

## CPC

## COOPERATIVE PATENT CLASSIFICATION

## B29B

## PREPARATION OR PRETREATMENT OF THE MATERIAL TO BE SHAPED; MAKING GRANULES OR PREFORMS; RECOVERY OF PLASTICS OR OTHER CONSTITUENTS OF WASTE MATERIAL CONTAINING PLASTICS

## B29B 7/00

**Mixing; Kneading** (for preparation of dough [A21C 1/00](#);) in general [B01F](#); combined with calendaring [B29C 43/24](#), with injection [B29C 45/46](#), with extrusion [B29C 47/36](#))

## B29B 7/002

. {Methods (chemical aspects [C08J 3/00](#))}

## B29B 7/005

.. {for mixing in batches}

## B29B 7/007

.. {for continuous mixing}

## B29B 7/02

. non-continuous, with mechanical mixing or kneading devices, i.e. batch type

## B29B 7/04

.. with non-movable mixing or kneading devices

## B29B 7/06

.. with movable mixing or kneading devices

## B29B 7/08

... shaking, oscillating or vibrating

## B29B 7/085

.... {by means of axially movable pistons}

## B29B 7/10

... rotary

## B29B 7/103

.... {with rollers or the like in casings}

## B29B 7/106

.... {using rotary casings}

## B29B 7/12

.... with single shaft

## B29B 7/125

..... {having a casing closely surrounding the rotor, e.g. for masticating rubber (with more than one shaft [B29B 7/183](#)); Rotors therefor ([B29B 7/14](#), [B29B 7/16](#) take precedence)}

## B29B 7/14

..... with screw or helix

## B29B 7/16

..... with paddles or arms

## B29B 7/18

.... with more than one shaft

## B29B 7/183

..... {having a casing closely surrounding the rotors, e.g. of Banbury type (with single shaft [B29B 7/125](#))}

## B29B 7/186

..... {Rotors therefor}

## B29B 7/20

..... with intermeshing devices, e.g. screws

## B29B 7/22

.. Component parts, details or accessories; Auxiliary operations

## B29B 7/24

... for feeding

## B29B 7/242

.... {in measured doses}

## B29B 7/244

..... {of several materials}

## B29B 7/246

.... {in mixers having more than one rotor and a casing closely surrounding the rotors, e.g. with feeding plungers}

## B29B 7/248

.... {with plungers for introducing the material, e.g. from below ([B29B 7/246](#) takes precedence)}

## B29B 7/26

... for discharging, e.g. doors

B29B 7/263	....	{from the underside in mixers having more than one rotor and a casing closely surrounding the rotors}
B29B 7/266	.....	{using sliding doors}
B29B 7/28	...	for measuring, controlling or regulating, e.g. viscosity control ( <a href="#">B29B 7/242</a> takes precedence)}
B29B 7/283	....	{measuring data of the driving system, e.g. torque, speed, power}
B29B 7/286	....	{measuring properties of the mixture, e.g. temperature, density ( <a href="#">B29B 7/283</a> takes precedence)}
B29B 7/30	.	continuous, with mechanical mixing or kneading devices
B29B 7/32	..	with non-movable mixing or kneading devices
B29B 7/325	...	{Static mixers (in general <a href="#">B01F 5/0602</a> )}
B29B 7/34	..	with movable mixing or kneading devices
B29B 7/36	...	shaking, oscillating or vibrating
B29B 7/365	....	{by means of axially movable pistons}
B29B 7/38	...	rotary ( <a href="#">B29B 7/52</a> takes precedence)
B29B 7/385	....	{fluid mixers}
B29B 7/40	....	with single shaft
B29B 7/401	.....	{having a casing closely surrounding the rotor, e.g. with a plunger for feeding the material ( <a href="#">B29B 7/407</a> , <a href="#">B29B 7/42</a> take precedence)}
B29B 7/402	.....	{using a rotor-stator system with intermeshing elements, e.g. teeth ( <a href="#">B29B 7/408</a> , <a href="#">B29B 7/404</a> take precedence)}
B29B 7/404	.....	{with feeding or valve actuating means, e.g. with cleaning means}
B29B 7/405	.....	{Mixing heads ( <a href="#">B29B 7/404</a> , <a href="#">B29B 7/42</a> take precedence; mixing heads without moving stirrer <a href="#">B29B 7/7457</a> )}
B29B 7/407	.....	{with a casing closely surrounding the rotor, e.g. with conical rotor}
B29B 7/408	.....	{with mixing elements on a rotor co-operating with mixing elements, perpendicular to the axis of the rotor, fixed on a stator}
B29B 7/42	.....	with screw or helix
B29B 7/421	.....	{with screw and additionally other mixing elements on the same shaft, e.g. paddles, discs, bearings, rotor blades of the Banbury type}
B29B 7/422	.....	{with screw sections co-operating, e.g. intermeshing, with elements on the wall of the surrounding casing}
B29B 7/423	.....	{and oscillating axially (in general <a href="#">B01F 11/0057</a> )}
B29B 7/424	.....	{with conical screw surrounded by conical casing}
B29B 7/425	.....	{with screw surrounded by a casing provided with grooves or cavities}
B29B 7/426	.....	{with consecutive casings or screws, e.g. for charging, discharging, mixing}
B29B 7/427	.....	{with independently driven screws rotating about the same axis, e.g. oscillating axially; with axially oscillating screws ( <a href="#">B29B 7/423</a> takes precedence)}
B29B 7/428	.....	{ Parts or accessories, e.g. casings, feeding or discharging means}
B29B 7/429	.....	{Screws( <a href="#">B29B 7/421</a> takes precedence)}
B29B 7/44	.....	with paddles or arms
B29B 7/46	....	with more than one shaft
B29B 7/465	.....	{each shaft comprising rotor parts of the Banbury type in addition to

