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)

1/005 . . . [Modulation co-ordination]
1/02 . . . Dwelling houses; Buildings for temporary habitation, [e.g. summer houses] (E04H 1/12 takes precedence)
   - (E04B 1/343)
1/04 . . . Apartment houses arranged in two or more levels
1/06 . . . Office buildings; Banks (E04H 1/12 takes precedence)
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
   - (E04H 1/1272 takes precedence)
1/1205 . . . [Small buildings erected in the open air]
1/1211 . . . [Waiting shelters for bus stops]
1/1216 . . . [Public W.C.s]
1/1222 . . . [Sales kiosks]
1/1227 . . . [Traffic control kiosks]
1/1233 . . . [Shelters for filling stations]
1/1238 . . . [Shelters for engines, e.g. electrical meter housings]
1/1244 . . . [Dressing or beach cabins]
1/125 . . . [Small buildings, arranged in other buildings (E04H 1/1272 takes precedence)]
1/1255 . . . [Voting booths]
1/1261 . . . [Cubicles for fire-protection]

3/00 Buildings or groups of buildings for public or similar purposes; Institutions, e.g. infirmaries or prisons

3/02 . . . Hotels; Motels; Coffee-houses; Restaurants; Shops; Department stores
3/04 . . . Restaurants or shops having arrangements for self-service
3/06 . . . Museums; Library buildings
3/08 . . . Hospitals, infirmaries, or the like; Schools; Prisons
3/10 . . . for meetings, entertainments, or sports
3/12 . . . Tribunes, grandstands or terraces for spectators
3/123 . . . [Telescopic grandstands]
3/126 . . . [Foldable, retractable or tiltable tribunes (E04H 3/123 takes precedence)]
3/14 . . . Gymnasiums; Other sporting buildings
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
3/165 . . . [having movable parts]
Swimming or splash baths or pools

Devices for producing waves in swimming pools (generating current of water in swimming pools A63B 69/125)

Floating swimming pools

(Easily movable or transportable swimming pools)

with inflatable parts

with shell type elements

(Mono-shell type)

(mainly made of panels (E04H 4/1031 takes precedence))

characterised by the framework for supporting the panels

with a framework combined with a water retaining bag

(characterised by stacked planks or staves)

(made of plastic shells or plastic elements including at least parts of walls and floors)

(made of concrete (E04H 4/1031 takes precedence))

with walls and floor cast in situ

with walls prefabricated and floor cast in situ

with walls and floor prefabricated

Safety devices; Coverings for baths

(Floors adjustable in height)

Coverings consisting of rigid elements [, e.g. coverings composed of separate or connected elements]

(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))

(with lifting mechanism)

(Sliding covers (E04H 4/084 and E04H 4/088 take precedence))

(Covers made in concertina folds)

Coverings of flexible material

(wound-up on a fixed axis)

(with inflatable chambers)

[supported by air pressure under the cover]

[supported by separate buoyant bodies]

[supported by frames]

Devices or arrangements for circulating water [, i.e. devices for removal of polluted water, cleaning baths or for water treatment]

(Treatment of water for swimming pools (filters B01D))

[Devices for removal of polluted water; Circumferential gutters]

(Circumferential gutters)

[Bottom drains]

[Recirculating pumps for swimming pool water]

[Arm-mounted debris traps or flow diverters]

(Floating skimmers)

