/027 . . {Preventive constructional measures against earthquake damage in existing buildings}

- 9/028 . . {Earthquake withstanding shelters}
- 9/029 . . . {arranged inside of buildings ([E04H 9/06](#) takes precedence)}
- 9/04 . against air-raid or other war-like actions
- 9/06 . . Structures arranged in or forming part of buildings
- 9/08 . . . Structures arranged underneath buildings, e.g. air-raid shelters
- 9/10 . . Independent shelters; Arrangement of independent splinter-proof walls
- 9/12 . . . entirely underneath the level of the ground, e.g. air-raid galleries
- 9/14 . against other dangerous influences, e.g. tornadoes, floods
- 9/145 . . {Floods ([protecting building openings E06B 9/00](#))}
- 9/16 . against adverse conditions, e.g. extreme climate, pests
- 12/00 Towers; Masts or poles; Chimney stacks; Water-towers; Methods of erecting such structures**
(cooling towers [E04H 5/12](#); derricks for oil drilling [E21B 15/00](#))
- 12/003 . {Access covers or locks therefor}
- 2012/006 . {Structures with truss-like sections combined with tubular-like sections}
- 12/02 . Structures made of specified materials
- 12/04 . . of wood
- 12/06 . . . Truss-like structures
- 12/08 . . of metal
- 12/085 . . . {Details of flanges for tubular masts}
- 12/10 . . . Truss-like structures
- 12/12 . . of concrete or other stone-like material, with or without internal or external reinforcements, e.g. with metal coverings, with permanent form elements
- 12/14 . . . Truss-like structures
- 12/16 . Prestressed structures
- 12/18 . movable or with movable sections, e.g. rotatable or telescopic
- 12/182 . . {telescopic ([locking of telescopic systems in general F16B 7/10](#))}
- 12/185 . . {with identical elements}
- 12/187 . . {with hinged sections}
- 12/20 . Side-supporting means therefor, e.g. using guy ropes or struts
- 12/22 . Sockets or holders for poles or posts {(for sports articles, e.g. floor sockets [A63B 71/023](#); for road signs [E01F 9/673](#))}
- 12/2207 . . {not used}
- 12/2215 . . . {driven into the ground ([ground anchors E02D 5/80](#))}
- 12/2223 {by screwing}
- 12/223 {with movable anchoring elements; with separately driven anchor rods}
- 12/2238 . . {to be placed on the ground ([Christmas tree stands A47G 33/12](#))}
- 12/2246 . . . {filled with water, sand or the like}
- 12/2253 . . {Mounting poles or posts to the holder ([E04H 12/2284](#) takes precedence; break-away mountings [E01F 9/631](#))}
- 12/2261 . . . {on a flat base ([E04H 12/08](#), [E04H 12/10](#) take precedence)}
- 12/2269 . . . {in a socket}
- 12/2276 . . . {Clamping poles or posts on a stub ([E04H 12/2269](#) takes precedence)}
- 12/2284 . . {Means for adjusting the orientation of the post or pole}
- 12/2292 . . {Holders used for protection, repair or reinforcement of the post or pole ([E04H 12/2276](#) takes precedence)}
- 12/24 . Cross arms
- 12/26 . Winding towers for mines
- 12/28 . Chimney stacks, e.g. free-standing, or similar ducts ([chimneys as part of buildings E04F 17/02](#))
- 12/30 . Water-towers
- 12/32 . Flagpoles
- 12/34 . Arrangements for erecting or lowering towers, masts, poles, chimney stacks, or the like
- 12/341 . . {Arrangements for casting [in situ](#) concrete towers or the like}
- 12/342 . . {Arrangements for stacking tower sections on top of each other ([E04H 12/344](#) takes precedence)}
- 12/344 . . {Arrangements for lifting tower sections for placing additional sections under them}
- 12/345 . . {Arrangements for tilting up whole structures or sections thereof ([E04H 12/347](#) takes precedence)}
- 12/347 . . {Arrangements for setting poles in the ground}
- 12/348 . . {Arrangements for demolition towers or the like}
- 13/00 Monuments; Tombs; Burial vaults; Columbaria**
- 13/001 . {Accessories for grave sites, e.g. liners, covers, vault lowering devices ([E04H 13/003](#) takes precedence)}
- 13/003 . {Funeral monuments, grave sites curbing or markers not making part of vaults ([E04H 13/008](#) takes precedence)}
- 13/005 . {Ventilation systems therefor}
- 13/006 . {Columbaria, mausoleum with frontal access to vaults}
- 13/008 . {Memorials for cremation ashes ([E04H 13/006](#) takes precedence)}
- 14/00 Buildings for combinations of different purposes not covered by any single one of main groups [E04H 1/00-E04H 13/00](#) of this subclass, e.g. for double purpose ([E04H 3/02](#), [E04H 9/06](#) take precedence); Buildings of the drive-in type**
- 15/00 Tents or canopies, in general**
- 15/001 . {Hunting, fishing huts or the like}
- 15/003 . {Bathing or beach cabins}
- 15/005 . . {Wind breakers, i.e. fabric stretched between posts anchored in the ground}
- 15/006 . {Tents used as toys}
- 15/008 . {Tents or tent-like constructions composed partially of rigid panels ([E04H 15/06](#) takes precedence; trailer-type vehicles or caravans with foldable or readily disassembled living accommodation comprising flexible elements [B60P 3/341](#))}
- 15/02 . Tents combined or specially associated with other devices
- 15/04 . . suspended type, e.g. from trees or from cantilever supports
- 15/06 . . Tents at least partially supported by vehicles
- 15/08 . . . Trailer awnings or the like
- 15/10 . . Heating, lighting or ventilating
- 15/12 . . . Heating
- 15/14 . . . Ventilating