		screw parts}
B29B 7/48	.....	with intermeshing devices, e.g. screws
B29B 7/481	.....	{provided with paddles, gears or discs ( <a href="#">B29B 7/482</a> takes precedence)}
B29B 7/482	.....	{provided with screw parts in addition to other mixing parts, e.g. paddles, gears, discs}
B29B 7/483	.....	{the other mixing parts being discs perpendicular to the screw axis}
B29B 7/484	.....	{with two shafts provided with screws, e.g. one screw being shorter than the other ( <a href="#">B29B 7/482</a> takes precedence)}
B29B 7/485	.....	{with three or more shafts provided with screws}
B29B 7/486	.....	{with screws surrounded by a casing provided with grooves or cavities}
B29B 7/487	.....	{with consecutive casings or screws, e.g. for feeding, discharging, mixing}
B29B 7/488	.....	{Parts, e.g. casings, sealings; Accessories, e.g. flow controlling or throttling devices (discharging <a href="#">B29B 7/582</a> ; feeding <a href="#">B29B 7/60</a> )}
B29B 7/489	.....	{Screws ( <a href="#">B29B 7/482</a> takes precedence)}
B29B 7/50	....	with rotary casing
B29B 7/52	...	with rollers or the like, e.g. calenders
B29B 7/523	....	{co-operating with casings}
B29B 7/526	.....	{with two or more rollers}
B29B 7/54	....	with a single roller co-operating with a stationary member {other than the casing}
B29B 7/56	....	with co-operating rollers{e.g. with repeated action, i.e. the material leaving a set of rollers being reconducted to the same set or being conducted to a next set}
B29B 7/562	.....	{with means for axially moving the material on the rollers}
B29B 7/564	.....	{at least one of the rollers being provided with helicoidal grooves or ridges, e.g. followed by axial extrusion}
B29B 7/566	.....	{provided with means to take material away from a set of rollers and to reconduct it to the same set; provided with endless belts, e.g. which can be in or out of cooperation with at least one of the rollers}
B29B 7/568	.....	{with consecutive sets of rollers or a train of rollers}
B29B 7/58	..	Component parts, details or accessories; Auxiliary operations
B29B 7/582	...	{for discharging, e.g. doors}
B29B 7/584	...	{for mixers with rollers, e.g. wedges, guides, pressing means, thermal conditioning}
B29B 7/586	....	{Drives}
B29B 7/588	....	{cutting devices, e.g. movable cutting devices (scrapers for stripping the material from rollers <a href="#">B29B 7/645</a> )}
B29B 7/60	...	for feeding, e.g. end guides for the incoming material {( <a href="#">B29B 7/7615</a> takes precedence; feeding predetermined amounts for mixing in general <a href="#">B01F 15/0216</a> )}
B29B 7/603	....	{in measured doses, e.g. proportioning of several materials}
B29B 7/606	....	{specially adapted for feeding calenders or the like}
B29B 7/62	...	Rollers, e.g. with grooves ( <a href="#">B29B 7/564</a> takes precedence)
B29B 7/625	....	{provided with cooling or heating means}

