

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.

1/00	Devices, e.g. jacks, for lifting loads in predetermined steps	3/245	. . { comprising toggle levers (lazy-tongs mechanisms B66F 3/22) }
1/02	. with locking elements, e.g. washers, co-operating with posts	3/247	. . { pneumatically actuated (B66F 3/35 takes precedence) }
1/025	. . { the devices being operated by fluid pressure (B66F 1/08 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
3/00	Devices, e.g. jacks, adapted for uninterrupted lifting of loads (mobile jacks of the garage type B66F 5/00)	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 B66F 3/40 ; connection of valves to inflatable elastic bodies B60C 29/00)
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 B60C 29/00)
3/08	. screw operated (B66F 3/44 takes precedence ; gearings F16H)	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 B66F 3/22)	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	5/00	Mobile jacks of the garage type mounted on wheels or rollers
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 { (B66F 11/042 takes precedence) }	5/04	. with fluid-pressure-operated lifting gear
3/24	. fluid-pressure operated (water-pressure machines F03B ; hydraulic gearings F16H ; cylinders, pistons F16J ; fluid-pressure servomotors F15B)	7/00	Lifting frames, e.g. for lifting vehicles; Platform lifts ({ B66F 11/04 takes precedence } ; for lift-truck platform B66F 9/06)
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 {inclinalable}
- 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 B60K)		
9/205	. . . . {Arrangements for transmitting pneumatic, hydraulic or electric power to movable parts or devices (for cranes B66C 13/12)}		
9/22	. . . . Hydraulic devices or systems		
9/24	. . . . Electrical devices or systems		
11/00	Lifting devices specially adapted for particular uses not otherwise provided for (ground-engaging vehicle fittings for supporting, lifting or manoeuvring the vehicle B60S 9/00)		
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 B66F 9/127 ; } vehicle aspects of service vehicles B60P 3/14 ; platforms for cleaning windows A47L 3/02 ; devices for rescuing persons from buildings A62B 1/02 ; liftable or lowerable platforms for use on ladders E06C 7/16 ; maintenance travellers for bridges E01D 19/10 ; scaffolds on an extensible sub-structure E04G 1/22)		
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}		
13/00	Common constructional features or accessories		
13/005	. {Thrust chain devices}		
15/00	Crowbars or levers		
17/00	Safety devices, e.g. for limiting or indicating lifting force		
17/003	. {for fork-lift trucks}		
17/006	. {for working platforms}		
19/00	Hoisting, lifting, hauling or pushing, not otherwise provided for		
19/005	. {Lifting devices for manhole covers}		
2700/00	Lifting apparatus		
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		