

CPC COOPERATIVE PATENT CLASSIFICATION

E FIXED CONSTRUCTIONS

BUILDING

E04 BUILDING (layered materials, layered products in general [B32B](#))

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, staggered storeys {small buildings} (E04H 3/00 takes precedence; buildings for two or more purposes, e.g. drive-in buildings E04H 14/00; building construction in general E04B 1/00)	1/125	. . {Small buildings, arranged in other buildings (E04H 1/1272 takes precedence)}
1/005	. {Modulation co-ordination}	1/1255	. . . {Voting booths}
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)	1/1261	. . . {Cubicles for fire-protection}
1/04	. . Apartment houses arranged in two or more levels	1/1266	. . . {Cubicles for dressing; Toilets}
1/06	. Office buildings; Banks (E04H 1/12 takes precedence; furniture or fittings for shops, storehouses or the like A47F)	1/1272	. . {Exhibition stands}
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, dressing cubicles (movable screens as household equipment A47G 5/00)	1/1277	. . {Shelters for decontamination}
1/1205	. . {Small buildings erected in the open air (E04H 1/1272 takes precedence)}	2001/1283	. . {Small buildings of the ISO containers type}
1/1211	. . . {Waiting shelters for bus stops}	2001/1288	. . {Sauna cabins}
1/1216	. . . {Public W.C.s}	2001/1294	. . {Booths for smoking}
1/1222	. . . {Sales kiosks}	1/14	. . Telephone cabinets
1/1227	. . . {Traffic control kiosks}	3/00	Buildings or groups of buildings for public or similar purposes; Institutions, e.g. infirmaries, prisons (portions of buildings for individual occupation, e.g. cubicles E04H 1/00; structures covering a large free area E04B 1/342)
1/1233	. . . {Shelters for filling stations}	3/02	. Hotels; Motels; Coffee houses; Restaurants; Shops; Department stores {(furnishing or fitting A47F)}
1/1238	. . . {Shelters for engines, e.g. electrical meter housings}	3/04	. . Restaurants or shops having arrangements for self-service (paying counters A47F 9/02 ; furniture or installations specially adapted for supermarkets A47F 10/00 ; transport aspects B65G ; coin-freed apparatus G07F)
1/1244	. . . {Dressing or beach cabins}	3/06	. Museums; Library buildings
		3/08	. Hospitals, infirmaries, or the like; Schools; Prisons
		3/10	. for meetings, entertainments, or sports
		3/12	. . Tribunals, grandstands or terraces for spectators {or amphitheatres} (auditoriums E04H 3/30 ; chairs, stools, benches A47C)
		3/123	. . . {Telescopic grandstands}

- 3/126 . . . {Foldable, retractable or tiltable tribunes ([E04H 3/123](#) takes precedence)}
- 3/14 . . Gymnasiums; Other sporting buildings (tribunes [E04H 3/12](#))
- 2003/142 . . . {with vertically movable or tiltable playing field or sections}
- 2003/145 . . . {with reconfigurable seating arrangement}
- 2003/147 {using horizontally movable sections of tribunes}
- 3/16 . . . for swimming (swimming or splash baths or pools [E04H 4/00](#))
- 3/165 {having movable parts}
- 3/22 . . Theatres; Concert halls; Studios for broadcasting, cinematography, television or similar purposes (drive-in buildings [E04H 14/00](#); equipment for theatres or concert halls [A63J](#) ; vehicles specially adapted to carry a theatre or stage [B60P 3/025](#))
- 3/24 . . . Constructional features of stages
- 3/26 Revolving stages; Stages able to be lowered (devices for raising or lowering persons [A63J 5/12](#))
- 3/28 Shiftable or portable platforms
- 3/30 . . . Constructional features of auditoriums (chairs, stools, benches [A47C](#); building details providing acoustical effects [E04B 1/99](#))
- 4/00** **Swimming or splash baths or pools** (wave-producers for baths [A47K 3/10](#); separation [B01D](#); treatment of water [C02F](#); wave-producing pumps [F04D 35/00](#))
- 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 (cleaning devices peculiar to vessels [B63B 59/00](#))
- 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** (building construction in general [E04B 1/00](#))

- 2005/005 . {Buildings for data processing centers}