- B29B 7/64 . . . Stripping the material from the rollers
- B29B 7/645 . . . . {by means of a scraper moving in the axial direction of the rollers}
- B29B 7/66 . . . Recycling the material {(B29B 7/566 takes precedence)}
- B29B 7/68 . . . Positioning of rollers
- B29B 7/70 . . . Conditioning of rollers, e.g. cleaning
- B29B 7/72 . . . Measuring, controlling or regulating
- B29B 7/722 . . . . {Safety devices}
- B29B 7/724 . . . . {for continuous roller mixers, e.g. calenders (B29B 7/722 takes precedence)}
- B29B 7/726 . . . . {Measuring properties of mixture, e.g. temperature or density (B29B 7/724 takes precedence)}
- B29B 7/728 . . . . {Measuring data of the driving system, e.g. torque, speed, power, vibration (B29B 7/724 takes precedence)}
  
- B29B 7/74 . . . using other mixers or combinations of {mixers, e.g. of} dissimilar mixers; {Plant}
- B29B 7/7404 . . . {Mixing devices specially adapted for foamable substances (B29B 7/76 takes precedence)}
- B29B 7/7409 . . . {with supply of gas}
- B29B 7/7414 . . . . {with rotatable stirrer, e.g. using an intermeshing rotor-stator system (B29B 7/7423 takes precedence)}
- B29B 7/7419 . . . . {with static or injector mixer elements}
- B29B 7/7423 . . . . . {preceded or followed by rotatable stirring device}
- B29B 7/7428 . . . . {Methodical aspects}
- B29B 7/7433 . . . {Plants}
- B29B 7/7438 . . . {Mixing guns, i.e. hand-held mixing units having dispensing means (B29B 7/761, B29B 7/7678 take precedence)}
- B29B 7/7442 . . . {with driven stirrer}
- B29B 7/7447 . . . {including means for feeding the components}
- B29B 7/7452 . . . {for mixing components by spraying them into each other; for mixing by intersecting sheets}
- B29B 7/7457 . . . {Mixing heads without moving stirrer (B29B 7/7438, B29B 7/76 take precedence)}
- B29B 7/7461 . . . {Combinations of dissimilar mixers}
- B29B 7/7466 . . . {Combinations of similar mixers}
- B29B 7/7471 . . . {Mixers in which the mixing takes place at the inlet of a mould, e.g. mixing chambers situated in the mould opening}
- B29B 7/7476 . . . {Systems, i.e. flow charts or diagrams; Plants}
- B29B 7/748 . . . . {Plants (B29B 7/7433, B29B 7/7485, B29B 7/7495 take precedence)}
- B29B 7/7485 . . . . {with consecutive mixers, e.g. with premixing some of the components}
- B29B 7/749 . . . . . {with stirring means for the individual components before they are mixed together}
- B29B 7/7495 . . . . {for mixing rubber}
- B29B 7/76 . . . {Mixers} with stream-impingement mixing head
- B29B 7/7605 . . . . {having additional mixing arrangements (B29B 7/7673 takes precedence)}
- B29B 7/761 . . . . {of gun-type, i.e. hand-held units having dispensing means (B29B 7/7678 takes precedence)}
- B29B 7/7615 . . . . {characterised by arrangements for controlling, measuring or regulating, e.g. for

- feeding or proportioning the components}
- B29B 7/7621 . . . . {involving introducing a gas or another component in at least one of the components}
- B29B 7/7626 . . . . {using measuring chambers of piston or plunger type ([B29B 7/7621](#) takes precedence; for mixing in general [B01F 15/0454](#))}
- B29B 7/7631 . . . {Parts; Accessories ([B29B 7/7684](#) takes precedence)}
- B29B 7/7636 . . . . { Construction of the feed orifices, bores, ports}
- B29B 7/7642 . . . . . { Adjustable feed orifices, e.g. for controlling the rate of feeding}
- B29B 7/7647 . . . . { Construction of the mixing conduit module or chamber part}
- B29B 7/7652 . . . . { Construction of the discharge orifice, opening or nozzle}
- B29B 7/7657 . . . . . { Adjustable discharge orifices, openings or nozzle openings, e.g. for controlling the rate of dispensing}
- B29B 7/7663 . . . {the mixing head having an outlet tube with a reciprocating plunger, e.g. with the jets impinging in the tube}
- B29B 7/7668 . . . . {having a second tube intersecting the first one with the jets impinging in the second tube}
- B29B 7/7673 . . . . {having additional mixing arrangements ([B29B 7/7668](#) takes precedence)}
- B29B 7/7678 . . . . {of the gun type, i.e. hand-held units}
- B29B 7/7684 . . . . {Parts; Accessories}
- B29B 7/7689 . . . . . { Plunger constructions}
- B29B 7/7694 . . . . . { comprising recirculation channels; ducts formed in the plunger}
- B29B 7/78 . . . by gravity, e.g. falling particle mixers
- B29B 7/80 . . . Component parts, details or accessories; Auxiliary operations ([B29B 7/22](#), [B29B 7/58](#) take precedence, {cleaning mixers [B01F 15/00019](#)})
- B29B 7/801 . . . {Valves}
- B29B 7/802 . . . { Constructions or methods for cleaning the mixing or kneading device (cleaning in general [B08B](#))}
- B29B 7/803 . . . { Cleaning of mixers of the gun type, stream-impingement type, mixing heads}
- B29B 7/805 . . . . { Cleaning of the mixing conduit, module or chamber part}
- B29B 7/806 . . . . { Cleaning of the discharge opening, e.g. orifice of the dispenser}
- B29B 7/807 . . . . { Cleaning of the central body of the plunger}
- B29B 7/808 . . . . { Cleaning of the plunger tip}
- B29B 7/82 . . . Heating or cooling
- B29B 7/823 . . . {Temperature control}
- B29B 7/826 . . . {Apparatus therefor}
- B29B 7/84 . . . Venting or degassing {;Removing liquids, e.g. by evaporating components}
- B29B 7/842 . . . {Removing liquids in liquid form}
- B29B 7/845 . . . {Venting, degassing or removing evaporated components in devices with rotary stirrers}
- B29B 7/847 . . . . {Removing of gaseous components before or after mixing}
- B29B 7/86 . . . for working at sub- or superatmospheric pressure {([B01F 13/06](#) takes precedence)}
- B29B 7/88 . . . Adding charges, {i.e. additives}
- B29B 7/885 . . . [N. with means for treating, e.g. milling, the charges ([B29B 7/905](#) takes precedence)]

