

# CPC COOPERATIVE PATENT CLASSIFICATION

## E FIXED CONSTRUCTIONS

### BUILDING

#### E01 CONSTRUCTION OF ROADS, RAILWAYS, OR BRIDGES

#### E01D CONSTRUCTION OF BRIDGES, {ELEVATED ROADWAYS} OR VIADUCTS; ASSEMBLY OF BRIDGES (bridges extending between terminal buildings and aircraft for embarking or disembarking passengers [B64F 1/305](#); {tracks for special kinds of railways [E01B 25/00](#); culverts [E01F 5/005](#)})

##### WARNINGS

- The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:  

<a href="#">E01D 24/00</a>	covered by	<a href="#">E01D 22/00</a>
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- 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.

<b>1/00</b>	<b>Bridges in general</b> (characterised by their structural type <a href="#">E01D 4/00</a> - <a href="#">E01D 15/00</a> )	15/122	. . {Inflatable or unreelable bridges (inflatable or unreelable girders in general <a href="#">E04C 3/005</a> ); Bridges with main load-supporting structure consisting only of non-rigid elements, e.g. cables}
1/005	. {Bowstring bridges (truss-type bowstring bridges <a href="#">E01D 6/02</a> )}		
<b>2/00</b>	<b>Bridges characterised by the cross-section of their bearing spanning structure</b>	15/124	. . {Folding or telescopic bridges; Bridges built up from folding or telescopic sections ( <a href="#">E01D 15/122</a> , <a href="#">E01D 15/127</a> take precedence; folding or telescopic girders in general <a href="#">E04C 3/005</a> )}
2/02	. of the I-girder type		
2/04	. of the box-girder type	15/127	. . combined with ground-supported vehicles for the transport, handling or placing of such bridges or of sections thereof
<b>4/00</b>	<b>Arch-type bridges</b>		
<b>6/00</b>	<b>Truss-type bridges</b>	15/133	. . built-up from readily separable standardised sections or elements, e.g. Bailey bridges ( <a href="#">E01D 15/127</a> takes precedence)
6/02	. of bowstring type		
<b>11/00</b>	<b>Suspension or cable-stayed bridges</b>	15/14	. Floating bridges, e.g. pontoon bridges (landing bridges <a href="#">E01D 15/24</a> ; floating bodies or pontoons <a href="#">B63B</a> )
11/02	. Suspension bridges		
11/04	. Cable-stayed bridges		
<b>12/00</b>	<b>Bridges characterised by a combination of structures not covered as a whole by a single one of groups <a href="#">E01D 2/00</a> - <a href="#">E01D 11/00</a></b>	15/145	. . {displaceable or with sections movable to allow passing of water-borne traffic (movable bridges actuated by floating bodies <a href="#">E01D 15/005</a> - <a href="#">E01D 15/10</a> )}
<b>15/00</b>	<b>Movable or portable bridges; Floating bridges</b>	15/20	. . collapsible, expandable, inflatable or the like {with main load supporting structure consisting only of non-rigid members} ( <a href="#">E01D 15/22</a> takes precedence)
15/005	. {Movable bridges in general (floating bridges with sections movable to allow passing of water-borne traffic <a href="#">E01D 15/145</a> ; lock gates <a href="#">E02B 7/20</a> ); Constructional elements peculiar to movable bridges}	15/22	. . designed as, or mounted on, vehicles
15/02	. Vertical lift bridges	15/24	. Bridges or similar structures, based on land or on a fixed structure and designed to give access to ships or other floating structures (arrangement of ship-based ramps <a href="#">B63B 27/14</a> ; loading ramps <a href="#">B65G 69/28</a> )
15/04	. Swing bridges		
15/06	. Bascule bridges; Roller bascule bridges, e.g. of Scherzer type		
15/08	. . Drawbridges		
15/10	. Travelling bridges {, i.e. roller bridges}; Sliding bridges; Rotary cylinder bridges, i.e. rotating about longitudinal axis to invert and raise the road	<b>18/00</b>	<b>Bridges specially adapted for particular applications or functions not provided for elsewhere, e.g. aqueducts, bridges for supporting pipe-lines</b>
15/12	. Portable or sectional bridges (floating bridges <a href="#">E01D 15/14</a> )	<b>19/00</b>	<b>Structural or constructional details of bridges</b>
		19/005	. {Piers, trestles, bearings, expansion joints or parapets specially adapted for portable or sectional bridges}

