SECTION B — PERFORMING OPERATIONS; TRANSPORTING

B29 WORKING OF PLASTICS; WORKING OF SUBSTANCES IN A PLASTIC STATE IN GENERAL

Note(s) [4, 2010.01]

- 1. This class <u>does not cover</u> the working of plastics sheet material in a manner analogous to the working of paper, which is covered by class B31.
- 2. In this class, the following term is used with the meaning indicated:
 - "plastics" means macromolecular compounds or compositions based on such compounds.
- 3. In this class, the following rules apply:
 - a. The working of plastics is, as far as possible, classified primarily according to the particular shaping technique used, e.g. in subclass B29C.
 - b. Classification according to production of particular articles in subclass B29D is restricted to:
 - i. aspects which are characteristic for the production of a particular article, and not classifiable in subclass B29B or B29C;
 - ii. combined operations for making the particular article which are not fully classifiable in subclass B29C.
 - c. Products <u>per se</u> are not classified in this class. However, if a product is characterised by the way it is produced and not by its structure or composition, the production method should be classified in this class.
- 4. The codes of subclass B29K are <u>only</u> for use as indexing codes associated with subclasses B29B, B29C, or B29D so as to provide information concerning moulding materials or materials for reinforcements, fillers or preformed parts, e.g. inserts.
- 5. The codes of subclass B29L are <u>only</u> for use as indexing codes associated with subclass B29C, so as to provide information concerning the articles produced by the techniques classified in subclass B29C.

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 [4]

Note(s) [4]

In this subclass, it is desirable to add the indexing codes of subclass B29K.

Subclass index

PRETREATMENT	
Mixing; kneading	7/00
Conditioning	13/00
Other pretreatment	15/00
MAKING GRANULES OR PREFORMS	9/00, 11/00
RECOVERY OF PLASTICS	17/00
	_

- **7/00 Mixing; Kneading** (in general B01F; combined with calendering B29C 43/24, with injection B29C 45/46, with extrusion B29C 48/36) **[4, 2006.01]**
- 7/02 non-continuous, with mechanical mixing or kneading devices, i.e. batch type [4, 2006.01]
- 7/04 with non-movable mixing or kneading devices [4, 2006.01]
- 7/06 with movable mixing or kneading devices [4, 2006.01]
- 7/08 • shaking, oscillating or vibrating **[4, 2006.01]**
- 7/10 • rotary **[4, 2006.01]**
- 7/12 • with single shaft **[4, 2006.01]**
- 7/14 • • with screw or helix **[4, 2006.01]**
- 7/16 • • with paddles or arms **[4, 2006.01]**
- 7/18 • with more than one shaft **[4, 2006.01]**
- 7/20 • • with intermeshing devices, e.g. screws **[4, 2006.01]**

- 7/22 Component parts, details or accessories; Auxiliary operations [4, 2006.01]
- 7/24 • for feeding **[4, 2006.01]**
- 7/26 • for discharging, e.g. doors [4, 2006.01]
- 7/28 • for measuring, controlling or regulating, e.g. viscosity control **[4, 2006.01]**
- 7/30 continuous, with mechanical mixing or kneading devices [4, 2006.01]
- 7/32 • with non-movable mixing or kneading devices [4, 2006.01]
- 7/34 with movable mixing or kneading devices [4, 2006.01]
- 7/36 • shaking, oscillating or vibrating [4, 2006.01]
- 7/38 • rotary (B29B 7/52 takes precedence) **[4, 2006.01]**
- 7/40 • with single shaft **[4, 2006.01]**
- 7/42 • • with screw or helix **[4, 2006.01]**
- 7/44 • • with paddles or arms **[4, 2006.01]**

