

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
		3/00	Buildings or groups of buildings for public or similar purposes; Institutions, e.g. infirmaries or prisons
1/04	. . Apartment houses arranged in two or more levels	3/02	. Hotels; Motels; Coffee-houses; Restaurants; Shops; Department stores
1/06	. Office buildings; Banks (E04H 1/12 takes precedence)	3/04	. . Restaurants or shops having arrangements for self-service
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	3/06	. Museums; Library buildings
		3/08	. Hospitals, infirmaries, or the like; Schools; Prisons
1/1205	. . {Small buildings erected in the open air (E04H 1/1272 takes precedence)}	3/10	. for meetings, entertainments, or sports
		3/12	. . Tribunes, grandstands or terraces for spectators
1/1211	. . . {Waiting shelters for bus stops}	3/123	. . . {Telescopic grandstands}
1/1216	. . . {Public W.C.s}	3/126	. . . {Foldable, retractable or tiltable tribunes (E04H 3/123 takes precedence)}
1/1222	. . . {Sales kiosks}		
1/1227	. . . {Traffic control kiosks}	3/14	. . Gymnasiums; Other sporting buildings
1/1233	. . . {Shelters for filling stations}	2003/142	. . . {with vertically movable or tiltable playing field or sections}
1/1238	. . . {Shelters for engines, e.g. electrical meter housings}	2003/145	. . . {with reconfigurable seating arrangement}
1/1244	. . . {Dressing or beach cabins}	2003/147 {using horizontally movable sections of tribunes}
1/125	. . {Small buildings, arranged in other buildings (E04H 1/1272 takes precedence)}	3/16	. . . for swimming
1/1255	. . . {Voting booths}	3/165 {having movable parts}
1/1261	. . . {Cubicles for fire-protection}		

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

- 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

E04H

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

E04H

- 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](#)