

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

**WARNING**

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

[B66F 19/02](#) covered by [B66F 19/00](#)

**B66F 1/00****Devices, e.g. jacks, for lifting loads in predetermined steps**

- B66F 1/02 . with locking elements, e.g. washers, co-operating with posts
- B66F 1/025 .. {the devices being operated by fluid pressure([B66F 1/08](#) takes precedence )}
- B66F 1/04 .. the posts being toothed
- B66F 1/06 ... and the devices being actuated mechanically
- B66F 1/08 ... and the devices being operated by fluid pressure

**B66F 3/00****Devices, e.g. jacks, adapted for uninterrupted lifting of loads( [mobile jacks of the garage type B66F 5/00](#))**

- B66F 3/005 . {with rocking arm or sector}
- B66F 3/02 . with racks actuated by pinions
- B66F 3/04 .. with several racks
- B66F 3/06 .. with racks comprising pivotable toothed sections or segments, e.g. arranged in pairs
- B66F 3/08 . screw operated([B66F 3/44](#) takes precedence; [gearings F16H](#))
- B66F 3/10 .. with telescopic sleeves
- B66F 3/12 .. comprising toggle levers( [lazy-tongs mechanisms B66F 3/22](#))
- B66F 3/14 .. actuated through pawl-and-ratchet mechanisms
- B66F 3/16 .. actuated through bevel-wheel gearings
- B66F 3/18 .. actuated through worm gearings
- B66F 3/20 .. actuated through multiple or change-speed gearings

- B66F 3/22 . Lazy-tongs mechanisms{([B66F 11/042](#) takes precedence )}
- B66F 3/24 . fluid-pressure operated( [water-pressure machines F03B](#) ; [hydraulic gearings F16H](#) ; [cylinders, pistons F16J](#) ; [fluid-pressure servomotors F15B](#))
- B66F 3/242 .. {suspended jacks}
- B66F 3/245 .. {comprising toggle levers( [lazy-tongs mechanisms B66F 3/22](#))}
- B66F 3/247 .. {pneumatically actuated([B66F 3/35](#) takes precedence )}
- B66F 3/25 .. Constructional features
  - B66F 3/26 ... Adaptations or arrangements of pistons
    - B66F 3/28 .... telescopic
    - B66F 3/30 ... with positive brakes or lock
    - B66F 3/32 ... with means for avoiding excessive shocks on completion of movements
    - B66F 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](#))
    - B66F 3/36 ... Load-engaging elements
      - B66F 3/38 .... adjustable relative to piston
      - B66F 3/40 .... inflatable( [connection of valves to inflatable elastic bodies B60C 29/00](#))
      - B66F 3/42 ... with self-contained pumps, e.g. actuated by hand
  - B66F 3/43 .. Pyrotechnical jacks
- B66F 3/44 . with self-contained electric driving motors
- B66F 3/46 . Combinations of several jacks with means for interrelating lifting or lowering movements
- B66F 5/00                      Mobile jacks of the garage type mounted on wheels or rollers**
- B66F 5/02 . with mechanical lifting gear
- B66F 5/025 .. {screw-actuated}
- B66F 5/04 . with fluid-pressure-operated lifting gear
- B66F 7/00                      Lifting frames, e.g. for lifting vehicles; Platform lifts{([B66F 11/04](#) takes precedence ) ; for lift-truck platform [B66F 9/06](#)}**
- B66F 7/02 . with platforms suspended from ropes, cables, or chains{or screws and movable along pillars}
- B66F 7/025 .. {screw operated}
- B66F 7/04 .. hydraulically or pneumatically operated
- B66F 7/06 . with platforms supported by levers for vertical movement
  - B66F 7/0608 .. {driven by screw or spindle}
  - B66F 7/0616 .. {Suspended platforms, i.e. the load platform hangs from the base}

- B66F 7/0625 . . {with wheels for moving around the floor}
- B66F 7/0633 . . {Mechanical arrangements not covered by the following subgroups}
- B66F 7/0641 . . {Single levers, e.g. parallel links}
- B66F 7/065 . . {Scissor linkages, i.e. X-configuration}
- B66F 7/0658 . . . {Multiple scissor linkages horizontally arranged}
- B66F 7/0666 . . . {Multiple scissor linkages vertically arranged}
- B66F 7/0675 . . . . {Auxiliary scissors, e.g. above main scissors}
- B66F 7/0683 . . . {Scissor linkage plus tilting action}
- B66F 7/0691 . . {Asymmetric linkages, i.e. Y-configuration}
- B66F 7/08 . . hydraulically or pneumatically operated
- B66F 7/085 . . . {pneumatically operated}
  