7/46	• • • with more than one shaft [4, 2006.01]	9/14	 fibre-reinforced [4, 2006.01]
7/48	• • • • with intermeshing devices, e.g. screws [4, 2006.01]	9/16	• Auxiliary treatment of granules [4, 2006.01]
7/50	• • • • with rotary casing [4, 2006.01]	11/00	Making preforms (B29C 61/06 takes
7/52	• • • with rollers or the like, e.g.		precedence) [4, 2006.01]
7/54	calenders [4, 2006.01]• • with a single roller co-operating with a	11/02	 by dividing preformed material, e.g. sheets, rods [4, 2006.01]
//34	stationary member [4, 2006.01]	11/04	 by assembling preformed material [4, 2006.01]
7/56	• • • • with co-operating rollers [4, 2006.01]	11/06	 by moulding the material [4, 2006.01]
7/58	Component parts, details or accessories; Auxiliary	11/08	 Injection moulding [4, 2006.01]
,,,,,	operations [4, 2006.01]	11/10	 Extrusion moulding [4, 2006.01]
7/60	for feeding, e.g. end guides for the incoming	11/12	 Compression moulding [4, 2006.01]
	material [4, 2006.01]	11/14	 characterised by structure or
7/62	• • • Rollers, e.g. with grooves [4, 2006.01]		composition [4, 2006.01]
7/64	• • Stripping the material from the rollers [4, 2006.01]	11/16	• • comprising fillers or reinforcements [4, 2006.01]
7/66	• • • Recycling the material [4, 2006.01]	13/00	Conditioning or physical treatment of the material to
7/68	• • • Positioning of rollers [4, 2006.01]		be shaped (chemical aspects C08J 3/00) [4, 2006.01]
7/70	 Conditioning of rollers, e.g. 	13/02	• by heating (B29B 13/06, B29B 13/08 take
	cleaning [4, 2006.01]	12/04	precedence) [4, 2006.01]
7/72	 Measuring, controlling or 	13/04	• by cooling [4, 2006.01]
	regulating [4, 2006.01]	13/06	 by drying (B29B 13/08 takes precedence) [4, 2006.01]
7/74	 using other mixers or combinations of dissimilar 	13/08	by using wave energy or particle
	mixers [4, 2006.01]	13/00	radiation [4, 2006.01]
7/76	with stream impingement mixing	13/10	 by grinding, e.g. by triturating; by sieving; by
7/70	head [4, 2006.01]	15, 10	filtering [4, 2006.01]
7/78	• by gravity, e.g. falling particle mixers [4, 2006.01]		
7/80	 Component parts, details or accessories; Auxiliary operations (B29B 7/22, B29B 7/58 take 	15/00	Pretreatment of the material to be shaped, not
	precedence) [4, 2006.01]		covered by groups B29B 7/00-
7/82	 Heating or cooling [4, 2006.01] 	15/02	B29B 13/00 [4, 2006.01]
7/84	• • Venting or degassing [4, 2006.01]	15/02	 of crude rubber, gutta-percha, or similar substances (tapping latex A01G; chemical aspects
7/86	for working at sub- or superatmospheric		C08C) [4, 2006.01]
	pressure [4, 2006.01]	15/04	 Coagulating devices [4, 2006.01]
7/88	 Adding charges [4, 2006.01] 	15/06	 Washing devices [4, 2006.01]
7/90	• • • Fillers or reinforcements [4, 2006.01]	15/08	 of reinforcements or fillers (chemical aspects C08J,
7/92	• • • • Wood chips or wood fibres [4, 2006.01]		C08K) [4, 2006.01]
7/94	• • • Liquid charges [4, 2006.01]	15/10	 Coating or impregnating (applying liquids in general B05) [4, 2006.01]
9/00	Making granules (in general B01J; chemical aspects C08J 3/12) [4, 2006.01]	15/12	• • of reinforcements of indefinite length [4, 2006.01]
9/02	 by dividing preformed material [4, 2006.01] 	15/14	• • • • of filaments or wires [4, 2006.01]
9/04	 in the form of plates or sheets [4, 2006.01] 	13, 1.	or manients or wheel (1, 2000)02]
9/06	• • in the form of filamentary material, e.g. combined with extrusion [4, 2006.01]	17/00	Recovery of plastics or other constituents of waste material containing plastics (chemical recovery
9/08	• by agglomerating smaller particles [4, 2006.01]		C08J 11/00) [4, 2006.01]
9/10	 by aggioniciating smaller particles [4, 2000.01] by moulding the material, i.e. treating it in the molten 	17/02	• Separating plastics from other materials [4, 2006.01]
5, 10	state [4, 2006.01]	17/04	 Disintegrating plastics (B29B 9/02, B29B 11/02,
9/12	characterised by structure or		B29B 13/10 take precedence) [2006.01]
	composition [4, 2006.01]		

B29C SHAPING OR JOINING OF PLASTICS; SHAPING OF MATERIAL IN A PLASTIC STATE, NOT OTHERWISE PROVIDED FOR; AFTER-TREATMENT OF THE SHAPED PRODUCTS, e.g. REPAIRING (making preforms B29B 11/00; making laminated products by combining previously unconnected layers which become one product whose layers will remain together B32B 37/00-B32B 41/00) [4]

Note(s) [4, 5, 2017.01]

- 1. This subclass <u>covers</u>:
 - shaping or joining of plastics;
 - shaping of material in a plastic state when a specific material is not identified;
 - shaping of material in a plastic state, not otherwise provided for.
- 2. This subclass <u>does not cover</u>:
 - working of plastics sheet material in a manner analogous to the working of paper, which is covered by class B31;

- shaping of materials provided for elsewhere, e.g. of metal, clay or foodstuffs.
- 3. Attention is drawn to Note (3) following the title of class B29.
- 4. In this subclass:
 - repairing of articles made from plastics or material in a plastic state, e.g. of articles shaped or produced by using techniques covered by this subclass or subclass B29D, is classified in group B29C 73/00;
 - component parts, details, accessories or auxiliary operations which are applicable to more than one moulding technique are classified in groups B29C 31/00-B29C 37/00;
 - component parts, details, accessories or auxiliary operations which are only applicable or only of use for one specific shaping technique are classified only in the relevant subgroups of groups B29C 39/00-B29C 71/00.
- 5. In this subclass, it is desirable to add the indexing codes of subclasses B29K and B29L.