- B29B 7/90 . . . Fillers or reinforcements{e.g. fibres}
- B29B 7/905 . . . . {with means for pretreatment of the charges or fibres}
- B29B 7/92 . . . . Wood chips or wood fibres
- B29B 7/94 . . . Liquid charges
- B29B 7/945 . . . . {involving coating particles}

**B29B 9/00** **Making granules** (in general B01J; chemical aspects [C08J 3/12](#))

- B29B 9/02 . by dividing preformed material
- B29B 9/04 . . in the form of plates or sheets
- B29B 9/06 . . in the form of filamentary material, e.g. combined with extrusion
- B29B 9/065 . . . {under-water, e.g. underwater pelletizers}
- B29B 9/08 . by agglomerating smaller particles
- B29B 9/10 . by moulding the material, i.e. treating it in the molten state
- B29B 9/12 . characterised by structure or composition
- B29B 9/14 . . fibre-reinforced
- B29B 9/16 . Auxiliary treatment of granules

**B29B 11/00** **Making preforms** ([B29C 61/06](#) takes precedence; { combined with blow-moulding [B29C 49/02](#), with thermoforming [B29C 51/02](#); making preforms for manufacturing of light guides [B29D 11/00721](#)})

- B29B 11/02 . by dividing preformed material, e.g. sheets, rods
- B29B 11/04 . by assembling preformed material
- B29B 11/06 . by moulding the material
- B29B 11/08 . . Injection moulding
- B29B 11/10 . . Extrusion moulding
- B29B 11/12 . . Compression moulding
- B29B 11/14 . characterised by structure or composition
- B29B 11/16 . . comprising fillers or reinforcement {(non-woven fabrics per se [D04H 1/00](#), [D04H 3/00](#))}

**B29B 13/00** **Conditioning or physical treatment of the material to be shaped** (chemical aspects [C08J 3/00](#)){heating, cooling or curing during shaping [B29C 35/00](#); Thermal after-treatment [B29C 71/02](#)}

- B29B 13/007 . {Treatment of sinter powders}
- B29B 13/02 . by heating ([B29B 13/06](#), [B29B 13/08](#) take precedence)
- B29B 13/021 . . {Heat treatment of powders}

- B29B 13/022 .. {Melting the material to be shaped}
- B29B 13/023 .. {Half-products, e.g. films, plates}
- B29B 13/024 ... {Hollow bodies, e.g. tubes or profiles}
- B29B 13/025 .... {Tube ends}
  
- B29B 13/04 . by cooling {(cooling moulded articles or half products [B29C 35/16](#))}
- B29B 13/045 .. {of powders or pellets}
  
- B29B 13/06 . by drying ([B29B 13/08](#) takes precedence; {drying moulded articles or half products [B29C 37/0092](#)})
- B29B 13/065 .. {of powder or pellets}
  
- B29B 13/08 . by using wave energy or particle radiation
  
- B29B 13/10 . by grinding, e.g. by triturating; by sieving; by filtering
  
- B29B 15/00** **Pretreatment of the material to be shaped, not covered by groups [B29B 7/00](#) to [B29B 13/00](#)**
  