- 5/02 . Buildings or groups of buildings for industrial purposes, e.g. for power-plants, factories ([buildings forming part of cooling plants E04H 5/10](#); [building structures for parking vehicles E04H 6/00](#))
- 5/04 . . Transformer houses; Substations or switchgear houses
- 5/06 . . Pits or building structures for inspection or services ([manhole shafts or other inspection chambers in general E02D 29/12](#))
- 5/08 . Buildings or groups of buildings for agricultural purposes ([silos E04H 7/22](#); [manure storage places A01C 3/02](#); [greenhouses A01G 9/14](#))
- 5/10 . Buildings forming part of cooling plants
- 5/12 . . Cooling towers ([towers in general E04H 12/00](#); [cooling equipment F28](#))
- 6/00 Buildings for parking cars, rolling stock, aircraft, vessels or like vehicles, e.g. garages** ([tents for use as garages E04H 15/00](#); [bicycle stands B62H](#); [storing of vessels on land B63C 15/00](#); [construction of ground-supported surfaces E01C](#); [marking of parking areas on the ground E01F 9/50](#); [building construction in general E04B 1/00](#))
- 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](#); [prefabricated and with undivided interior E04B 1/343](#))
- 6/025 . . {in the form of an overhead canopy, e.g. carports}
- 6/04 . . wheeled, hinged, foldable, telescopic, swinging or otherwise movable ([E04H 6/025 takes precedence](#)); [transportable or collapsible buildings in general E04B 1/343](#))
- 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 ([E04H 6/26 takes precedence](#))}
- 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 the use of conveyor chains or rotatable rollers for horizontal transport
- 6/22 characterised by the use of movable platforms for horizontal transport, {i.e. cars being permanently parked on pallets ([E04H 6/20 takes precedence](#))}
- 6/225 {without transverse movement of the parking palette after leaving the transfer means}
- 6/24 characterised by the use of dollies for horizontal transport, {i.e. cars being permanently parked on wheeled platforms ([E04H 6/20 takes precedence](#))}
- 6/245 {without transverse movement of the wheeled parking platform after leaving the transfer means}
- 6/26 characterised by the use of tiltable floors or floor sections; characterised by the use of movable ramps
- 6/28 characterised by the use of turntables or rotary rings for horizontal transport ([E04H 6/20 takes precedence](#))}
- 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 ([E04H 6/32 takes precedence](#))}
- 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 ([E04H 6/32 - E04H 6/38 take precedence](#))}
- 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 ([structures covering a large free area E04B 1/342](#))
- 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	<ul style="list-style-type: none"> Containers for fluids or gases; Supports therefor (arrangements or adaptations of tanks for water supply E03B 11/00) 	9/12	<ul style="list-style-type: none"> entirely underneath the level of the ground, e.g. air-raided galleries (tunnels, mine galleries E21D)
7/04	<ul style="list-style-type: none"> mainly of metal 	9/14	<ul style="list-style-type: none"> against other dangerous influences, e.g. tornadoes, floods
7/06	<ul style="list-style-type: none"> with vertical axis 	9/145	<ul style="list-style-type: none"> {Floods (protecting building openings E06B 9/00)}
7/065	<ul style="list-style-type: none"> {roof constructions} 	9/16	<ul style="list-style-type: none"> against adverse conditions, e.g. extreme climate, pests
7/14	<ul style="list-style-type: none"> ball-shaped 		
7/16	<ul style="list-style-type: none"> with horizontal axis 		
7/18	<ul style="list-style-type: none"> mainly of concrete, e.g. reinforced concrete, or other stone-like material 	12/00	Towers; Masts or poles; Chimney stacks; Water-towers; Methods of erecting such structures (cooling-towers E04H 5/12 ; supports for road signs E01F 9/60 ; foundation piles E02D 5/22 ; foundations for masts, poles or chimneys E02D 27/42 ; structural elongated members in general E04C 3/00 ; fixed climbing irons E06C 9/04 ; derricks for oil drilling E21B 15/00)