Subclass index

COMPONENT PARTS, DETAILS ACCESSORIES, AUXILIARY OPERATIONS	
Moulds or cores	33/00
Heating, cooling, curing	35/00
Other features	
MOULDING	
by casting, by coating a mould	39/00, 41/00
Compression moulding	
by internal pressure	
Injection moulding	
Extrusion moulding	
Blow-moulding	
Thermoforming	
OTHER SHAPING TECHNIQUES	
Bending, folding, twisting, straightening, flattening	53/00
Stretching	
Liberation of internal stresses	
Additive manufacturing	
Other techniques	
JOINING	
PARTICULAR APPLICATIONS	
Shaping tube ends	57/00
Surface shaping	
Lining or sheathing	
Shaping composites	
COMBINATIONS OF SHAPING TECHNIQUES	
AFTER-TREATMENT	
REPAIRING	

Compone operation	ent parts, details or accessories; Auxiliary ns [4]	33/22 33/24	 • by rectilinear movement [4, 2006.01] • using hydraulic or pneumatic means [4, 2006.01]
31/00	Handling, e.g. feeding of the material to be shaped [4, 2006.01]	33/26	• • by pivotal movement [4, 2006.01]
31/02	• Dispensing from vessels, e.g. hoppers [4, 2006.01]	33/28	 using hydraulic or pneumatic means [4, 2006.01]
31/04 31/06	Feeding, e.g. into a mould cavity [4, 2006.01]in measured doses [4, 2006.01]	33/30 33/32	 Mounting, exchanging or centering [4, 2006.01] using magnetic means [4, 2006.01]
31/08 31/10	 of preforms [4, 2006.01] of several materials [4, 2006.01]	33/34	 movable, e.g. to or from the moulding station [4, 2006.01]
33/00	Moulds or cores; Details thereof or accessories therefor [4, 2006.01]	33/36 33/38	continuously movable [4, 2006.01]characterised by the material or the manufacturing
33/02	 with incorporated heating or cooling means [4, 2006.01] 	33/40	process (B29C 33/44 takes precedence) [4, 2006.01] • Plastics, e.g. foam or rubber [4, 2006.01]
33/04	• • using liquids, gas or steam [4, 2006.01]	33/42	 characterised by the shape of the moulding surface, e.g. ribs or grooves [4, 2006.01]
33/06 33/08 33/10	 using radiation [4, 2006.01] for dielectric heating [4, 2006.01] with incorporated venting means [4, 2006.01] 	33/44	 with means for, or specially constructed to facilitate, the removal of articles, e.g. of undercut articles [4, 2006.01]
33/12	 with incorporated means for positioning inserts, e.g. labels [4, 2006.01] 	33/46 33/48	using fluid pressure [4, 2006.01]with means for collapsing or
33/14 33/16	against the mould wall [4, 2006.01]using magnetic means [4, 2006.01]	33/50	disassembling [4, 2006.01] • • elastic [4, 2006.01]
33/18 33/20	• • using vacuum [4, 2006.01]• Opening, closing or clamping [4, 2006.01]	33/52	• • soluble or fusible [4, 2006.01]