(Skimmers integrated in the pool wall)
vehicles with mechanical means for shifting or lifting 
without mechanical means for shifting or lifting 
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] 
Garages shaped as a wheel or drum rotatable 
about a horizontal axis 
with means for transport in vertical direction 
only or independently in vertical and horizontal 
directions (E04H 6/14 takes precedence) 
[the cars rolling freely from the transfer 
means (E04H 6/282 takes precedence)] 
using car-gripping transfer means 
(E04H 6/285 takes precedence) 
[without transverse movement of the car 
after leaving the transfer means] 
[using comb-type transfer means 
(E04H 6/287 takes precedence)] 
[without transverse movement of the car 
after leaving the transfer means] 
[using vertical parking loops] 
[using only vertical transport means] 
characterised by use of conveyor chains or 
rotatable rollers for horizontal transport 
characterised by use of movable platforms 
for horizontal transport [. i.e. cars being 
permanently parked on palettes] 
[without transverse movement of the 
parking palette after leaving the transfer means] 
characterised by use of dollies for horizontal 
transport [. i.e. cars being permanently 
parked on wheeled platforms] 
[without transverse movement of the 
wheelied platform after leaving the transfer means] 
characterised by use of tiltle floors or floor 
sections; characterised by use of movable 
ramps 
characterised by use of turntables or rotary 
rings for horizontal transport 
[turntables, rotary elevators or the like 
on which the cars are not permanently 
parked] 
{using car-gripping transfer means] 
{comb-type transfer means] 
with means for transport in horizontal direction 
only 
{the cars rolling freely from the transfer 
means] 
{using car-gripping transfer means] 
{comb-type transfer means] 
characterised by use of conveyor chains or 
rotatable rollers 
characterised by use of movable platforms 
characterised by use of freely-movable 
dollies 
characterised by use of tiltle floors or floor 
sections 
characterised by use of turntables or rotary 
rings 
Devices or arrangements peculiar to garages, not 
covered elsewhere, e.g. securing devices, safety 
device [. monitoring and operating schemes; 
centering devices] 
{Automatically operated car-parks} 
{Positioning devices] 
{Parking guides] 
{Devices for collecting oil or other fluids under 
parked cars (servicing, maintaining, repairing or 
refitting of vehicles B60S 5/00] 
for storing aircraft 
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, 
P17C; foundations E02D 27/38) 
Containers for fluids or gases; Supports therefor 
mainly of metal 
with vertical axis 
{roof constructions] 
ball-shaped 
with horizontal axis 
mainly of concrete, e.g. reinforced concrete, or 
other stone-like material 
{Positioning devices] 
{Automatically operated car-parks} 
{Parking guides] 
{Devices for collecting oil or other fluids under 
parked cars (servicing, maintaining, repairing or 
refitting of vehicles B60S 5/00] 
Silos with retaining wall type wall elements, e.g. 
trench silos] 
Constructions, with or without perforated walls, 
depending on the use of specified materials 
mainly of concrete, e.g. reinforced concrete or 
other stone-like materials 
composed of special building elements 
mainly of metal 
mainly of wood 
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) 
withstanding earthquake or sinking of ground 
(foundations E02D 27/34) 
{Bearing, supporting or connecting constructions 
specially adapted for such buildings] 
{involving active or passive dynamic mass 
damping systems] 
{and comprising laminated structures of 
alternating elastomeric and rigid layers] 
{and comprising rolling elements, e.g. balls, 
pins] 
{Anti-seismic devices with hydraulic or 
pneumatic damping] 
{Structural braces with damping devices] 
{Structures with steel columns and beams] 
{Structures with concrete columns] 
{Preventive constructional measures against 
earthquake damage in existing buildings]
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)
12/006  . . . (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 E16B 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 71/02; 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 9/673))
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
15/18 . . 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
15/201 . . . [with inflatable tubular framework, with or without tent cover]
15/202 . . . [with inflatable panels, without inflatable tubular framework]
15/203 . . . [supported by a non-inflatable structure or framework]
15/204 . . . [made from contiguous inflatable tubes]
15/205 . . . [made from two sheets with intermediate spacer means]
15/206 . . . [Details of inflation devices, e.g. valves, connections to fluid pressure source]
15/207 . . . [Tents specially designed for insulation]
15/208 . . . [with inflatable mattresses]
15/209 . . . [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)]
15/326 . . . [Frame members connected by elastic cord]
15/328 . . . [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 (1E04H 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; Drovers
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 . . . . . . . . . [Stretch-ertype 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]
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

**NOTE**

Parts entering the ground are classified in E04H 12/22