- B29B 15/02 . of crude rubber, gutta-percha, or similar substances (tapping latex [A01G](#); Chemical aspects [C08C](#))
- B29B 15/023 .. {Breaking up rubber bales}
- B29B 15/026 .. {Baling of rubber}
- B29B 15/04 .. Coagulating devices
- B29B 15/06 .. Washing devices
  
- B29B 15/08 . of reinforcements or fillers (chemical aspects [C08J, K](#))
- B29B 15/10 .. Coating or impregnating {independently of the moulding or shaping step}{applying liquids in general [B05](#)}
  
- NOTE**
- Where the coating or impregnating is combined with moulding the documents are classified in [B29C 53/8066](#), **B29C 67/14C**
  
- B29B 15/105 ... { of reinforcement of definite length with a matrix in solid form e.g. powder, fibre or sheet form (calendering [B29C 70/506](#))}
- B29B 15/12 ... of reinforcements of indefinite length
- B29B 15/122 .... {with a matrix in liquid form, e.g. as melt, solution or latex}
- B29B 15/125 ..... {by dipping}
- B29B 15/127 ..... {by spraying}
- B29B 15/14 .... of filaments or wires
  
- B29B 17/00** **Recovery of plastics or other constituents of waste material containing plastics; ({ volume reduction of waste plastics, e.g. by mechanical compacting or melting disposal of solid waste [B09B](#);} chemical recovery [C08J 11/00](#))**
  
- B29B 17/0005 . {Direct recuperation and re-use of scrap material during moulding operation, i.e.

- feed-back of used material}
- B29B 17/0026 . {by agglomeration or compacting}
- B29B 17/0036 .. {of large particles, e.g. beads, granules, pellets, flakes, slices}
- B29B 17/0042 .. {for shaping parts, e.g. multilayered parts with at least one layer containing regenerated plastic}
- B29B 17/0047 .. {Compacting complete waste articles}
- B29B 17/0052 ... {Hollow articles, e.g. bottles}
  
- B29B 17/02 . Separating plastics from other materials
- B29B 17/0206 .. {Selectively separating reinforcements from matrix material by destroying the interface bound before desintegrating the matrix to particles or powder, e.g. from tires or belts}
- B29B 17/021 ... {using local heating of the reinforcement}
  
- B29B 17/04 . Disintegrating plastics, { e.g. by milling }(B29B 9/02, B29B 11/02, B29B 13/10, B29B 17/02) take precedence)
- B29B 17/0404 .. { to powder}
- B29B 17/0408 ... { using cryogenic systems}
- B29B 17/0412 .. { to large particles, e.g. beads, granules, flakes, slices}
  
- B29B 2009/00**      **Making granules** (in general B01J; chemical aspects C08J 3/12)
  
- B29B 2009/12 . characterised by structure or composition
- B29B 2009/125 .. Micropellets, microgranules, microparticles
  
- B29B 2009/16 . Auxiliary treatment of granules
- B29B 2009/161 .. Absorbing, i.e. introducing a gas, a liquid or a solid material into the granules
- B29B 2009/163 .. Coating, i.e. applying a layer of liquid or solid material on the granule
- B29B 2009/165 .. Crystallizing granules
- B29B 2009/166 .. Deforming granules to give a special form, e.g. spheroidizing, rounding
- B29B 2009/168 .. Removing undesirable residual components, e.g. solvents, unreacted monomers; Degassing
  
- B29B 2013/00**      **Conditioning or physical treatment of the material to be shaped** (chemical aspects C08J 3/00){heating, cooling or curing during shaping B29C 35/00; Thermal after-treatment B29C 71/02}
  
- B29B 2013/002 . Extracting undesirable residual components, e.g. solvents, unreacted monomers, from material to be moulded
  
- B29B 2013/005 . Degassing undesirable residual components, e.g. gases, unreacted monomers, from material to be moulded
  
- B29B 2013/02 . by heating (B29B 13/06, B29B 13/08 take precedence)

- B29B 2013/023 .. {Half-products, e.g. films, plates}
- B29B 2013/026 ... Obtaining a uniform temperature over the whole surface of films or tubes
- B29B 2013/027 ... Obtaining a temperature gradient over the surface of films or tubes
- B29B 2013/028 ... Obtaining a temperature gradient across the wall thickness of plates or tubes
  
- B29B 2017/00** **Recovery of plastics or other constituents of waste material containing plastics; ({**  
**volume reduction of waste plastics, e.g. by mechanical compacting or melting disposal of**  
**solid waste B09B;}** **chemical recovery C08J 11/00)**
  