33/54	 made of powdered or granular material [4, 2006.01] 	39/20	 Making multilayered or multicoloured articles [4, 2006.01]
33/56	 Coatings; Releasing, lubricating or separating agents [4, 2006.01] 	39/22	 Component parts, details or accessories; Auxiliary operations [4, 2006.01]
33/58	Applying the releasing agents [4, 2006.01]	39/24	• • Feeding the material into the mould [4, 2006.01]
33/60	Releasing, lubricating or separating	39/26	 Moulds or cores [4, 2006.01]
	agents [4 , 2006.01]	39/28	• • • with means to avoid flashes [4, 2006.01]
33/62	• • • based on polymers or oligomers [4, 2006.01]	39/30	• • • with means for cutting the article [4, 2006.01]
33/64	• • • • Silicone [4, 2006.01]	39/32	• • • with joints or the like for making the mould
33/66	• • • • Cellulose; Derivatives thereof [4, 2006.01]	33/32	impervious [4, 2006.01]
33/68	• • Release sheets [4, 2006.01]	39/34	• • • for undercut articles [4, 2006.01]
33/70	• Maintenance [4, 2006.01]	39/36	Removing moulded articles [4, 2006.01]
33/72	• • Cleaning [4, 2006.01]	39/38	 Heating or cooling [4, 2006.01]
33/74	• • Repairing [4, 2006.01]	39/40	Compensating volume change, e.g.
33/74	Cores (B29C 33/02-B29C 33/70 take	33/40	retraction [4, 2006.01]
33/70	precedence) [4, 2006.01]	39/42	Casting under special conditions, e.g.
	precedence) [4, 2000.01]	337 42	vacuum [4, 2006.01]
35/00	Heating, cooling or curing, e.g. crosslinking or	39/44	 Measuring, controlling or regulating [4, 2006.01]
	vulcanising; Apparatus therefor (moulds with	557 44	incusumg, condoming or regulating [4, 2000.01]
25 /02	incorporated heating or cooling means B29C 33/02; curing devices for plastics dental prostheses A61C 13/14; before moulding B29B 13/00) [4, 2006.01]	41/00	Shaping by coating a mould, core or other substrate, i.e. by depositing material and stripping-off the shaped article; Apparatus therefor (with compacting
35/02	 Heating or curing, e.g. crosslinking or vulcanising (cold vulcanisation B29C 35/18) [4, 2006.01] 	41 (00	pressure B29C 43/00) [4, 2006.01]
35/04	 using liquids, gas or steam [4, 2006.01] 	41/02	 for making articles of definite length, i.e. discrete articles [4, 2006.01]
35/04	• • for articles of indefinite length [4, 2006.01]	41/04	Rotational or centrifugal casting, i.e. coating the
35/08	• by wave energy or particle radiation [4, 2006.01]	41/04	inside of a mould by rotating the
35/10	• • for articles of indefinite length [4, 2006.01]		mould [4, 2006.01]
35/10	 Dielectric heating [4, 2006.01] 	41/06	• • • about two or more axes [4, 2006.01]
35/14	• • for articles of indefinite length [4, 2006.01]	41/08	 Coating a former, core or other substrate by
		12,00	spraying or fluidisation, e.g. spraying
35/16	• Cooling [4, 2006.01]		powder [4, 2006.01]
35/18	• Cold vulcanisation [4, 2006.01]	41/10	• • by fluidisation [4, 2006.01]
37/00	Component parts, details, accessories or auxiliary	41/12	Spreading-out the material on a
	operations, not covered by group B29C 33/00 or		substrate [4, 2006.01]
	B29C 35/00 [4, 2006.01]	41/14	 Dipping a core [4, 2006.01]
37/02	• Deburring or deflashing [4, 2006.01]	41/16	 Slip casting, i.e. applying a slip or slurry on a
37/04	 of welded articles, e.g. deburring or deflashing in combination with welding [4, 2006.01] 		perforated or porous or absorbent surface with the liquid being drained away [4, 2006.01]
De et e le	and a stranger for the contract of the contrac	41/18	 Slush casting, i.e. pouring moulding material into a hollow mould with excess material being poured off [4, 2006.01]
	r shaping techniques, e.g. moulding, joining; us therefor [4]	41/20	 incorporating preformed parts or layers, e.g.
39/00	Shaping by casting, i.e. introducing the moulding	41/20	moulding around inserts or for coating articles [4, 2006.01]
	material into a mould or between confining surfaces without significant moulding pressure; Apparatus	41/22	 Making multilayered or multicoloured articles [4, 2006.01]
	therefor (B29C 41/00 takes precedence) [4, 2006.01]	41/24	• for making articles of indefinite length [4, 2006.01]
39/02	 for making articles of definite length, i.e. discrete articles [4, 2006.01] 	41/26	by depositing flowable material on a rotating drum [4, 2006.01]
39/04	• using movable moulds (B29C 41/02 takes precedence) [4, 2006.01]	41/28	by depositing flowable material on an endless belt [4, 2006.01]
39/06	• • continuously movable, e.g. along a production line [4, 2006.01]	41/30	 incorporating preformed parts or layers, e.g. moulding around inserts or for coating
39/08	 Introducing the material into the mould by centrifugal force [4, 2006.01] 		articles [4, 2006.01]
39/10	incorporating preformed parts or layers, e.g. casting around inserts or for coating	41/32	 Making multilayered or multicoloured articles [4, 2006.01]
39/12	articles [4, 2006.01] • Making multilayered or multicoloured	41/34	 Component parts, details or accessories; Auxiliary operations [4, 2006.01]
	articles [4, 2006.01]	41/36	 Feeding the material on to the mould, core or other substrate [4, 2006.01]
39/14 39/16	 for making articles of indefinite length [4, 2006.01] between endless belts [4, 2006.01] 	41/38	• • Moulds, cores or other substrates [4, 2006.01]
		41/40	• • • Cores [4, 2006.01]
39/18	 incorporating preformed parts or layers, e.g. casting around inserts or for coating articles [4, 2006.01] 	41/42	 Removing articles from moulds, cores or other substrates [4, 2006.01]
	aracico (7) 2000/01]	41/44	• • • Articles of indefinite length [4, 2006.01]

