

# CPC COOPERATIVE PATENT CLASSIFICATION

## B PERFORMING OPERATIONS; TRANSPORTING (NOTES omitted)

### TRANSPORTING

#### B66 HOISTING; LIFTING; HAULING

**B66F HOISTING, LIFTING, HAULING OR PUSHING, NOT OTHERWISE PROVIDED FOR, e.g. DEVICES WHICH APPLY A LIFTING OR PUSHING FORCE DIRECTLY TO THE SURFACE OF A LOAD** ({invalid lifting devices [A61G 7/10](#); } mounting artificial islands on piles or like supports [E02B 17/00](#) : scaffolding combined with lifting devices [E04G 1/22](#); lifting devices for sliding forms [E04G 11/24](#); lifting of buildings [E04G 23/06](#); shores or struts [E04G 25/00](#); lifts or other hoisting devices on ladders [E06C 7/12](#); props for mining [E21D 15/00](#))

#### 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:  
[B66F 19/02](#) covered by [B66F 19/00](#)
- 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>Devices, e.g. jacks, for lifting loads in predetermined steps</b>	<b>3/245</b>	. . {comprising toggle levers (lazy-tongs mechanisms <a href="#">B66F 3/22</a> )}
1/02	. with locking elements, e.g. washers, co-operating with posts	3/247	. . {pneumatically actuated ( <a href="#">B66F 3/35</a> takes precedence)}
1/025	. . {the devices being operated by fluid pressure ( <a href="#">B66F 1/08</a> takes precedence)}	3/25	. . Constructional features
1/04	. . the posts being toothed	3/26	. . . Adaptations or arrangements of pistons
1/06	. . . and the devices being actuated mechanically	3/28	. . . . telescopic
1/08	. . . and the devices being operated by fluid pressure	3/30	. . . with positive brakes or locks
<b>3/00</b>	<b>Devices, e.g. jacks, adapted for uninterrupted lifting of loads (mobile jacks of the garage type <a href="#">B66F 5/00</a>)</b>	3/32	. . . with means for avoiding excessive shocks on completion of movements
3/005	. {with rocking arm or sector}	3/35	. . . Inflatable flexible elements, e.g. bellows (inflatable load-engaging elements <a href="#">B66F 3/40</a> ; connection of valves to inflatable elastic bodies <a href="#">B60C 29/00</a> )
3/02	. with racks actuated by pinions	3/36	. . . . Load-engaging elements
3/04	. . with several racks	3/38	. . . . adjustable relative to piston
3/06	. . with racks comprising pivotable toothed sections or segments, e.g. arranged in pairs	3/40	. . . . inflatable (connection of valves to inflatable elastic bodies <a href="#">B60C 29/00</a> )
3/08	. screw operated ( <a href="#">B66F 3/44</a> takes precedence; <a href="#">gearings F16H</a> )	3/42	. . . with self-contained pumps, e.g. actuated by hand
3/10	. . with telescopic sleeves	3/43	. . Pyrotechnical jacks
3/12	. . comprising toggle levers (lazy-tongs mechanisms <a href="#">B66F 3/22</a> )	3/44	. with self-contained electric driving motors
3/14	. . actuated through pawl-and-ratchet mechanisms	3/46	. Combinations of several jacks with means for interrelating lifting or lowering movements
3/16	. . actuated through bevel-wheel gearings	<b>5/00</b>	<b>Mobile jacks of the garage type mounted on wheels or rollers</b>
3/18	. . actuated through worm gearings	5/02	. with mechanical lifting gear
3/20	. . actuated through multiple or change-speed gearings	5/025	. . {screw-actuated}
3/22	. Lazy-tongs mechanisms ({ <a href="#">B66F 11/042</a> takes precedence})	5/04	. with fluid-pressure-operated lifting gear
3/24	. fluid-pressure operated (water-pressure machines <a href="#">F03B</a> ; hydraulic gearings <a href="#">F16H</a> ; cylinders, pistons <a href="#">F16J</a> ; fluid-pressure servomotors <a href="#">F15B</a> )	<b>7/00</b>	<b>Lifting frames, e.g. for lifting vehicles; Platform lifts</b> ({ <a href="#">B66F 11/04</a> takes precedence } ; for lift-truck platform <a href="#">B66F 9/06</a> )
3/242	. . {suspended jacks}	7/02	. with platforms suspended from ropes, cables, or chains {or screws and movable along pillars}