- B29B 2017/001 . Pretreating the materials before recovery
- B29B 2017/0015 .. Washing, rinsing
- B29B 2017/0021 .. Dividing in large parts
  
- B29B 2017/0026 . {by agglomeration or compacting}
- B29B 2017/0031 .. Melting the outer surface of compressed waste, e.g. for forming briquets by  
expelling the compressed waste material through a heated tool
- B29B 2017/0047 .. {Compacting complete waste articles}
- B29B 2017/0052 ... {Hollow articles, e.g. bottles}
- B29B 2017/0057 .... Externally powered deformation tools, e.g. tools being part of relatively big  
non domestic installations, powered by motors
- B29B 2017/0063 .... Manually driven deformation tools, e.g. tools being part of domestic  
installations
- B29B 2017/0068 .... Softening the hollow articles by heat and causing permanent deformation
- B29B 2017/0073 .... Removing caps or labels during deformation
- B29B 2017/0078 .... Maintaining the deflated state, e.g. by mounting original screw lids after  
deformation
- B29B 2017/0084 .... Deflating the hollow articles by vacuum; Details of the nozzles used in the  
vacuum generating devices.
  
- B29B 2017/0089 . Recycling systems, wherein the flow of products between producers, sellers and  
consumers includes at least a recycling step, e.g. the products being fed back to the  
sellers or to the producers for recycling purposes
  
- B29B 2017/0094 . Mobile recycling devices, e.g. devices installed in truck trailers
  
- B29B 2017/02 . Separating plastics from other materials
- B29B 2017/0203 .. Separating plastics from plastics
- B29B 2017/0213 .. Specific separating techniques
- B29B 2017/0217 ... Mechanical separating techniques; devices therefor
- B29B 2017/022 .... Grippers, hooks, piercing needles, fingers, e.g. mounted on robots
- B29B 2017/0224 .... Screens, sieves
- B29B 2017/0227 .... Vibratory or shaking tables
- B29B 2017/0231 .... Centrifugating, cyclones
- B29B 2017/0234 .... using gravity, e.g. separating by weight differences in a wind sifter
- B29B 2017/0237 .... using density difference
- B29B 2017/0241 ..... in gas, e.g. air flow

- B29B 2017/0244 . . . . . in liquids
- B29B 2017/0248 . . . . . Froth flotation, i.e. wherein gas bubbles are attached to suspended particles in an aerated liquid
- B29B 2017/0251 . . . . . Hydropulping for converting the material under the influence of water into a slurry, e.g. for separating laminated plastic from paper
- B29B 2017/0255 . . . . . using different melting or softening temperatures of the materials to be separated
- B29B 2017/0258 . . . . . using heated surfaces for selective softening or melting of at least one plastic ingredient
- B29B 2017/0262 . . . . . using electrical characteristics
- B29B 2017/0265 . . . . . Electrostatic separation
- B29B 2017/0268 . . . . . Separation of metals
- B29B 2017/0272 . . . . . Magnetic separation
- B29B 2017/0275 . . . . . using chemical sensors, e.g. analysing gasified constituents
- B29B 2017/0279 . . . . . Optical identification, e.g. cameras or spectroscopy
- B29B 2017/0282 . . . . . using information associated with the materials, e.g. labels on products
- B29B 2017/0286 . . . . . Cleaning means used for separation
- B29B 2017/0289 . . . . . Washing the materials in liquids
- B29B 2017/0293 . . . . . Dissolving the materials in gases or liquids
- B29B 2017/0296 . . . . . Dissolving the materials in aqueous alkaline solutions, e.g. NaOH or KOH
  
- B29B 2017/04 . . . . . Disintegrating plastics, { e.g. by milling } ([B29B 9/02](#), [B29B 11/02](#), [B29B 13/10](#), [B29B 17/02](#) } take precedence)
- B29B 2017/0416 . . . . . Cooling the plastics before disintegration, e.g. freezing
- B29B 2017/042 . . . . . Mixing disintegrated particles or powders with other materials, e.g. with virgin materials
- B29B 2017/0424 . . . . . Specific disintegrating techniques; devices therefor
- B29B 2017/0428 . . . . . Jets of high pressure fluid
- B29B 2017/0432 . . . . . Abrasive blasting, i.e. the jets being charged with abrasives
- B29B 2017/0436 . . . . . Immersion baths
- B29B 2017/044 . . . . . Knives
- B29B 2017/0444 . . . . . Cutting wires, e.g. vibrating wires
- B29B 2017/0448 . . . . . Cutting discs
- B29B 2017/0452 . . . . . the discs containing abrasives
- B29B 2017/0456 . . . . . Pressing tools with calibrated openings, e.g. in sizing plates, for disintegrating solid materials
- B29B 2017/046 . . . . . Extruder as pressing tool with calibrated die openings for forming and disintegrating pasty or melted material
- B29B 2017/0464 . . . . . Solid state shear extrusion pulverisation
- B29B 2017/0468 . . . . . Crushing, i.e. disintegrating into small particles
- B29B 2017/0472 . . . . . Balls or rollers in a container
- B29B 2017/0476 . . . . . Cutting or tearing members, e.g. spiked or toothed cylinders or intermeshing rollers
- B29B 2017/048 . . . . . Cutter-compactors, e.g. of the EREMA type
- B29B 2017/0484 . . . . . Grinding tools, roller mills or disc mills