41/46	 Heating or cooling [4, 2006.01] 	44/10	 Applying counter-pressure during
41/48	• • Compensating volume change, e.g.	44/40	expanding [6, 2006.01]
44 /50	retraction [4, 2006.01]	44/12	 Incorporating or moulding on preformed parts, e.g. inserts or reinforcements [6, 2006.01]
41/50	 Shaping under special conditions, e.g. vacuum [4, 2006.01] 	44/14	 the preformed part being a lining [6, 2006.01]
41/52	Measuring, controlling or regulating [4, 2006.01]	44/16	• • • • shaped by the expansion of the
.1,0=	recubilities, controlling or regulating [1, 200002]	, 10	material [6, 2006.01]
43/00	Compression moulding, i.e. applying external	44/18	• • • Filling preformed cavities [6, 2006.01]
	pressure to flow the moulding material; Apparatus	44/20	 for articles of indefinite length [6, 2006.01]
43/02	therefor [4, 6, 2006.01]of articles of definite length, i.e. discrete	44/22	 consisting of at least two parts of chemically or
43/02	articles [4, 2006.01]		physically different materials, e.g. having different
43/04	 using movable moulds [4, 2006.01] 	44/24	densities [6, 2006.01]
43/06	• • • continuously movable [4, 2006.01]	44/24 44/26	• • Making multilayered articles [6, 2006.01]• using several expanding steps [6, 2006.01]
43/08	• • • • with circular movement [4, 2006.01]	44/28	Expanding the moulding material on continuous
43/10	 Isostatic pressing, i.e. using non-rigid pressure- 	11/20	moving surfaces [6, 2006.01]
	exerting members against rigid parts or	44/30	• • Expanding the moulding material between endless
42/12	dies [4, 2006.01]		belts or rollers [6, 2006.01]
43/12	 using bags surrounding the moulding material [4, 2006.01] 	44/32	• Incorporating or moulding on preformed parts, e.g.
43/14	• • in several steps [4, 2006.01]	44/24	linings, inserts or reinforcements [6, 2006.01]
43/16	• • Forging [4, 2006.01]	44/34	 Component parts, details or accessories; Auxiliary operations [6, 2006.01]
43/18	 incorporating preformed parts or layers, e.g. 	44/36	Feeding the material to be shaped [6, 2006.01]
	compression moulding around inserts or for	44/38	 • • into a closed space, i.e. to make articles of
	coating articles [4, 2006.01]		definite length [6, 2006.01]
43/20	 Making multilayered or multicoloured articles [4, 2006.01] 	44/40	• • • by gravity, e.g. by casting [6, 2006.01]
43/22	• of articles of indefinite length [4, 2006.01]	44/42	• • • using pressure difference, e.g. by injection or
43/24	• Calendering [4, 2006.01]		by vacuum [6, 2006.01]
43/26	• • in several steps (B29C 43/30 takes	44/44	• • • in the form of expandable particles or beads [6, 2006.01]
	precedence) [4, 2006.01]	44/46	• • • into an open space or onto moving surfaces, i.e.
43/28	 incorporating preformed parts or layers, e.g. 	44/40	to make articles of indefinite
	compression moulding around inserts or for		length [6, 2006.01]
40 /00	coating articles [4, 2006.01]	44/48	 • • by gravity, e.g. casting onto, or between,
43/30	 Making multilayered or multicoloured articles [4, 2006.01] 		moving surfaces [6, 2006.01]
43/32	Component parts, details or accessories; Auxiliary	44/50	• • • using pressure difference, e.g. by extrusion or by spraying [6, 2006.01]
	operations [4, 2006.01]	44/52	• • • • between moving surfaces [6, 2006.01]
43/34	 Feeding the material to the mould or the 	44/54	• • • • in the form of expandable particles or
	compression means [4, 2006.01]	,	beads [6, 2006.01]
43/36	 Moulds for making articles of definite length, i.e. discrete articles [4, 2006.01] 	44/56	 After-treatment of articles, e.g. for altering the
43/38	• • • with means to avoid flashes [4, 2006.01]		shape [6, 2006.01]
43/40	• • • with means for cutting the article [4, 2006.01]	44/58	• • Moulds [6, 2006.01]
43/42	• • • for undercut articles [4, 2006.01]	44/60	• • Measuring, controlling or regulating [6, 2006.01]
43/44	Compression means for making articles of	45/00	Injection moulding, i.e. forcing the required volume
	indefinite length [4, 2006.01]		of moulding material through a nozzle into a closed
43/46	• • • Rollers [4, 2006.01]		mould; Apparatus therefor (injection blow-moulding
43/48	• • • Endless belts [4, 2006.01]	45/02	B29C 49/06) [4, 2006.01] • Transfer moulding, i.e. transferring the required
43/50	Removing moulded articles [4, 2006.01]	45/02	volume of moulding material by a plunger from a
43/52	• • Heating or cooling [4, 2006.01]		"shot" cavity into a mould cavity [4, 2006.01]
43/54	 Compensating volume change, e.g. retraction [4, 2006.01] 	45/03	Injection moulding apparatus (transfer moulding
43/56	Compression moulding under special conditions,		B29C 45/02) [4, 2006.01]
157 50	e.g. vacuum [4, 2006.01]	45/04	• using movable moulds (B29C 45/08 takes
43/58	• • Measuring, controlling or regulating [4, 2006.01]	4F /0C	precedence) [4, 2006.01]
44/00		45/06 45/07	• • • on a turntable [4, 2006.01]
44/00	Shaping by internal pressure generated in the material, e.g. swelling or foaming [6, 2006.01]	45/07 45/08	using movable injection units [4, 2006.01]moving with the mould during the injection
44/02	• for articles of definite length, i.e. discrete	45/00	operation [4, 2006.01]
17/02	articles [6, 2006.01]	45/10	 using moulds or injection units usable in different
44/04	consisting of at least two parts of chemically or		arrangements or combinations to each
	physically different materials, e.g. having different		other [4, 2006.01]
44/00	densities [6, 2006.01]	45/12	• • using two or more fixed moulds, e.g. in
44/06	• • • Making multilayered articles [6, 2006.01]		tandem [4, 2006.01]
44/08	 using several expanding steps [6, 2006.01] 		

