

**CPC****COOPERATIVE PATENT CLASSIFICATION****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](#)})

**E01D 1/00**

**Bridges in general** (characterised by their structural type [E01D 4/00](#) - [E01D 15/00](#))

**E01D 1/005**

- {Bowstring bridges (truss-type bowstring bridges [E01D 6/02](#))}

**E01D 2/00**

**Bridges characterised by the cross-section of their bearing spanning structure**

**E01D 2/02**

- of the I-girder type

**E01D 2/04**

- of the box-girder type

**E01D 4/00**

**Arch-type bridges**

**E01D 6/00**

**Truss-type bridges**

**E01D 6/02**

- of bowstring type

**E01D 11/00**

**Suspension or cable-stayed bridges**

**E01D 11/02**

- Suspension bridges

**E01D 11/04**

- Cable-stayed bridges

**E01D 12/00**

**Bridges characterised by a combination of structures not covered as a whole by a single one of groups [E01D 2/00](#) - [E01D 11/00](#)**

**E01D 15/00**

**Movable or portable bridges; Floating bridges**

**E01D 15/005**

- {Movable bridges in general (floating bridges with sections movable to allow passing of water-borne traffic [E01D 15/145](#); lock gates [E02B 7/20](#)); Constructional elements peculiar to movable bridges}

**E01D 15/02**

- Vertical lift bridges

**E01D 15/04**

- Swing bridges

**E01D 15/06**

- Bascule bridges; Roller bascule bridges, e.g. of Scherzer type

**E01D 15/08**

- . Drawbridges

**E01D 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

**E01D 15/12**

- Portable or sectional bridges (floating bridges [E01D 15/14](#))

**E01D 15/122**

- . {Inflatable or unreelable bridges (inflatable or unreelable girders in general [E04C 3/005](#)); Bridges with main load-supporting structure consisting only of non-rigid elements, e.g. cables}

**E01D 15/124**

- . {Folding or telescopic bridges; Bridges built up from folding or telescopic sections ([E01D 15/122](#), [E01D 15/127](#) take precedence; folding or telescopic girders in general [E04C 3/005](#))}

- E01D 15/127
  - . combined with ground-supported vehicles for the transport, handling or placing of such bridges or of sections thereof
- E01D 15/133
  - . built-up from readily separable standardised sections or elements, e.g. Bailey bridges ([E01D 15/127](#) takes precedence)
- E01D 15/14
  - Floating bridges, e.g. pontoon bridges ([landing bridges E01D 15/24](#); [floating bodies or pontoons B63B](#))
- E01D 15/145
  - . {displaceable or with sections movable to allow passing of water-borne traffic ([movable bridges actuated by floating bodies E01D 15/005 - E01D 15/10](#))}
- E01D 15/20
  - . collapsible, expandable, inflatable or the like {with main load supporting structure consisting only of non-rigid members} ([E01D 15/22](#) takes precedence)
- E01D 15/22
  - . designed as, or mounted on, vehicles
- E01D 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 B63B 27/14](#); [loading ramps B65G 69/28](#))
- E01D 18/00**

**Bridges specially adapted for particular applications or functions not provided for elsewhere, e.g. aqueducts, bridges for supporting pipe-lines**
- E01D 19/00**

**Structural or constructional details of bridges**
- E01D 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](#))}
- E01D 19/04
  - Bearings {([E01D 19/005](#) takes precedence; specially for movable bridges [E01D 15/005 - E01D 15/10](#))}; Hinges
- E01D 19/041
  - . {Elastomeric bearings ([E01D 19/048](#) takes precedence)}
- E01D 19/042
  - . {Mechanical bearings ([E01D 19/048](#) takes precedence)}
- E01D 19/043
  - . . {Roller bearings}
- E01D 19/045
  - . . {Line and point rocker bearings}
- E01D 19/046
  - . . {Spherical bearings}
- E01D 19/047
  - . . {Pot bearings}
- E01D 19/048
  - . {Bearings being adjustable once installed; Bearings used in incremental launching}
- E01D 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](#)}
- E01D 19/062
  - . {Joints having intermediate beams}
- E01D 19/065
  - . {Joints having sliding plates}
- E01D 19/067
  - . {Flat continuous joints cast in situ}
- E01D 19/08
  - Damp-proof or other insulating layers; Drainage arrangements or devices {Bridge deck surfacings ([bridge decks per se E01D 19/125](#))}
- E01D 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](#))}

- E01D 19/086
  - . . {Drainage arrangements or devices (surface drainage of roads in general [E01C 11/224](#); roof drainage [E04D 13/04](#))}
- E01D 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](#))
- E01D 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](#))}
- E01D 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](#))}
- E01D 19/12
  - . Grating or flooring for bridges; Fastening railway sleepers or tracks to bridges ([sleepers E01B 3/00](#))
- E01D 19/125
  - . . {Grating or flooring for bridges (waterproofing thereof [E01D 19/083](#); floors in general [E04B 5/00](#))}
- E01D 19/14
  - . Towers; Anchors; {[Connection of cables to bridge parts](#)}; Saddle supports
- E01D 19/16
  - . Suspension cables; Cable clamps for suspension cables; {[Pre- or post-stressed cables](#)}
  
- E01D 21/00**
**Methods or apparatus specially adapted for erecting or assembling bridges**
- E01D 21/06
  - . by translational movement of the bridge or bridge sections ({[E01D 15/127](#), [E01D 15/133](#) and [E01D 21/10](#) take precedence})
- E01D 21/065
  - . . {Incremental launching}
- E01D 21/08
  - . by rotational movement of the bridge or bridge sections
- E01D 21/10
  - . Cantilevered erection
- E01D 21/105
  - . . {Balanced cantilevered erection}
  
- E01D 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](#)}**
  
- E01D 2101/00**
**Material constitution of bridges**
- E01D 2101/10
  - . Wood
- E01D 2101/20
  - . Concrete, stone or stone-like material
- E01D 2101/22
  - . . Masonry; Bricks
- E01D 2101/24
  - . . Concrete
- E01D 2101/26
  - . . . reinforced
- E01D 2101/262
  - . . . . {with steel fibres}
- E01D 2101/264
  - . . . . {with glass fibres}
- E01D 2101/266
  - . . . . {with fibres other than steel or glass}
- E01D 2101/268
  - . . . . {Composite concrete-metal}
- E01D 2101/28
  - . . . . prestressed
- E01D 2101/285
  - . . . . . {Composite prestressed concrete-metal}
- E01D 2101/30
  - . Metal ([E01D 2101/26](#) takes precedence)
- E01D 2101/32
  - . . prestressed

- E01D 2101/34 . . non-ferrous, e.g. aluminium
- E01D 2101/40 . Plastics