7/20	<ul style="list-style-type: none"> Prestressed constructions 	12/003	<ul style="list-style-type: none"> {Access covers or locks therefor}
7/22	<ul style="list-style-type: none"> Containers for fluent solids, e.g. silos, bunkers; Supports therefor 	2012/006	<ul style="list-style-type: none"> {Structures with truss-like sections combined with tubular-like sections}
2007/225	<ul style="list-style-type: none"> {Silos with retaining wall type wall elements, e.g. trench silos} 	12/02	<ul style="list-style-type: none"> Structures made of specified materials (E04H 12/16, E04H 12/18 take precedence)
7/24	<ul style="list-style-type: none"> Constructions, with or without perforated walls, depending on the use of specified materials 	12/04	<ul style="list-style-type: none"> of wood
7/26	<ul style="list-style-type: none"> mainly of concrete, e.g. reinforced concrete or other stone-like materials 	12/06	<ul style="list-style-type: none"> Truss-like structures
7/28	<ul style="list-style-type: none"> composed of special building elements 	12/08	<ul style="list-style-type: none"> of metal
7/30	<ul style="list-style-type: none"> mainly of metal 	12/085	<ul style="list-style-type: none"> {Details of flanges for tubular masts}
7/32	<ul style="list-style-type: none"> mainly of wood 	12/10	<ul style="list-style-type: none"> Truss-like structures
9/00	Buildings, or groups of buildings, or shelters adapted to withstand or provide protection against abnormal external influences, e.g. war-like action, earthquake, extreme climate (floatable buildings B63B ; foundation aspects E02D ; building constructions in general E04B ; bearings or like supports allowing movement E04B 1/36 ; special details in regard to insulation or other protection E04B 1/62 ; supporting structures for endangered or damaged existing buildings or parts thereof E04G 23/04 ; doors, windows E06B 5/00 ; air-conditioning, ventilation F24F ; camouflage F41H 3/00 ; cells or rooms shielded against dangerous radiation G21F 7/00)	12/12	<ul style="list-style-type: none"> of concrete or other stone-like material, with or without internal or external reinforcements, e.g. with metal coverings, with permanent form elements
9/02	<ul style="list-style-type: none"> withstanding earthquake or sinking of ground (foundations E02D 27/34 ; making use of active or passive dynamic mass damping systems E04B 1/985) 	12/14	<ul style="list-style-type: none"> Truss-like structures
9/021	<ul style="list-style-type: none"> {Bearing, supporting or connecting constructions specially adapted for such buildings} 	12/16	<ul style="list-style-type: none"> Prestressed structures
9/022	<ul style="list-style-type: none"> {and comprising laminated structures of alternating elastomeric and rigid layers} 	12/18	<ul style="list-style-type: none"> movable or with movable sections, e.g. rotatable, telescopic ({flexible slalom gate poles A63C 19/062; flexible road sign supports E01F 9/627}; rotary buildings E04B 1/346)
9/023	<ul style="list-style-type: none"> {and comprising rolling elements, e.g. balls, pins} 	12/182	<ul style="list-style-type: none"> {telescopic (locking of telescopic systems in general F16B 7/10)}
9/024	<ul style="list-style-type: none"> {Structures with steel columns and beams} 	12/185	<ul style="list-style-type: none"> {with identical elements}
9/025	<ul style="list-style-type: none"> {Structures with concrete columns} 	12/187	<ul style="list-style-type: none"> {with hinged sections}
2009/026	<ul style="list-style-type: none"> {Anti-seismic devices with hydraulic or pneumatic damping} 	12/20	<ul style="list-style-type: none"> Side supporting means therefor, e.g. using guy ropes, struts (ground anchors E02D 5/80; fastening means for cables or ropes F16G 11/00)