6

45/13	 using two or more injection units co-operating 	45/72	 Heating or cooling [4, 2006.01]
	with a single mould [4, 2006.01]	45/73	• • • of the mould [4, 2006.01]
45/14	 incorporating preformed parts or layers, e.g. injection 	45/74	• • • of the injection unit [4, 2006.01]
	moulding around inserts or for coating	45/76	• • Measuring, controlling or regulating [4, 2006.01]
	articles [4, 2006.01]	45/77	of velocity or pressure of moulding
45/16	Making multilayered or multicoloured	43///	material [4, 2006.01]
	articles [4, 2006.01]	45 /50	
45/17	Component parts, details or accessories; Auxiliary	45/78	• • • of temperature [4, 2006.01]
45/17	operations [4, 2006.01]	45/80	• • of relative position of mould parts [4, 2006.01]
4E /10	Feeding the material into the injection moulding	45/82	• • • Hydraulic circuits [4, 2006.01]
45/18		45/83	 Lubricating means [4, 2006.01]
45 /00	apparatus [4, 2006.01]	45/84	• • Safety devices [4, 2006.01]
45/20	• • Injection nozzles [4, 2006.01]		,
45/22	 • Multiple nozzle systems [4, 2006.01] 	48/00	Extrusion moulding, i.e. expressing the moulding
45/23	 • • Feed stopping equipment [4, 2006.01] 		material through a die or nozzle which imparts the
45/24	 Cleaning equipment [4, 2006.01] 		desired form; Apparatus therefor (extrusion blow-
45/26	 Moulds [4, 2006.01] 		moulding B29C 49/04) [2019.01]
45/27	• • • Sprue channels [4, 2006.01]	48/02	Small extruding apparatus, e.g. handheld, toy or
45/28	• • • Closure devices therefor [4, 2006.01]		laboratory extruders [2019.01]
		48/025	General arrangement or layout of plant [2019.01]
45/30	• • • Flow control means disposed within the	48/03	 characterised by the shape of the extruded material at
	sprue channel, e.g. "torpedo"	40/03	
.=	construction [4, 2006.01]	40 /04	extrusion [2019.01]
45/32	• • having several axially spaced mould	48/04	Particle-shaped (making granules Page 2002 1994 241)
	cavities [4, 2006.01]		B29B 9/00) [2019.01]
45/33	 having transversely, e.g. radially, movable 	48/05	 Filamentary, e.g. strands [2019.01]
	mould parts [4, 2006.01]	48/06	• • Rod-shaped [2019.01]
45/34	 having venting means [4, 2006.01] 	48/07	• • Flat, e.g. panels [2019.01]
45/36	• • having means for locating or centering	48/08	• • • flexible, e.g. films [2019.01]
.07.00	cores [4, 2006.01]	48/09	Articles with cross-sections having partially or
45/37	• • • Mould cavity walls [4, 2006.01]	40/03	fully enclosed cavities, e.g. pipes or
	•		channels [2019.01]
45/38	• Cutting-off equipment for sprues or	40 / 10	
.=	ingates [4, 2006.01]	48/10	• • • flexible, e.g. blown foils [2019.01]
45/40	Removing or ejecting moulded	48/11	 comprising two or more partially or fully
	articles [4, 2006.01]		enclosed cavities, e.g. honeycomb-
45/42	 using means movable from outside the mould 		shaped [2019.01]
	between mould parts [4, 2006.01]	48/12	 Articles with an irregular circumference when
45/43	• • • using fluid under pressure [4, 2006.01]		viewed in cross-section, e.g. window
45/44	 • • for undercut articles [4, 2006.01] 		profiles [2019.01]
45/46	 Means for plasticising or homogenising the 	48/13	 Articles with a cross-section varying in the
	moulding material or forcing it into the		longitudinal direction, e.g. corrugated
	mould [4, 2006.01]		pipes [2019.01]
45/47	• • using screws (B29C 45/54 takes	48/14	 characterised by the particular extruding conditions,
43/4/	precedence) [4, 2006.01]		e.g. in a modified atmosphere or by using
45 / 40	*		vibration [2019.01]
45/48	Plasticising screw and injection	48/15	 incorporating preformed parts or layers, e.g.
	screw [4, 2006.01]	40/13	extrusion moulding around inserts [2019.01]
45/50	• • • • Axially movable screw [4, 2006.01]	40 / 1 5 1	<u>-</u>
45/52	• • • • Non-return devices [4, 2006.01]	48/151	• • Coating hollow articles [2019.01]
45/53	 using injection ram or piston [4, 2006.01] 	48/152	• • the inner surfaces thereof [2019.01]
45/54	• • • • and plasticising screw [4, 2006.01]	48/153	 Coating both inner and outer
45/56	• • using mould parts movable during or after		surfaces [2019.01]
43/30	injection, e.g. injection-compression	48/154	 Coating solid articles, i.e. non-hollow
	moulding [4, 2006.01]		articles [2019.01]
45 /57	_	48/155	• • • Partial coating thereof [2019.01]
45/57	• • • Exerting after-pressure on the moulding	48/156	Coating two or more articles
	material [4, 2006.01]	40/ 150	simultaneously [2019.01]
45/58	• • • Details [4, 2006.01]	48/157	Coating linked inserts, e.g. chains [2019.01]
45/60	• • • • Screws [4, 2006.01]		
45/62	• • • • Barrels or cylinders [4, 2006.01]	48/16	• Articles comprising two or more components, e.g.
45/63	• • • Venting or degassing means [4, 2006.01]		co-extruded layers [2019.01]
45/64	Mould opening, closing or clamping	48/17	• • the components having different colours [2019.01]
.5, 5 !	devices [4, 2006.01]	48/18	 the components being layers [2019.01]
45/66	• • • mechanical [4, 2006.01]	48/19	• • • the layers being joined at their edges [2019.01]
		48/20	one of the layers being a strip, e.g. a partially
4F /C7			
45/67	• • • hydraulic [4, 2006.01]		embedded strip [2019.01]
45/68	• • • hydro-mechanical [4, 2006.01]	<i>4</i> 8/21	embedded strip [2019.01] • • • the layers being joined at their
	• • hydro-mechanical [4, 2006.01]• Means for plasticising or homogenising the	48/21	 the layers being joined at their
45/68	 • • hydro-mechanical [4, 2006.01] • • Means for plasticising or homogenising the moulding material or forcing it into the mould, 		 the layers being joined at their surfaces [2019.01]
45/68	• • hydro-mechanical [4, 2006.01]• Means for plasticising or homogenising the	48/21 48/22	 the layers being joined at their