- B66F 7/10 . with platforms supported directly by jacks
- B66F 7/12 . . by mechanical jacks
- B66F 7/14 . . . screw operated
- B66F 7/16 . . by one or more hydraulic or pneumatic jacks
- B66F 7/18 . . . by a single central jack
- B66F 7/20 . . . by several jacks with means for maintaining the platforms horizontal during movement
  
- B66F 7/22 . with tiltable platforms( [tilting vehicles for unloading B65G 67/34](#))
  
- B66F 7/24 . for raising or lowering vehicles by their own power
- B66F 7/243 . . {Ramps}
- B66F 7/246 . . {Wheel supporting trolleys}
  
- B66F 7/26 . for selective lifting of parts of vehicles( [mobile garage jacks B66F 5/00](#))
  
- B66F 7/28 . Constructional details, e.g. end stops, pivoting supporting members, sliding runners adjustable to load dimensions
  
- B66F 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](#))
  
- B66F 9/02 . Stationary loaders or unloaders, e.g. for sacks
- B66F 9/04 . . hydraulically actuated or controlled
  
- B66F 9/06 . movable, with their loads, on wheels or the like, e.g. fork-lift trucks( [vehicle aspects B60 to 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](#))
  
- B66F 9/061 . . {characterised by having a lifting jib}
- B66F 9/063 . . {Automatically guided}

B66F 9/065	..	non-masted( <a href="#">mobile jacks of the garage type mounted on wheels or rollers</a> <a href="#">B66F 5/00</a> )
B66F 9/0655	...	<a href="#">{with a telescopic boom}</a>
B66F 9/07	..	Floor-to-roof stacking devices, e.g. "stacker cranes", "retrievers"
B66F 9/072	...	<a href="#">{Travelling gear therefor}</a>
B66F 9/075	..	Constructional features or details
B66F 9/07504	...	<a href="#">{Accessories, e.g. for towing, charging, locking}</a>
B66F 9/07509	...	<a href="#">{Braking}</a>
B66F 9/07513	...	<a href="#">{Details concerning the chassis}</a>
B66F 9/07518	....	<a href="#">{Fuel or oil tank arrangements}</a>
B66F 9/07522	....	<a href="#">{Variable length or width chassis}</a>
B66F 9/07527	....	<a href="#">{Covers for e.g. engines or batteries}</a>
B66F 9/07531	....	<a href="#">{Battery compartments}</a>
B66F 9/07536	.....	<a href="#">{Battery stoppers, i.e. means to hold battery in position}</a>
B66F 9/0754	....	<a href="#">{Battery removal arrangements}</a>
B66F 9/07545	...	<a href="#">{Overhead guards}</a>
B66F 9/0755	...	<a href="#">{Position control; Position detectors}</a>
B66F 9/07554	...	<a href="#">{Counterweights}</a>
B66F 9/07559	...	<a href="#">{Stabilizing means}</a>
B66F 9/07563	...	<a href="#">{Fork-lift trucks adapted to be carried by transport vehicles}</a>
B66F 9/07568	...	<a href="#">{Steering arrangements}</a>
B66F 9/07572	...	<a href="#">{Propulsion arrangements}</a>
B66F 9/07577	....	<a href="#">{not supported by wheels, e.g. tracks or air cushions}</a>
B66F 9/07581	...	<a href="#">{Remote controls}</a>
B66F 9/07586	...	<a href="#">{Suspension or mounting of wheels on chassis}</a>
B66F 9/0759	...	<a href="#">{Details of operating station, e.g. seats, levers, operator platforms, cabin suspension}</a>
B66F 9/07595	...	<a href="#">{Cooling arrangements for device or operator}</a>
B66F 9/08	...	Masts; Guides; Chains
B66F 9/082	....	<a href="#">{inclinalable}</a>
B66F 9/085	....	<a href="#">{Multiple forks, i.e. more than one pair mounted on a single mast or with more than one mast}</a>
B66F 9/087	....	<a href="#">{Monomasts}</a>
B66F 9/10	....	movable in a horizontal direction relative to truck
B66F 9/105	.....	<a href="#">{Articulated, i.e. front chassis with wheels and mast rotatable relative to rear chassis with wheels}</a>
B66F 9/12	...	Platforms; Forks; Other load supporting or gripping members
B66F 9/122	....	<a href="#">{longitudinally movable}</a>
B66F 9/125	....	<a href="#">{rotatable about a longitudinal axis}</a>
B66F 9/127	....	<a href="#">{Working platforms}</a>
B66F 9/14	....	laterally movable, e.g. swingable, for slewing or transverse movements