9/027	<ul style="list-style-type: none"> {Preventive constructional measures against earthquake damage in existing buildings} 	12/22	<ul style="list-style-type: none"> Sockets or holders for poles or posts {(for sports articles, e.g. floor sockets A63B 71/023; for road signs E01F 9/673; foundations for poles, masts or chimneys E02D 27/42)}
9/028	<ul style="list-style-type: none"> {Earthquake withstanding shelters} 	12/2207	<ul style="list-style-type: none"> {not used}
9/029	<ul style="list-style-type: none"> {arranged inside of buildings (E04H 9/06 takes precedence)} 	12/2215	<ul style="list-style-type: none"> {driven into the ground (ground anchors E02D 5/80)}
9/04	<ul style="list-style-type: none"> against air-raided or other warlike actions (respiratory apparatus A62B) 	12/2223	<ul style="list-style-type: none"> {by screwing}
9/06	<ul style="list-style-type: none"> Structures arranged in or forming part of buildings 	12/223	<ul style="list-style-type: none"> {with movable anchoring elements; with separately driven anchor rods}
9/08	<ul style="list-style-type: none"> Structures arranged underneath buildings, e.g. air-raided shelters 	12/2238	<ul style="list-style-type: none"> {to be placed on the ground (Christmas tree stands A47G 33/12)}
9/10	<ul style="list-style-type: none"> Independent shelters; Arrangement of independent splinter-proof walls 	12/2246	<ul style="list-style-type: none"> {filled with water, sand or the like}
		12/2253	<ul style="list-style-type: none"> {Mounting poles or posts to the holder (E04H 12/2284 takes precedence; break-away mountings E01F 9/631)}
		12/2261	<ul style="list-style-type: none"> {on a flat base (E04H 12/08, E04H 12/10 take precedence)}
		12/2269	<ul style="list-style-type: none"> {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 (elevators [B66B](#))
- 12/28 . Chimney stacks, e.g. free-standing, or similar ducts (foundations [E02D 27/42](#); chimneys as part of buildings [E04F 17/02](#); connections between furnace and smoke-stack, chimney equipment [F23](#))
- 12/30 . Water-towers (tanks [B65D 88/00](#); use of high-level tanks [E03B 11/12](#))
- 12/32 . Flagpoles (flags, banners, mountings therefor [G09F 17/00](#))
- 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,**
({coffins, urns [A61G 17/00](#)}; sculpture or other artistic features [B44](#))
- 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 in a single previous group 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, from cantilever supports (supporting frames [E04H 15/34](#))
- 15/06 . . Tents at least partially supported by vehicles
- 15/08 . . . Trailer awnings or the like
- 15/10 . . Heating, lighting or ventilating (for heating, lighting or ventilating devices per se, see the relevant classes, e.g. [F21](#), [F24](#))
- 15/12 . . . Heating
- 15/14 . . . Ventilating
- 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 (connection of valves to inflatable elastic bodies [B60C 29/00](#); inflatable forms for making walls or the like [E04G 11/04](#))
- 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 to another type tent, from tent to canopy, from tent cover into diverse articles (sacks or packs convertible into tents [A45F 4/04](#); coats or capes convertible into tent coverings [A45F 4/14](#))
- 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 {having connecting nodes} ([E04H 15/42](#) takes precedence; building structures having collapsible parts in general [E04B 1/343](#))

15/46	. . . . telescoping and foldable	17/1439	. . . {with separate pickets going through the horizontal members}
15/48	. . . . foldable, i.e. having pivoted or hinged means (E04H 15/405 and E04H 15/46 takes precedence)	17/1443	. . . . {Connections between horizontal members and post}
15/50	. . . . . lazy-tongs type	2017/1447	. . {Details of connections between rails and posts}
15/505	. . . . . {characterised by connecting arches with lazy-tongues}	2017/1452	. . . {the ends of the rails are fixed on the lateral sides of the posts}