## E01D

- 19/02 . Piers {(E01D 19/005 takes precedence; towers for suspension bridges E01D 19/14)}; Abutments (foundations E02D ); Protecting same against drifting ice (against colliding vehicles E01F 15/00)
- 19/04 . Bearings {(E01D 19/005 takes precedence; specially for movable bridges E01D 15/005 - E01D 15/10)}; Hinges
- 19/041 . . {Elastomeric bearings (E01D 19/048 takes precedence)}
- 19/042 . . {Mechanical bearings (E01D 19/048 takes precedence)}
- 19/043 . . . {Roller bearings}
- 19/045 . . . {Line and point rocker bearings}
- 19/046 . . . {Spherical bearings}
- 19/047 . . . {Pot bearings}
- 19/048 . . {Bearings being adjustable once installed; Bearings used in incremental launching}
- 19/06 . Arrangement, construction or bridging of expansion joints {(E01D 19/005 takes precedence; in movable bridges E01D 15/005 - E01D 15/10); sealing joints not restricted to expansion joints for bridges E04B 1/68}
- 19/062 . . {Joints having intermediate beams}
- 19/065 . . {Joints having sliding plates}
- 19/067 . . {Flat continuous joints cast *in situ*}
- 19/08 . Damp-proof or other insulating layers; Drainage arrangements or devices {; Bridge deck surfacings (bridge decks *per se* E01D 19/125)}
- 19/083 . . {Waterproofing of bridge decks; Other insulations for bridges, e.g. thermal (insulation for buildings in general E04B 1/62); Bridge deck surfacings (road surfacings in general E01C)}
- 19/086 . . {Drainage arrangements or devices (surface drainage of roads in general E01C 11/224; roof drainage E04D 13/04)}
- 19/10 . Railings; Protectors against smoke or gases, e.g. of locomotives; Maintenance travellers; Fastening of pipes or cables to bridges ({pipe-line bridges E01D 18/00}); supports for pipes, cables or protective tubing, e.g. hangers, holders, clamps, cleats, clips, brackets, F16L 3/00)
- 19/103 . . {Parapets, railings (E01D 19/005 takes precedence; balustrades in general E04F 11/18); Guard barriers or road-bridges (in general E01F 15/00)}
- 19/106 . . {Movable inspection or maintenance platforms, e.g. travelling scaffolding or vehicles specially designed to provide access to the undersides of bridges (lifting devices for movable platforms on vehicles in general B66F 11/04)}
- 19/12 . Grating or flooring for bridges; Fastening railway sleepers or tracks to bridges (sleepers E01B 3/00)
- 19/125 . . {Grating or flooring for bridges (waterproofing thereof E01D 19/083; floors in general E04B 5/00)}
- 19/14 . Towers; Anchors {; Connection of cables to bridge parts}; Saddle supports
- 19/16 . Suspension cables; Cable clamps for suspension cables {; Pre- or post-stressed cables}
- 21/00 Methods or apparatus specially adapted for erecting or assembling bridges**
- 21/06 . by translational movement of the bridge or bridge sections {(E01D 15/127, E01D 15/133 and E01D 21/10 take precedence)}
- 21/065 . . {Incremental launching}
- 21/08 . by rotational movement of the bridge or bridge sections
- 21/10 . Cantilevered erection
- 21/105 . . {Balanced cantilevered erection}
- 22/00 Methods or apparatus for repairing or strengthening existing bridges {(electrochemical desalination or re-alkalisation C04B 41/00); Methods or apparatus for dismantling bridges}**
- 2101/00 Material constitution of bridges**
- 2101/10 . Wood
- 2101/20 . Concrete, stone or stone-like material
- 2101/22 . . Masonry; Bricks
- 2101/24 . . Concrete
- 2101/26 . . . reinforced
- 2101/262 . . . . {with steel fibres}
- 2101/264 . . . . {with glass fibres}
- 2101/266 . . . . {with fibres other than steel or glass}
- 2101/268 . . . . {Composite concrete-metal}
- 2101/28 . . . . prestressed
- 2101/285 . . . . . {Composite prestressed concrete-metal}
- 2101/30 . Metal (E01D 2101/26 takes precedence)
- 2101/32 . . prestressed
- 2101/34 . . non-ferrous, e.g. aluminium
- 2101/40 . Plastics