B29B 2017/0488 ... Hammers or beaters  
 B29B 2017/0492 ... Projecting the material on stationary or moving impact surfaces or plates  
 B29B 2017/0496 ... Pyrolysing the materials

**B29B 2911/00**      **Indexing scheme related to making preforms for blow-moulding bottles or the like**  
 (not used)

B29B 2911/14      . Layer configuration, geometry, dimensions or physical properties of preforms for  
 blow-moulding bottles or the like (not used)

B29B 2911/14006    .. layer configuration (not used)

B29B 2911/14013    ... monolayered

B29B 2911/1402     .... at neck portion

B29B 2911/14026    .... at flange portion

B29B 2911/14033    .... at body portion

B29B 2911/1404     .... at bottom portion

B29B 2911/14046    ... multilayered

B29B 2911/14053    .... at neck portion

B29B 2911/1406     ..... partially

B29B 2911/14066    .... at flange portion

B29B 2911/14073    ..... partially

B29B 2911/1408     .... at body portion

B29B 2911/14086    ..... partially

B29B 2911/14093    .... at bottom portion

B29B 2911/141      ..... partially

B29B 2911/14106    .... having at least one layer

B29B 2911/14113    ..... having at least two layers

B29B 2911/1412     ..... having at least three layers

B29B 2911/14126    ..... having more than three layers

B29B 2911/14133    .... having at least one layer being injected

B29B 2911/1414     ..... having at least two layers being injected

B29B 2911/14146    ..... having at least three layers being injected

B29B 2911/14153    ..... having more than three layers being injected

B29B 2911/1416     .... having at least one layer being extruded

B29B 2911/14166    ..... having at least two layers being extruded

B29B 2911/14173    ..... having at least three layers being extruded

B29B 2911/1418     ..... having more than three layers being extruded

B29B 2911/14186    .... having at least one layer being thermoformed

B29B 2911/14193    ..... having at least two layers being thermoformed

B29B 2911/142      ..... having at least three layers being thermoformed

B29B 2911/14206    ..... having more than three layers being thermoformed

B29B 2911/14213    .... having at least one layer being compression moulded

B29B 2911/1422	.....	having at least two layers being compression moulded
B29B 2911/14226	.....	having at least three layers being compression moulded
B29B 2911/14233	.....	having more than three layers being compression moulded
B29B 2911/1424	....	having at least one layer being applied using techniques not covered by <a href="#">B29B 2911/14133</a> to <a href="#">B29B 2911/14213</a>
B29B 2911/14246	.....	having at least two layers being applied using said techniques
B29B 2911/14253	.....	having at least three layers being applied using said techniques
B29B 2911/1426	.....	having more than three layers being applied using said techniques
B29B 2911/14266	.....	Type of said techniques not covered by <a href="#">B29B 2911/14133</a> to <a href="#">B29B 2911/14213</a>
B29B 2911/14273	.....	Spray coating
B29B 2911/1428	.....	Dip coating
B29B 2911/14286	.....	Powder coating
B29B 2911/14293	.....	Casting
B29B 2911/143	....	Interaction between at least two layers
B29B 2911/14306	.....	by welding
B29B 2911/14313	.....	by using adhesives
B29B 2911/1432	..	Geometry (not used)
B29B 2911/14326	...	Variable wall thickness
B29B 2911/14333	...	Variable diameter
B29B 2911/1434	...	Ribs or protrusions
B29B 2911/14346	...	Internal separating wall
B29B 2911/14353	...	Special shape
B29B 2911/1436	....	Special overall shape
B29B 2911/14366	.....	Conical
B29B 2911/14373	.....	Axially asymmetrical
B29B 2911/1438	.....	Elliptic or oval cross-section shape
B29B 2911/14386	.....	Rectangular cross-section shape
B29B 2911/14393	.....	Hexagonal cross-section shape
B29B 2911/144	.....	Shape allows stacking or nesting
B29B 2911/14406	....	Special shape of specific parts of preform
B29B 2911/14413	.....	Special lip, i.e. very top of preform neck
B29B 2911/1442	.....	Special neck
B29B 2911/14426	.....	Wide-mouth
B29B 2911/14433	.....	Closure retaining means
B29B 2911/1444	.....	Threads
B29B 2911/14446	.....	Interrupted threads
B29B 2911/14453	.....	Inner threads
B29B 2911/1446	.....	No threads
B29B 2911/14466	.....	Tamper-evident band retaining ring
B29B 2911/14473	.....	Special flange
B29B 2911/1448	.....	Special body