- 7/025 . . {screw operated}
- 7/04 . . hydraulically or pneumatically operated
- 7/06 . with platforms supported by levers for vertical movement
- 7/0608 . . {driven by screw or spindle}
- 7/0616 . . {Suspended platforms, i.e. the load platform hangs from the base}
- 7/0625 . . {with wheels for moving around the floor}
- 7/0633 . . {Mechanical arrangements not covered by the following subgroups}
- 7/0641 . . {Single levers, e.g. parallel links}
- 7/065 . . {Scissor linkages, i.e. X-configuration}
- 7/0658 . . . {Multiple scissor linkages horizontally arranged}
- 7/0666 . . . {Multiple scissor linkages vertically arranged}
- 7/0675 . . . . {Auxiliary scissors, e.g. above main scissors}
- 7/0683 . . . {Scissor linkage plus tilting action}
- 7/0691 . . {Asymmetric linkages, i.e. Y-configuration}
- 7/08 . . hydraulically or pneumatically operated
- 7/085 . . . {pneumatically operated}
- 7/10 . with platforms supported directly by jacks
- 7/12 . . by mechanical jacks
- 7/14 . . . screw operated
- 7/16 . . by one or more hydraulic or pneumatic jacks
- 7/18 . . . by a single central jack
- 7/20 . . . by several jacks with means for maintaining the platforms horizontal during movement
- 7/22 . with tiltable platforms ([tilting vehicles for unloading B65G 67/34](#))
- 7/24 . for raising or lowering vehicles by their own power
- 7/243 . . {Ramps}
- 7/246 . . {Wheel supporting trolleys}
- 7/26 . for selective lifting of parts of vehicles ([mobile garage jacks B66F 5/00](#))
- 7/28 . Constructional details, e.g. end stops, pivoting supporting members, sliding runners adjustable to load dimensions
- 9/00** **Devices for lifting or lowering bulky or heavy goods for loading or unloading purposes** ([mobile or transportable lifts in, or associated with, buildings and specially adapted to be shifted from one part of a building or other structure to another part or to another building or structure B66B 9/16; cranes B66C](#))
- 9/02 . Stationary loaders or unloaders, e.g. for sacks
- 9/04 . . hydraulically actuated or controlled
- 9/06 . movable, with their loads, on wheels or the like, e.g. fork-lift trucks ([vehicle aspects B60 - B62; vehicles predominantly for transporting loads and modified to facilitate loading or unloading B60P 1/00; low-lift hand trucks for transporting goods B62B 3/06](#))
- 9/061 . . {characterised by having a lifting jib}
- 9/063 . . {Automatically guided}
- 9/065 . . non-masted ([mobile jacks of the garage type mounted on wheels or rollers B66F 5/00](#))
- 9/0655 . . . {with a telescopic boom}
- 9/07 . Floor-to-roof stacking devices, e.g. "stacker cranes", "retrievers"
- 9/072 . . . {Travelling gear therefor}
- 9/075 . . Constructional features or details
- 9/07504 . . . {Accessories, e.g. for towing, charging, locking}
- 9/07509 . . . {Braking}
- 9/07513 . . . {Details concerning the chassis}
- 9/07518 . . . . {Fuel or oil tank arrangements}
- 9/07522 . . . . {Variable length or width chassis}
- 9/07527 . . . . {Covers for, e.g. engines or batteries}
- 9/07531 . . . . {Battery compartments}
- 9/07536 . . . . . {Battery stoppers, i.e. means to hold battery in position}
- 9/0754 . . . . {Battery removal arrangements}
- 9/07545 . . . {Overhead guards}
- 9/0755 . . . {Position control; Position detectors}
- 9/07554 . . . {Counterweights}
- 9/07559 . . . {Stabilizing means}
- 9/07563 . . . {Fork-lift trucks adapted to be carried by transport vehicles}
- 9/07568 . . . {Steering arrangements}
- 9/07572 . . . {Propulsion arrangements}
- 9/07577 . . . . {not supported by wheels, e.g. tracks or air cushions}
- 9/07581 . . . {Remote controls}
- 9/07586 . . . {Suspension or mounting of wheels on chassis}
- 9/0759 . . . {Details of operating station, e.g. seats, levers, operator platforms, cabin suspension}
- 9/07595 . . . {Cooling arrangements for device or operator}
- 9/08 . . . Masts; Guides; Chains
- 9/082 . . . . {inclinable}
- 9/085 . . . . {Multiple forks, i.e. more than one pair mounted on a single mast or with more than one mast}
- 9/087 . . . . {Monomasts}
- 9/10 . . . . movable in a horizontal direction relative to truck
- 9/105 . . . . . {Articulated, i.e. front chassis with wheels and mast rotatable relative to rear chassis with wheels}
- 9/12 . . . Platforms; Forks; Other load supporting or gripping members
- 9/122 . . . . {longitudinally movable}
- 9/125 . . . . {rotatable about a longitudinal axis}
- 9/127 . . . . {Working platforms}
- 9/14 . . . . laterally movable, e.g. swingable, for slewing or transverse movements
- 9/141 . . . . . {with shuttle-type movement}
- 9/142 . . . . . {Movements of forks either individually or relative to each other}
- 9/143 . . . . . {Movements of forks relative to each other - symmetric}
- 9/144 . . . . . {Movements of forks relative to each other - independent}
- 9/145 . . . . . {Rotation of fork around vertical axis}
- 9/146 . . . . . {Side shift, i.e. both forks move together sideways relative to fork support}
- 9/147 . . . . . {Whole unit including fork support moves relative to mast}
- 9/148 . . . . . {Whole unit including fork support moves sideways}
- 9/149 . . . . . {Whole unit including fork support rotates}
- 9/16 . . . . inclinable relative to mast
- 9/165 . . . . . {Foldable forks, i.e. where only the horizontal section moves}
- 9/18 . . . . Load gripping or retaining means
- 9/181 . . . . . {by suction means}

