SECTION B — PERFORMING OPERATIONS; TRANSPORTING

B30 PRESSES

B30B PRESSES IN GENERAL; PRESSES NOT OTHERWISE PROVIDED FOR (producing ultra-high pressure or ultra-high pressure and high temperature to effect modifications of a substance, e.g. for making artificial diamonds B01J 3/00) **[2]**

Subclass index

PRESSES CHARACTERISED BY OPERATION OF PRESSING MECHANISMS.....1/00, 3/00, 5/00, 7/00
PRESSES FOR SPECIAL PURPOSES.....9/00, 11/00
OTHER PRESSES.....12/00
DETAILS, ACCESSORIES, CONTROL.....15/00
OTHER PRESSING METHODS.....13/00

1/00 Presses, using a press ram, characterised by the features of the drive therefor, pressure being transmitted directly, or through simple thrust or tension members only, to the press ram or platen

1/02 • by lever mechanism (by toggle mechanism B30B 1/10)
1/04 • • operated by hand or foot
1/06 • • operated by cams, eccentrics, or cranks
1/08 • • operated by fluid-pressure means
1/10 • by toggle mechanism
1/12 • • operated by hand or foot
1/14 • • operated by cams, eccentrics, or cranks
1/16 • • operated by fluid-pressure means
1/18 • by screw means
1/20 • • driven by hand
1/22 • • driven through friction disc means
1/23 • • operated by fluid-pressure means **[2]**
1/24 • by rack-and-pinion means
1/26 • by cams, eccentrics, or cranks
1/28 • • the cam, crank, or eccentric being disposed below the lower platen or table and operating to pull down the upper platen or slide
1/30 • by the pull of chains or ropes
1/32 • by plungers under fluid pressure
1/34 • • involving a plurality of plungers acting on the platen (gas operated B30B 1/38)
1/36 • • having telescoping plungers (gas operated B30B 1/38)
1/38 • • wherein the plungers are operated by pressure of a gas, e.g. steam, air
1/40 • by wedge means
1/42 • by magnetic means, e.g. electromagnetic **[2]**

3/00 Presses characterised by the use of rotary pressing members, e.g. rollers, rings, discs

3/02 • co-operating with a fixed member
3/04 • co-operating with one another, e.g. with co-operating cones
3/06 • • arranged one within another, e.g. with a roller disposed within a rotating ring and co-operating with the inner surface thereof

5/00 Presses characterised by the use of pressing means other than those mentioned in groups B30B 1/00 and B30B 3/00

5/02 • wherein the pressing means is in the form of a flexible element, e.g. diaphragm, urged by fluid pressure **[2]**
5/04 • wherein the pressing means is in the form of an endless band
5/06 • • co-operating with another endless band

7/00 Presses characterised by a particular arrangement of the pressing members

7/02 • having several platens arranged one above the other
7/04 • wherein pressing is effected in different directions simultaneously or in turn

9/00 Presses specially adapted for particular purposes

9/02 • for squeezing-out liquid from liquid-containing material, e.g. juice from fruits, oil from oil-containing material (kitchen equipment A47J; filtering, e.g. straining solids from liquids, using presses in combination with filtering elements B01D; expelling water from textile fabrics or laundry D06C, D06F; drying F26)
9/04 • • using press rams
9/06 • • • co-operating with permeable casings or strainers
9/08 • • • co-operating with a rotary casing
9/10 • • • without use of a casing
9/12 • • using pressing worms or screws co-operating with a permeable casing
9/14 • • • operating with only one screw or worm
9/16 • • • operating with two or more screws or worms
9/18 • • • with means for adjusting the outlet for the solid
9/20 • • using rotary pressing members, other than worms or screws, e.g. rollers, rings, discs
9/22 • • using a flexible element, e.g. diaphragm, urged by fluid pressure (connection of valves to inflatable elastic bodies B60C 29/00) **[3]**
9/24 • • using an endless pressing band
9/26 • • Permeable casings or strainers

9/28 • for forming shaped articles (from material in powder, granular, or paste form, e.g. briquetting presses, B30B 11/00)
9/30 • for baling; Compression boxes therefor (baling hay, straw, or the like A01F)
9/32 • for consolidating scrap metal or for compacting used cars

11/00 Presses specially adapted for forming shaped articles from material in particulate or plastic state, e.g. briquetting presses, tabletting presses (apparatus for forming or shaping of dough A21C 3/00, A21C 11/00; apparatus for shaping clay or mixtures containing cement B28B; apparatus for shaping of plastic or substances in a plastic state B29, e.g. for compression moulding B29C 43/00, for extrusion moulding B29C 47/00)
11/02 • using a ram exerting pressure on the material in a moulding space
11/04 • • co-operating with a fixed mould
11/06 • • • each charge of the material being compressed against the previously formed body
11/08 • • co-operating with moulds carried by a turn-table
11/10 • • • intermittently rotated
11/12 • • co-operating with moulds on the circumference of a rotating drum
11/14 • • co-operating with moulds on a movable carrier other than a turn-table or a rotating drum
11/16 • using pocketed rollers, e.g. two co-operating pocketed rollers
11/18 • using profiled rollers
11/20 • Roller-and-ring machines, i.e. with roller disposed within a ring and co-operating with the inner surface of the ring
11/22 • Extrusion presses; Dies therefor (extruding by the use of roller-and-ring machines B30B 11/20)
11/24 • • using screws or worms
11/26 • • using press rams
11/28 • • using perforated rollers or discs
11/30 • • using directly-acting fluid pressure
11/34 • for coating articles, e.g. tablets

12/00 Presses not provided for in groups B30B 1/00-B30B 11/00 [2]

13/00 Methods of pressing not special to the use of presses of any one of the preceding main groups B30B 1/00-B30B 12/00 [2]

15/00 Details of, or accessories for, presses; Auxiliary measures in connection with pressing (safety devices F16P)
15/02 • Dies; Inserts therefor; Mountings thereof; Moulds (extrusion dies B30B 11/22)
15/04 • Frames; Guides
15/06 • Platens or press rams
15/08 • Accessory tools, e.g. knives; Mountings therefor
15/10 • Brakes specially adapted for presses
15/12 • Clutches specially adapted for presses
15/14 • Control arrangements for mechanically-driven presses
15/16 • Control arrangements for fluid-driven presses (pumps per se F04; hydraulic accumulators per se F15B; valves per se F16K)
15/18 • • controlling the reciprocating motion of the ram
15/20 • • • controlling the speed of the ram, e.g. the speed of the approach, pressing or return strokes
15/22 • • controlling the degree of pressure applied by the ram during the pressing stroke
15/24 • • controlling the movement of a plurality of actuating members to maintain parallel movement of the platen or press beam
15/26 • Programme control arrangements
15/28 • Arrangements for preventing distortion of, or damage to, presses or parts thereof
15/30 • Feeding material to presses
15/32 • Discharging presses
15/34 • Heating or cooling presses or parts thereof