48/23 • • • with means for avoiding adhesion of the layers, e.g. for forming peelable layers [2019.01]	48/415 • • • • and having partially non-intermeshing screws [2019.01]
• Component parts, details or accessories; Auxiliary operations [2019.01]	48/42 • • • • Non-identical or non-mirrored screws [2019.01]
48/255 • Flow control means, e.g. valves (flow dividers B29C 48/695) [2019.01]	48/425 • • • • using three or more screws (serially
48/265 • • Support structures or bases for apparatus, e.g.	arranged screws B29C 48/38, B29C 48/385) [2019.01]
frames [2019.01]	48/43 • • • • • Ring extruders [2019.01]
48/27 • Cleaning; Purging; Avoiding	48/435 • • • • Sub-screws [2019.01]
contamination [2019.01]	48/44 • • • • • Planetary screws [2019.01]
48/275 • Recovery or reuse of energy or materials [2019.01]	48/445 • • • Coaxially arranged screws, i.e. one within the other [2019.01]
48/28 • • Storing of extruded material, e.g. by winding up or	
stacking [2019.01]	48/45 • • • • Axially movable screws [2019.01] 48/455 • • • • Screws arranged to convey material towards
48/285 • • Feeding the extrusion material to the extruder [2019.01]	each other, e.g. separate screws arranged after each other and feeding in opposite
48/29 • • • in liquid form [2019.01]	directions [2019.01]
48/295 • • • in gaseous form [2019.01]	48/46 • • • using vanes [2019.01]
48/30 • Extrusion nozzles or dies (extrusion characterised	48/465 • • • using rollers [2019.01]
by the shape or cross-section of the extruded	48/47 • • • using discs, e.g. plasticising the moulding
article B29C 48/03) [2019.01]	material by passing it between a fixed and a
48/305 • • • having a wide opening, e.g. for forming	rotating disc that are coaxially
sheets [2019.01]	arranged [2019.01]
48/31 • • • • adjustable [2019.01]	48/475 • • • using pistons, accumulators or press
48/315 • • • • with parts oscillating relative to each	rams [2019.01]
other [2019.01]	48/48 • • • • Two or more rams or pistons [2019.01]
48/32 • • • with annular openings, e.g. for forming tubular articles [2019.01]	48/485 • • • Hydrostatic extrusion [2019.01] 48/49 • • using two or more extruders to feed one die or
48/325 • • • • adjustable [2019.01]	nozzle [2019.01]
48/33 • • • with parts rotatable relative to each	48/495 • • • • Feedblocks (extrusion moulding of multi-
other [2019.01]	component articles B29C 48/16) [2019.01]
48/335 • • • Multiple annular extrusion nozzles in coaxial	48/50 • • • Details of extruders [2019.01]
arrangement, e.g. for making multi-layered	48/505 • • • • Screws [2019.01]
tubular articles [2019.01]	48/51 • • • • with internal flow passages, e.g. for
48/34 • • • • Cross-head annular extrusion nozzles, i.e. for simultaneously receiving moulding	molten material [2019.01] 48/515 • • • • for auxiliary fluids, e.g. foaming
material and the preform to be coated [2019.01]	agents [2019.01]
48/345 • • • Extrusion nozzles comprising two or more	48/52 • • • • with an outer diameter varying along the
adjacently arranged ports, for simultaneously	longitudinal axis, e.g. for obtaining different thread clearance [2019.01]
extruding multiple strands, e.g. for	48/525 • • • • • Conical screws [2019.01]
pelletising [2019.01]	48/53 • • • • having a varying channel depth, e.g.
48/35 • • • with rollers [2019.01]	varying the diameter of the longitudinal
48/355 • • Conveyors for extruded articles [2019.01]	screw trunk [2019.01]
48/36 • Means for plasticising or homogenising the	48/535 • • • • with thread pitch varying along the
moulding material or forcing it through the nozzle or die [2019.01]	longitudinal axis [2019.01]
48/365 • • • using pumps, e.g. piston pumps [2019.01]	48/54 • • • • with additional forward-feeding
48/37 • • • • Gear pumps [2019.01]	elements [2019.01]
48/375 • • • Plasticisers, homogenisers or feeders	48/55 • • • • having reverse-feeding elements [2019.01]
comprising two or more stages [2019.01]	48/56 • • • • having grooves or cavities other than the
48/38 • • • • using two or more serially arranged screws	thread or the channel [2019.01]
in the same barrel [2019.01]	48/565 • • • • having projections other than the thread,
48/385 • • • using two or more serially arranged screws in separate barrels [2019.01]	e.g. pins [2019.01] 48/57 • • • • provided with kneading disc-like
48/39 • • • • a first extruder feeding the melt into an	elements, e.g. with oval-shaped
intermediate location of a second	elements [2019.01]
extruder [2019.01]	48/575 • • • • provided with elements of a generally
48/395 • • • using screws surrounded by a cooperating	circular cross-section for shearing the
barrel, e.g. single screw extruders [2019.01] 48/40 • • • using two or more parallel screws, e.g. twin	melt, i.e. shear-ring elements [2019.01]
screw extruders [2019.01]	48/58 • • • • provided with seal ring elements, i.e. elements of generally circular and tapered
48/405 • • • • Intermeshing co-rotating	shape for preventing the back flow of the
screws [2019.01]	melt [2019.01]
48/41 • • • • Intermeshing counter-rotating	48/585 • • • • provided with gears interacting with the
screws [2019.01]	flow [2019.01]