B66F 9/141	.....	{with shuttle-type movement}
B66F 9/142	.....	{Movements of forks either individually or relative to each other}
B66F 9/143	.....	{Movements of forks relative to each other - symmetric}
B66F 9/144	.....	{Movements of forks relative to each other - independent}
B66F 9/145	.....	{Rotation of fork around vertical axis}
B66F 9/146	.....	{Side shift, i.e. both forks move together sideways relative to fork support}
B66F 9/147	.....	{Whole unit including fork support moves relative to mast}
B66F 9/148	.....	{Whole unit including fork support moves sideways}
B66F 9/149	.....	{Whole unit including fork support rotates}
B66F 9/16	....	inclinable relative to mast
B66F 9/165	.....	{Foldable forks, i.e. where only the horizontal section moves}
B66F 9/18	....	Load gripping or retaining means
B66F 9/181	.....	{by suction means}
B66F 9/182	.....	{by magnetic means}
B66F 9/183	.....	{Coplanar side clamps}
B66F 9/184	.....	{Roll clamps}
B66F 9/185	.....	{by internally expanding grippers}
B66F 9/186	.....	{Container lifting frames}
B66F 9/187	.....	{Drum lifting devices}
B66F 9/188	.....	{Stacked-bricks lifting devices}
B66F 9/19	....	Additional means for facilitating unloading
B66F 9/195	.....	{for pushing the load}
B66F 9/20	...	Means for actuating or controlling masts, platforms, or forks( <a href="#">power take-off from vehicle transmissions, combined with vehicle propulsion systems B60K</a> )
B66F 9/205	....	{Arrangements for transmitting pneumatic, hydraulic or electric power to movable parts or devices( <a href="#">for cranes B66C 13/12</a> )}
B66F 9/22	....	Hydraulic devices or systems
B66F 9/24	....	Electrical devices or systems

**B66F 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](#))

B66F 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({ <a href="#">Working platforms on fork-lift trucks B66F 9/127</a> ; } <a href="#">vehicle aspects of service vehicles B60P 3/14</a> ; <a href="#">platforms for cleaning windows A47L 3/02</a> ; <a href="#">devices for rescuing persons from buildings A62B 1/02</a> ; <a href="#">liftable or lowerable platforms for use on ladders E06C 7/16</a> ; <a href="#">maintenance travellers for bridges E01D 19/10</a> ; <a href="#">scaffolds on an extensible sub-structure E04G 1/22</a> )
B66F 11/042	..	{actuated by lazy-tongs mechanisms or articulated levers}
B66F 11/044	..	{Working platforms suspended from booms}
B66F 11/046	...	{of the telescoping type}

B66F 11/048	. . {Mobile camera platform}
<b>B66F 13/00</b>	<b>Common constructional features or accessories</b>
B66F 13/005	. {Thrust chain devices}
<b>B66F 15/00</b>	<b>Crowbars or levers</b>
<b>B66F 17/00</b>	<b>Safety devices, e.g. for limiting or indicating lifting force</b>
B66F 17/003	. {for fork-lift trucks}
B66F 17/006	. {for working platforms}
<b>B66F 19/00</b>	<b>Hoisting, lifting, hauling or pushing, not otherwise provided for</b>
B66F 19/005	. {Lifting devices for manhole covers}
<b>B66F 2700/00</b>	<b>Lifting apparatus</b>
B66F 2700/02	. Lifting devices with a toothed post and pawl latch or with a post and locking elements
B66F 2700/025	. . with a post and locking elements
B66F 2700/03	. Lifting jacks with pinion and rack
B66F 2700/04	. Jacks with screw and nut
B66F 2700/05	. Hydraulic jacks
B66F 2700/052	. . Support- or transmission members
B66F 2700/055	. . Jacks with a single cylinder
B66F 2700/057	. . . Pistons, e.g. telescopic; Cylinders or sealing joints; Hydraulic travel-limiting devices or shock damping
B66F 2700/07	. Lifting devices actuated by the driving force of water
B66F 2700/09	. Other lifting devices
B66F 2700/12	. Lifting platforms for vehicles or motorcycles or similar lifting apparatus
B66F 2700/123	. . Details concerning the support members or devices not related to the lifting itself
B66F 2700/126	. . Arrangements in which the platform is fixed to the upper end of a single or plural jacks