

# CPC COOPERATIVE PATENT CLASSIFICATION

## F MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING (NOTE omitted)

### ENGINEERING IN GENERAL

#### F16 ENGINEERING ELEMENTS AND UNITS; GENERAL MEASURES FOR PRODUCING AND MAINTAINING EFFECTIVE FUNCTIONING OF MACHINES OR INSTALLATIONS; THERMAL INSULATION IN GENERAL

#### F16G BELTS, CABLES, OR ROPES, PREDOMINANTLY USED FOR DRIVING PURPOSES; CHAINS; FITTINGS PREDOMINANTLY USED THEREFOR

##### NOTE

Attention is drawn to the following places:

<a href="#">B63B 21/04</a>	Fastening equipment for chains, ropes or the like for ships
<a href="#">B63B 21/20</a>	Adaptations of chains, ropes or the like for ships
<a href="#">B65G 15/30</a>	Endless conveyor belts
<a href="#">B65G 17/38</a> , <a href="#">B65G 19/20</a>	Traction chains for conveyors
<a href="#">F16H</a>	Gearings using flexible members
<a href="#">F16H 9/24</a>	Chains specially adapted for gearings with variable ratio
<a href="#">H05F</a>	Preventing or carrying-off electrostatic charges.

##### WARNING

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>Driving-belts</b> (V-belts <a href="#">F16G 5/00</a> ; conveyor belt <a href="#">B65G</a> )	<b>3/00</b>	<b>Belt fastenings, e.g. for conveyor belts</b> (for V-belts <a href="#">F16G 7/00</a> )
1/02	• made of leather ( <a href="#">F16G 1/28</a> takes precedence; making thereof <a href="#">C14B 9/00</a> {; consisting of several parts <a href="#">F16G 1/22</a> })	3/003	• {Apparatus or tools for joining belts (stapler <a href="#">B25C 5/00</a> )}
1/04	• made of fibrous material, e.g. textiles, whether rubber-covered or not ( <a href="#">F16G 1/28</a> takes precedence; making thereof <a href="#">D03D</a> {; consisting of several parts <a href="#">F16G 1/22</a> })	3/006	• {Traction devices to bring together belts, cables or chains}
1/06	• made of rubber ( <a href="#">F16G 1/28</a> takes precedence; making thereof <a href="#">B29D 29/00</a> {consisting of several parts <a href="#">F16G 1/22</a> })	3/02	• with series of eyes or the like, interposed and linked by a pin to form a hinge ( <a href="#">F16G 3/09</a> takes precedence)
1/08	• . with reinforcement bonded by the rubber	3/04	• . in which the ends of separate U-shaped or like eyes are attached to the belt by parts penetrating into it
1/10	• . . with textile reinforcement	3/06	• with outwardly-bent, mutually-connected belt ends
1/12	• . . with metal reinforcement	3/07	• Friction clamps, e.g. of grommet-thimble type
1/14	• made of plastics ( <a href="#">F16G 1/28</a> takes precedence; making thereof <a href="#">B29D 29/00</a> {consisting of several parts <a href="#">F16G 1/22</a> })	3/08	• consisting of plates and screw-bolts or rivets ( <a href="#">F16G 3/06</a> takes precedence)
1/16	• . with reinforcement bonded by the plastic material {(making thereof <a href="#">B32B</a> )}	3/09	• . the plates forming a hinge
1/18	• made of wire (making thereof <a href="#">B21F 43/00</a> {; consisting of several parts <a href="#">F16G 1/22</a> })	3/10	• Joining belts by sewing, sticking, vulcanising, or the like; Constructional adaptations of the belt ends for this purpose
1/20	• made of a single metal strip (making thereof <a href="#">B21D 53/14</a> )	3/12	• Joining belts by lacing
1/21	• built-up from superimposed layers, e.g. zig-zag folded	3/14	• with extensible parts; with resilient parts
1/22	• consisting of several parts	3/16	• Devices or machines for connecting driving-belts or the like
1/24	• . in the form of links (in the shape of chain links <a href="#">F16G 13/08</a> )	<b>5/00</b>	<b>V-belts, i.e. belts of tapered cross-section</b>
1/26	• . in the form of strips or lamellae	5/02	• made of leather ( <a href="#">F16G 5/20</a> takes precedence {; consisting of several parts <a href="#">F16G 5/16</a> })
1/28	• with a contact surface of special shape, e.g. toothed	5/04	• made of rubber ( <a href="#">F16G 5/02</a> takes precedence {consisting of several parts <a href="#">F16G 5/16</a> })
		5/06	• . with reinforcement bonded by the rubber
		5/08	• . . with textile reinforcement

