

## 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 | OTHER PRESSES.....                  | 12/00 |
| PRESSES FOR SPECIAL PURPOSES .....                              | 9/00, 11/00            | DETAILS, ACCESSORIES, CONTROL ..... | 15/00 |
|   |                        | OTHER PRESSING METHODS .....        | 13/00 |

|             |   |              |  |
|-------------|---|--------------|--|
| <b>1/00</b> | <b>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</b> | <b>7/00</b>  | <b>Presses characterised by a particular arrangement of the pressing members</b>   |
| 1/02        | . by lever mechanism (by toggle mechanism B30B 1/10)  | 7/02         | . having several platens arranged one above the other  |
| 1/04        | . . operated by hand or foot  | 7/04         | . wherein pressing is effected in different directions simultaneously or in turn   |
| 1/06        | . . operated by cams, eccentrics, or cranks   | <b>9/00</b>  | <b>Presses specially adapted for particular purposes</b>   |
| 1/08        | . . operated by fluid-pressure means  | 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)  |
| 1/10        | . by toggle mechanism   | 9/04         | . . using press rams   |
| 1/12        | . . operated by hand or foot  | 9/06         | . . . co-operating with permeable casings or strainers   |
| 1/14        | . . operated by cams, eccentrics, or cranks   | 9/08         | . . . co-operating with a rotary casing  |
| 1/16        | . . operated by fluid-pressure means  | 9/10         | . . . without use of a casing  |
| 1/18        | . by screw means  | 9/12         | . . using pressing worms or screws co-operating with a permeable casing  |
| 1/20        | . . driven by hand  | 9/14         | . . . operating with only one screw or worm  |
| 1/22        | . . driven through friction disc means  | 9/16         | . . . operating with two or more screws or worms   |
| 1/23        | . . operated by fluid-pressure means [2]  | 9/18         | . . . with means for adjusting the outlet for the solid  |
| 1/24        | . by rack-and-pinion means  | 9/20         | . . using rotary pressing members, other than worms or screws, e.g. rollers, rings, discs  |
| 1/26        | . by cams, eccentrics, or cranks  | 9/22         | . . using a flexible element, e.g. diaphragm, urged by fluid pressure (connection of valves to inflatable elastic bodies B60C 29/00) [3]   |
| 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  | 9/24         | . . using an endless pressing band   |
| 1/30        | . by the pull of chains or ropes  | 9/26         | . . Permeable casings or strainers   |
| 1/32        | . by plungers under fluid pressure  | 9/28         | . for forming shaped articles (from material in powder, granular, or paste form, e.g. briquetting presses, B30B 11/00)   |
| 1/34        | . . involving a plurality of plungers acting on the platen (gas operated B30B 1/38)   | 9/30         | . for baling; Compression boxes therefor (baling hay, straw, or the like A01F)   |
| 1/36        | . . having telescoping plungers (gas operated B30B 1/38)  | 9/32         | . for consolidating scrap metal or for compacting used cars  |
| 1/38        | . . wherein the plungers are operated by pressure of a gas, e.g. steam, air   | <b>11/00</b> | <b>Presses specially adapted for forming shaped articles from material in particulate or plastic state, e.g. briquetting presses, tableting presses</b> (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) |
| 1/40        | . by wedge means  | 11/02        | . using a ram exerting pressure on the material in a moulding space  |
| 1/42        | . by magnetic means, e.g. electromagnetic [2]   | 11/04        | . . co-operating with a fixed mould  |
| <b>3/00</b> | <b>Presses characterised by the use of rotary pressing members, e.g. rollers, rings, discs</b>  | 11/06        | . . . each charge of the material being compressed against the previously formed body  |
| 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   |              |  |
| <b>5/00</b> | <b>Presses characterised by the use of pressing means other than those mentioned in groups B30B 1/00 and B30B 3/00</b>  |              |  |
| 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  |              |  |

## B30B

|       |  |       |   |
|-------|--|-------|---|
| 11/08 | . . co-operating with moulds carried by a turn-table   | 15/00 | <b>Details of, or accessories for, presses; Auxiliary measures in connection with pressing</b> (safety devices F16P)                            |
| 11/10 | . . . intermittently rotated   | 15/02 | . Dies; Inserts therefor; Mountings thereof; Moulds (extrusion dies B30B 11/22)   |
| 11/12 | . . co-operating with moulds on the circumference of a rotating drum   | 15/04 | . Frames; Guides  |
| 11/14 | . . co-operating with moulds on a movable carrier other than a turn-table or a rotating drum                                     | 15/06 | . Platens or press rams   |
| 11/16 | . using pocketed rollers, e.g. two co-operating pocketed rollers   | 15/08 | . Accessory tools, e.g. knives; Mountings therefor  |
| 11/18 | . using profiled rollers   | 15/10 | . Brakes specially adapted for presses  |
| 11/20 | . Roller-and-ring machines, i.e. with roller disposed within a ring and co-operating with the inner surface of the ring          | 15/12 | . Clutches specially adapted for presses  |
| 11/22 | . Extrusion presses; Dies therefor (extruding by the use of roller-and-ring machines B30B 11/20)                                 | 15/14 | . Control arrangements for mechanically-driven presses  |
| 11/24 | . . using screws or worms  | 15/16 | . Control arrangements for fluid-driven presses (pumps <u>per se</u> F04; hydraulic accumulators <u>per se</u> F15B; valves <u>per se</u> F16K) |
| 11/26 | . . using press rams   | 15/18 | . . controlling the reciprocating motion of the ram   |
| 11/28 | . . using perforated rollers or discs  | 15/20 | . . . controlling the speed of the ram, e.g. the speed of the approach, pressing or return strokes  |
| 11/30 | . . using directly-acting fluid pressure   | 15/22 | . . controlling the degree of pressure applied by the ram during the pressing stroke  |
| 11/34 | . for coating articles, e.g. tablets   | 15/24 | . . controlling the movement of a plurality of actuating members to maintain parallel movement of the platen or press beam                      |
| 12/00 | <b>Presses not provided for in groups B30B 1/00 to B30B 11/00 [2]</b>  | 15/26 | . Programme control arrangements  |
| 13/00 | <b>Methods of pressing not special to the use of presses of any one of the preceding main groups B30B 1/00 to B30B 12/00 [2]</b> | 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   |