15/52	. . . . . parallelogram type	2017/1456	. . . . {the ends of the rails being located in vertical channels extending along a substantial portion of the length of the post}
15/54	. . Covers of tents or canopies (ventilated tent roofs E04H 15/16)	2017/146	. . . {the rails being attached to the front faces of the posts}
15/56	. . Floors	2017/1465	. . . {the rails being supported within blind or through holes of the posts}
15/58	. . Closures; Awnings; Sunshades	2017/1469	. . . . {Snap connections}
15/60	. . Poles	2017/1473	. . . {using fixing devices encircling, partially or fully, the post}
15/62	. . Pegs, stakes or the like	2017/1478	. . . {the posts extending through apertures or cut-outs in the rails}
15/64	. . Tent or canopy cover fastenings	2017/1482	. . . {the rails being attached to the tops of the posts}
15/642	. . . {with covers held by elongated fixing members locking in longitudinal recesses of a frame}	2017/1486	. . . {the rails being positioned between the uprights of double posts}
15/644	. . . . {the fixing members being a beading}	2017/1491	. . . {Hinged connections between rails and posts}
15/646	. . . . {the fixing members being locked by an additional locking member}	2017/1495	. . {Fences with pivotable slats for reduced wind resistance or for adjusting visibility}
15/648	. . . . {the longitudinal recesses being made from two clamping members}	17/16	. . using prefabricated panel-like elements, e.g. wired frames
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)	17/161	. . . {using wired panels without frame}
17/003	. {Anti-climbing devices, e.g. fixed or rotary spikes}	17/163	. . . {using wired panels with frame}
2017/006	. {Caps for posts}	17/165	. . . {using panels with frame (E04H 17/163 takes precedence)}
17/02	. Wire fencing (E04H 17/14 takes precedence)	17/166	. . . . {with cross-members}
17/04	. . using wire, barbed wire, wire mesh, toothed strips, or the like; Coupling means therefor (wire netting B21F 27/00 ; other metallic fabrics see the relevant classes ; {turnbuckles F16G 11/12 })	17/168	. . . {using panels without frames and fitted in grooves of posts}
17/06	. . Parts for wire fences	17/18	. . . Corrals, i.e. easily transportable or demountable enclosures
17/063	. . . {Fence liners; Vegetation prevention barriers}	17/20	. . Posts therefor
17/066	. . . {Slats for chain link fences}	17/22	. . . Anchoring means therefor, e.g. specially-shaped parts entering the ground; Struts or the like (for towers or masts E04H 12/20 ; sockets for posts E04H 12/22)
17/08	. . . Anchoring means therefor, e.g. specially-shaped parts entering the ground; Struts or the like (for towers or masts E04H 12/20 ; sockets for posts E04H 12/22)		
	NOTE		NOTE
	Parts entering the ground are classified in E04H 12/22		Parts entering the ground are classified in E04H 12/22
17/10	. . characterised by the way of connecting wire to posts; Droppers	17/24	. . Connections for attaching additional wire to frames, posts or railings
17/12	. . . the wire being placed in slots, grooves, or the like	17/26	. . Devices for erecting or removing fences ({ hand-operated hammers having the impact head in form of a sleeve slidable on a shaft B25D 1/16 })
17/14	. Fences constructed of rigid elements, e.g. with posts, with additional wire fillings	17/261	. . {for post and wire handling}
17/1404	. . {using building blocks}	17/263	. . . {for erecting posts (pile driving E02D 7/00)}
17/1408	. . {using woven slats}	17/265	. . . {for removing posts}
17/1413	. . {Post-and-rail fences without vertical cross-members}	17/266	. . . {for stretching or winding wire or wire mesh}
17/1417	. . {Post-and-rail fences with vertical cross-members}	17/268	. . {Hand tools for wiring fences, e.g. tying or splicing tools (E04H 17/266 takes precedence)}
17/1421	. . . {Connections between rail and post}		
17/1426	. . {Picket fences}		
17/143	. . . {with separate pickets attached to the side of the horizontal members}		
17/1434	. . . . {Connections between horizontal members and post}		