- 5/10 . . . with metal reinforcement
- 5/12 . made of plastics ([F16G 5/20](#) takes precedence  
{consisting of several parts [F16G 5/16](#)})
- 5/14 . . with reinforcement bonded by the plastic material
- 5/16 . consisting of several parts
- 5/163 . . {with means allowing lubrication ([F16G 5/18](#)  
takes precedence)}
- 5/166 . . {with non-metallic rings ([F16G 5/18](#) takes  
precedence)}
- 5/18 . . in the form of links
- 5/20 . with a contact surface of special shape, e.g. toothed
- 5/22 . built-up from superimposed layers
- 5/24 . . zig-zag folded
- 7/00 V-belt fastenings**
- 7/02 . locked, e.g. riveted
- 7/04 . quickly detachable
- 7/06 . adjustable, e.g. for tension
- 9/00 Ropes or cables specially adapted for driving,  
or for being driven by, pulleys or other gearing  
elements (ropes or cables in general [D07B](#))**
- 9/02 . made of leather; having enveloping sheathings made  
of leather
- 9/04 . made of rubber or plastics ([F16G 9/02](#) takes  
precedence)
- 11/00 Means for fastening cables or ropes to one another  
or to other objects; Caps or sleeves for fixing on  
cables or ropes (attaching ropes or cables to lift  
cars or cages [B66B 7/08](#), to winch drums or barrels  
[B66D 1/34](#); ground anchors [E02D 5/00](#); anchoring  
devices for prestressed members [E04C 5/00](#); rope  
clamps in earth drilling [E21B 19/12](#))**
- 11/02 . with parts deformable to grip the cable or cables;  
Fastening means which engage a sleeve or the like  
fixed on the cable
- 11/025 . . {Fastening means which engage a sleeve or the  
like fixed on the cable, e.g. caps ([F16G 11/143](#)  
and [F16G 11/146](#) take precedence)}
- 11/03 . incorporating resiliently-mounted members for  
attachment of the cable end
- 11/04 . with wedging action, e.g. friction clamps  
([F16G 11/02](#), {[F16G 11/10](#)} take precedence; {eyes  
for grommet-thimble type fastenings [F16G 11/146](#)})
- 11/042 . . {using solidifying liquid material forming a  
wedge}
- 11/044 . . {friction clamps deforming the cable, wire, rope  
or cord}
- 11/046 . . . {by bending the cable around a surface}
- 11/048 . . . {by moving a surface into the cable}
- 11/05 . . by using conical plugs insertable between the  
strands
- 11/06 . with laterally-arranged screws ([F16G 11/02](#),  
[F16G 11/04](#) take precedence)
- 11/08 . Fastenings for securing ends of driving-cables to  
one another, the fastenings having approximately  
the same diameter as the cables
- 11/09 . . incorporating hinge joints or pivots for the  
attachment of the cable ends
- 11/10 . Quick-acting fastenings; Clamps holding in one  
direction only
- 11/101 . . {deforming the cable by moving a part of the  
fastener}
- 11/103 . . {deforming the cable by bending it around or  
inserting it into the fastener}
- 11/105 . . {Clamps holding in one direction only}
- 11/106 . . . {using a toothed surface}
- 11/108 . . . {using a ball or a cylinder}
- 11/12 . Connections or attachments, e.g. turnbuckles,  
adapted for straining of cables, ropes, or wire  
(straining wire in general [B21F 9/00](#))
- 11/14 . Devices or coupling-pieces designed for easy  
formation of adjustable loops, e.g. choker hooks;  
Hooks or eyes with integral parts designed to  
facilitate quick attachment to cables or ropes at  
any point, e.g. by forming loops ([crane hooks](#)  
[B66C 1/34](#); hooks or eyes in general [F16B 45/00](#))
- 11/143 . . {Hooks}
- 11/146 . . {Eyes}
- 13/00 Chains (making thereof [B21L](#))**
- 13/02 . Driving-chains (specially adapted to gearings with  
variable gear-ratio [F16H 9/00](#))
- 13/04 . . Toothed chains
- 13/06 . . with links connected by parallel driving-pins  
with or without rollers {so called open links (if  
the parallel coupling pins have only a joining  
function - so called closed links - [F16G 13/02](#))}
- 13/07 . . . the links being of identical shape, e.g. cranked
- 13/08 . . with links closely interposed on the joint pins  
([F16G 13/04](#) takes precedence)
- 13/10 . . with universal joints
- 13/12 . Hauling- or hoisting-chains {so called ornamental  
chains}
- 13/14 . . built up from readily-separable links
- 13/16 . . with arrangements for holding electric cables,  
hoses, or the like
- 13/18 . Chains having special overall characteristics
- 13/20 . . stiff; Push-pull chains
- 13/22 . . extensible {(not used, see [F16G 13/18](#))}
- 13/24 . . . resilient {(not used, see [F16G 13/18](#))}
- 15/00 Chain couplings, Shackles; Chain joints; Chain  
links; Chain bushes (making chain elements [B21L](#))**
- 15/02 . for fastening more or less permanently
- 15/04 . Quickly-detachable chain couplings; Shackles  
{chain links with rapid junction means are classified  
according to the corresponding kind of chain}
- 15/06 . . Shackles designed for attachment by joint pins to  
chain elements, e.g. D-shackles {so called harp  
links; the D-chain links are classified according to  
the corresponding kind of chain}
- 15/08 . Swivels
- 15/10 . Emergency joints or links
- 15/12 . Chain links
- 15/14 . . made of sheet metal, e.g. profiled
- 17/00 Hooks as integral parts of chains (hooks for cranes  
[B66C 1/34](#); hooks in general [F16B 45/00](#))**