B29B 2911/14486	.....	Special bottom
B29B 2911/14493	.....	Special sprue, i.e. injection mark
B29B 2911/145	.....	Special pinch-off portion
B29B 2911/14506	...	Auxiliary parts or inserts
B29B 2911/14513	....	Handle
B29B 2911/1452	....	Closure
B29B 2911/14526	....	Transport means
B29B 2911/14533	....	Dispensing spout
B29B 2911/1454	....	Parts to assist orientation of preform, e.g. in mould
B29B 2911/14546	.....	at neck portion
B29B 2911/14553	.....	at flange portion
B29B 2911/1456	.....	at body portion
B29B 2911/14566	.....	at bottom portion
B29B 2911/14573	....	Preform, i.e. neck, flange, body and bottom, made of several individual parts
B29B 2911/1458	.....	Finish neck ring
B29B 2911/14586	..	Mentioned dimensions (not used)
B29B 2911/14593	...	Wall thickness
B29B 2911/146	....	of the lip, i.e. the very top of the preform neck
B29B 2911/14606	....	of the neck
B29B 2911/14613	....	of the threads
B29B 2911/1462	....	of the tamper-evident band retaining ring
B29B 2911/14626	....	of the flange
B29B 2911/14633	....	of the body
B29B 2911/1464	....	of the bottom
B29B 2911/14646	....	of a layer
B29B 2911/14653	...	Diameter, D
B29B 2911/1466	....	of the lip, i.e. the very top of the preform neck
B29B 2911/14666	....	of the neck
B29B 2911/14673	....	of the threads
B29B 2911/1468	....	of the tamper-evident band retaining ring
B29B 2911/14686	....	of the flange
B29B 2911/14693	....	of the body
B29B 2911/147	....	of the bottom
B29B 2911/14706	....	of a layer
B29B 2911/14713	...	Height, length, L
B29B 2911/1472	....	of the lip, i.e. the very top of the preform neck
B29B 2911/14726	....	of the neck
B29B 2911/14733	....	of the threads
B29B 2911/1474	....	of the tamper-evident band retaining ring
B29B 2911/14746	....	of the flange
B29B 2911/14753	....	of the body
B29B 2911/1476	....	of the bottom

B29B 2911/14766	....	of a layer
B29B 2911/14773	...	Ratio L/D
B29B 2911/1478	...	Angle
B29B 2911/14786	....	of the lip, i.e. the very top of the preform neck
B29B 2911/14793	....	of the neck
B29B 2911/148	....	of the threads
B29B 2911/14806	....	of the tamper-evident band retaining ring
B29B 2911/14813	....	of the flange
B29B 2911/1482	....	of the body
B29B 2911/14826	....	of the bottom
B29B 2911/14833	....	of a layer
B29B 2911/1484	...	Curvature, e.g. radius
B29B 2911/14846	....	of the lip, i.e. the very top of the preform neck
B29B 2911/14853	....	of the neck
B29B 2911/1486	....	of the threads
B29B 2911/14866	....	of the tamper-evident band retaining ring
B29B 2911/14873	....	of the flange
B29B 2911/1488	....	of the body
B29B 2911/14886	....	of the bottom
B29B 2911/14893	....	of a layer
B29B 2911/149	..	Mentioned values not covered by <a href="#">B29B 2911/14586</a>
B29B 2911/14906	...	Crystallinity
B29B 2911/14913	....	at the neck portion
B29B 2911/1492	....	at the flange portion
B29B 2911/14926	....	at the body portion
B29B 2911/14933	....	at the bottom portion
B29B 2911/1494	...	Surface roughness
B29B 2911/14946	....	at the neck portion
B29B 2911/14953	....	at the flange portion
B29B 2911/1496	....	at the body portion
B29B 2911/14966	....	at the bottom portion
B29B 2911/14973	...	Optical properties
B29B 2911/1498	...	Weight
B29B 2911/14986	...	Composition
B29B 2911/14993	....	Recycled material