15/16	. . . . of tent roofs	15/642	. . . {with covers held by elongated fixing members locking in longitudinal recesses of a frame}
15/18	. Tents having plural sectional covers, e.g. pavilions, vaulted tents, marquees, circus tents (inflatable E04H 15/20); Plural tents, e.g. modular	15/644	. . . . {the fixing members being a beading}
15/20	. inflatable, e.g. shaped, strengthened or supported by fluid pressure	15/646	. . . . {the fixing members being locked by an additional locking member}
2015/201	. . {with inflatable tubular framework, with or without tent cover}	15/648	. . . . {the longitudinal recesses being made from two clamping members}
2015/202	. . {with inflatable panels, without inflatable tubular framework}	17/00	Fencing, e.g. fences, enclosures, corrals (features peculiar to electrified fences A01K 3/00, H05C; means for allowing passage through fences, barriers, or the like E06B 11/00)
2015/203	. . . {supported by a non-inflatable structure or framework}	17/003	. {Anti-climbing devices, e.g. fixed spikes}
2015/204	. . . {made from contiguous inflatable tubes}	17/004	. . {Unstable, e.g. rotatory or resiliently mounted fence panels, spikes}
2015/205	. . . {made from two sheets with intermediate spacer means}	17/006	. {Caps or covers for posts}
2015/206	. . {Details of inflation devices, e.g. valves, connections to fluid pressure source}	17/009	. {Footing elements for fence posts or fence sections}
2015/207	. . {Tents specially designed for insulation}	17/013	. {in combination with gates}
2015/208	. . {with inflatable mattresses}	17/017	. {Fencing provided with electric elements or components, e.g. fencing member or component, such as fence strands, post, panel or rail, provided with electric elements or components}
2015/209	. . {Structures with a netting or similar for anchorage}		NOTE
15/22	. . supported by air pressure inside the tent		{When classifying in this group, aspects of electrified wire fencing for animal pasturing should also be classified in group A01K 3/005 }
15/24	. cone shaped, e.g. teepees		
15/26	. Centre-pole supported tents (umbrella-type E04H 15/28)		
15/28	. Umbrella type tents		
15/30	. convertible, e.g. from one type tent to another type tent, from tent to canopy or from tent cover into diverse articles	17/02	. Wire fencing, e.g. made of wire mesh (E04H 17/14 takes precedence)
15/32	. Parts, components, construction details, accessories, interior equipment, specially adapted for tents, e.g. guy-line equipment, skirts, thresholds	17/04	. . characterised by the use of specially adapted wire, e.g. barbed wire {, wire mesh, toothed strip or the like; Coupling means therefor}
15/322	. . {Stretching devices}	17/045	. . . {Barbed wire or toothed strip}
15/324	. . {Beds constituted by the tent supporting means (beds per se, A47C)}	17/05	. . . {Wire mesh or wire fabric}
2015/326	. . {Frame members connected by elastic cord}	17/055	. . {Pickets for wire fencing}
2015/328	. . {Frames kept erected solely by guy lines}	17/06	. . Parts for wire fences
15/34	. . Supporting means, e.g. frames	17/063	. . . {Fence liners; Vegetation prevention barriers}
15/36	. . . arch-shaped type (E04H 15/42 takes precedence {; arches connected with lazy-tongues E04H 15/505 })	17/066	. . . {Slats for chain link fences}
15/38	. . . . expansible, e.g. extensible {in a fan type manner}	17/08	. . . Anchoring means therefor, e.g. specially-shaped parts entering the ground; Struts or the like
15/40	. . . . flexible		NOTE
15/405	. . . . . {flexible and foldable}		Parts entering the ground are classified in E04H 12/22
15/42	. . . external type, e.g. frame outside cover		
15/425	. . . . {Flexible supporting means}	17/10	. . characterised by the way of connecting wire to posts; Droppers
15/44	. . . collapsible, e.g. breakdown type (E04H 15/42 takes precedence)	17/12	. . . the wire being placed in slots, grooves, or the like
15/46	. . . . telescoping and foldable	17/124	. . . {connecting by one or more clamps, clips, screws, wedges or ties}
15/48	. . . . foldable, i.e. having pivoted or hinged means (E04H 15/405 and E04H 15/46 takes precedence)	17/127	. . {Stretcher-type wire fencing; Tensioning devices for wire fencing}
15/50	. . . . . lazy-tongs type	17/131	. . . {the wire being tensioned by one or more springs}
15/505	. . . . . {characterised by connecting arches with lazy-tongues}	17/133	. . . {the wire being tensioned by one or more winders}
15/52	. . . . . parallelogram type	17/135	. . . . {winder fixed to post via a bracket}
15/54	. . Covers of tents or canopies	17/139	. . . . {winder internal to post}
15/56	. . Floors	17/14	. Fences constructed of rigid elements, e.g. with additional wire fillings or with posts
15/58	. . Closures; Awnings; Sunshades	17/1404	. . {using building blocks, e.g. from concrete or stone}
15/60	. . Poles		
15/62	. . Pegs, stakes or the like		
15/64	. . Tent or canopy cover fastenings		