9/182	. . . . . {by magnetic means}	2700/07	. Lifting devices actuated by the driving force of water
9/183	. . . . . {Coplanar side clamps}	2700/09	. Other lifting devices
9/184	. . . . . {Roll clamps}	2700/12	. Lifting platforms for vehicles or motorcycles or similar lifting apparatus
9/185	. . . . . {by internally expanding grippers}	2700/123	. . Details concerning the support members or devices not related to the lifting itself
9/186	. . . . . {Container lifting frames}	2700/126	. . Arrangements in which the platform is fixed to the upper end of a single or plural jacks
9/187	. . . . . {Drum lifting devices}		
9/188	. . . . . {Stacked-bricks lifting devices}		
9/19	. . . . Additional means for facilitating unloading		
9/195	. . . . . {for pushing the load}		
9/20	. . . Means for actuating or controlling masts, platforms, or forks (power take-off from vehicle transmissions, combined with vehicle propulsion systems <a href="#">B60K</a> )		
9/205	. . . . {Arrangements for transmitting pneumatic, hydraulic or electric power to movable parts or devices (for cranes <a href="#">B66C 13/12</a> )}		
9/22	. . . . Hydraulic devices or systems		
9/24	. . . . Electrical devices or systems		
<b>11/00</b>	<b>Lifting devices specially adapted for particular uses not otherwise provided for</b> (ground-engaging vehicle fittings for supporting, lifting or manoeuvring the vehicle <a href="#">B60S 9/00</a> )		
11/04	. for movable platforms or cabins, e.g. on vehicles, permitting workmen to place themselves in any desired position for carrying out required operations ({Working platforms on fork-lift trucks <a href="#">B66F 9/127</a> ; } vehicle aspects of service vehicles <a href="#">B60P 3/14</a> ; platforms for cleaning windows <a href="#">A47L 3/02</a> ; devices for rescuing persons from buildings <a href="#">A62B 1/02</a> ; liftable or lowerable platforms for use on ladders <a href="#">E06C 7/16</a> ; maintenance travellers for bridges <a href="#">E01D 19/10</a> ; scaffolds on an extensible sub-structure <a href="#">E04G 1/22</a> )		
11/042	. . {actuated by lazy-tongs mechanisms or articulated levers}		
11/044	. . {Working platforms suspended from booms}		
11/046	. . . {of the telescoping type}		
11/048	. . {Mobile camera platform}		
<b>13/00</b>	<b>Common constructional features or accessories</b>		
13/005	. {Thrust chain devices}		
<b>15/00</b>	<b>Crowbars or levers</b>		
<b>17/00</b>	<b>Safety devices, e.g. for limiting or indicating lifting force</b>		
17/003	. {for fork-lift trucks}		
17/006	. {for working platforms}		
<b>19/00</b>	<b>Hoisting, lifting, hauling or pushing, not otherwise provided for</b>		
19/005	. {Lifting devices for manhole covers}		
<b>2700/00</b>	<b>Lifting apparatus</b>		
2700/02	. Lifting devices with a toothed post and pawl latch or with a post and locking elements		
2700/025	. . with a post and locking elements		
2700/03	. Lifting jacks with pinion and rack		
2700/04	. Jacks with screw and nut		
2700/05	. Hydraulic jacks		
2700/052	. . Support- or transmission members		
2700/055	. . Jacks with a single cylinder		
2700/057	. . . Pistons, e.g. telescopic; Cylinders or sealing joints; Hydraulic travel-limiting devices or shock damping		