

# 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:  
[E01D 24/00](#) covered by
- 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> );
1/005	. {Bowstring bridges (truss-type bowstring bridges <a href="#">E01D 6/02</a> )}		Bridges with main load-supporting structure consisting only of non-rigid elements, e.g. cables}
<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