- 17/1408 . . . {using woven slats}
- 17/1413 . . . {Post-and-rail fences, e.g. without vertical cross-members}
- 17/1417 . . . {with vertical cross-members}
- 17/1426 {Picket fences}
- 17/143 {with separate pickets attached to the side of the horizontal members}
- 17/1439 {with separate pickets going through the horizontal members}
- 17/1445 . . . {Fences with pivotable slats for reduced wind resistance or for adjusting visibility}
- 17/1447 . . . {Details of connections between rails and posts}
- 17/1448 {Adjustable, angled or hinged connections}
- 17/145 {being welded, bonded or deformed in-situ}
- 17/1452 {the ends of the rails are fixed on the lateral sides of the posts}
- 17/1456 {the ends of the rails being located in vertical channels extending along a substantial portion of the length of the post}
- 17/146 {the rails being attached to the front faces of the posts}
- 17/1465 {the rails being supported within blind or through holes of the posts}
- 17/1469 {Snap connections}
- 17/1473 {using fixing devices encircling, partially or fully, the post}
- 17/1478 {the posts extending through apertures or cut-outs in the rails}
- 17/1482 {the rails being attached to the tops of the posts}
- 17/1486 {the rails being positioned between the uprights of double posts}
- 17/1488 {Brackets for connections between rails and posts ([E04H 17/1448- E04H 17/1486 take precedence](#))}
- 17/16 . . using prefabricated panel-like elements, e.g. wired frames
- 17/1602 . . . {Using wooden, plastic or composite-material panel-like elements}
- 17/161 . . . {using wire panels}
- 17/163 {using wired panels with frame}
- 17/164 {occultation devices therefor, e.g. slats, fence liners or panels blocking view therethrough}
- 17/165 . . . {using panels with rigid filling and frame}
- 17/166 {with cross-members}
- 17/168 . . . {using panels fitted in grooves of posts}
- 17/17 . . . {brackets for the connection between panels and posts}
- 17/18 . . . Corrals, i.e. easily transportable or demountable enclosures
- 17/185 {hinged or tied prefabricated panel-like elements}
- 17/20 . . Posts therefor
- 17/21 . . . {with hollow cross sections}
- 17/22 . . . Anchoring means therefor, e.g. specially-shaped parts entering the ground; Struts or the like
- 17/23 {lateral supporting elements, e.g. braces, tie downs, or cables}
- 17/24 . . Connections for attaching additional wire to frames, posts or railings
- 17/26 . Devices for erecting or removing fences
- 17/261 . . {for post and wire handling}
- 17/263 . . . {for erecting posts ([pile driving E02D 7/00](#))}
- 17/265 . . . {for removing posts}
- 17/266 . . . {for stretching or winding wire or wire mesh ([stretcher-type wire fencing or tensioning devices for wire fencing E04H 17/127](#))}
- 17/268 . . {Hand tools for wiring fences, e.g. tying or splicing tools ([E04H 17/266 takes precedence](#))}

NOTE

Parts entering the ground are classified in [E04H 12/22](#)