48/59										
		•	•	•	characterised by details of the thread, i.e. the shape of a single thread of the	48/74	•	•	, ,	 Bypassing means, i.e. part of the molten material being diverted into downstream
					material-feeding screw [2019.01]					stages of the extruder [2019.01]
48/595			•	•	 the thread having non-uniform 	48/76	•	•	, ,	 Venting means; Degassing means [2019.01]
					width [2019.01]	48/78	•		, ,	Thermal treatment of the extrusion moulding
48/60					• Thread tops [2019.01]	10770				material or of preformed parts or layers, e.g. by
48/605			_	_	*					heating or cooling [2019.01]
48/605	•	•	•	•	• the thread being	40 /50				
					discontinuous [2019.01]	48/79				• of preformed parts or layers [2019.01]
48/61	• •	•	•	•	 Threads having wavy 	48/793	•	•	, ,	 upstream of the plasticising zone, e.g. heating
					profiles [2019.01]					in the hopper [2019.01]
48/615		•	•	•	Threads having varying helix	48/797	•	•	, ,	• • Cooling [2019.01]
					angles [2019.01]	48/80				at the plasticising zone, e.g. by heating
48/62					characterised by the shape of the thread	.0, 00				cylinders [2019.01]
.0, 02					channel, e.g. U-shaped [2019.01]	48/82				Cooling (B29C 48/84 takes)
48/625					characterised by the ratio of the threaded	40/02	·	•		precedence) [2019.01]
40/023			•	Ť		40.40.4				
					length of the screw to its outside diameter	48/84	•	•	'	• • by heating or cooling the feeding screws (for
40.400					[L/D ratio] [2019.01]					hollow screws B29C 48/515) [2019.01]
48/63	• •	•	•	•	having sections without mixing elements	48/85	•	•	•	• • • Cooling [2019.01]
					or threads, i.e. having cylinder shaped	48/86	•	•		 at the nozzle zone [2019.01]
					sections [2019.01]	48/87	•		, ,	• • Cooling [2019.01]
48/635	• •	•	•	•	Eccentrically rotating screws; Screws	48/875				for achieving a non-uniform temperature
					revolving around an axis other than their	40/0/3				distribution, e.g. using barrels having both
					central axis [2019.01]					cooling and heating zones [2019.01]
48/64			•	•	Screws with two or more	40 /00			,	
					threads [2019.01]	48/88	•	•		Thermal treatment of the stream of extruded
48/645					 neighbouring threads and channels]	material, e.g. cooling [2019.01]
40/043		_	-	-	having identical		N	Jo	teľ	e(s) [2019.01]
					configurations [2019.01]					
40.765										en classifying in this group, forms or shapes of
48/65	•	•	•	•	neighbouring threads or channels					lucts are further classified in groups B29C 48/03-
					having different configurations, e.g.		Е	329	9C	C 48/13.
					one thread being lower than its	48/885	•	•	, ,	 External treatment, e.g. by using air rings for
					neighbouring thread [2019.01]					cooling tubular films [2019.01]
48/655	• •	•	•	•	• having three or more threads [2019.01]	48/89	•			• Internal treatment, e.g. by applying an internal
48/66	• •	•	•	•	 Barrier threads, i.e. comprising 					cooling fluid stream [2019.01]
					primary and secondary threads					-
					primary and secondary uncads	48/90				 with calibration or sizing i.e. combined with
					whereby the secondary thread provides	48/90	•	•		
						48/90	•	•		fixing or setting of the final dimensions of the
					whereby the secondary thread provides		•	•		fixing or setting of the final dimensions of the extruded article [2019.01]
48/67		•	•	•	whereby the secondary thread provides clearance to the barrel for material movement [2019.01]	48/91	•	•		fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01]
			•	•	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not	48/91 48/92	•	•	• •]	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01]
		•	•	•	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-	48/91 48/92 48/94		•	• •]	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01]
48/67				• B:	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01]	48/91 48/92		•	• •]	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01]
48/67 48/68	• •			. Ва	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] arrels or cylinders [2019.01]	48/91 48/92 48/94		•	• •]	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01]
48/67		•		Ва	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] arrels or cylinders [2019.01] characterised by their inner surfaces, e.g.	48/91 48/92 48/94 48/95	•	•	· · · · · · · · · · · · · · · · · · ·	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01]
48/67 48/68	• •	•		. Ва	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] harrels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or	48/91 48/92 48/94	•	•	· · · · · · · · · · · · · · · · · · ·	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding
48/67 48/68 48/685		•	•	•	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] harrels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01]	48/91 48/92 48/94 48/95	•	•		fixing or setting of the final dimensions of the extruded article [2019.01] Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] by adding lubricant to the moulding material [2019.01] Safety devices [2019.01]
48/67 48/68		•		• Fi	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] having or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] lters or screens for the moulding	48/91 48/92 48/94 48/95		· ·	w-	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] v-moulding, i.e. blowing a preform or parison to
48/67 48/68 48/685		•	•	• Fi	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] having or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] heters or screens for the moulding aterial [2019.01]	48/91 48/92 48/94 48/95		ilo de	w-	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] v-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus
48/67 48/68 48/685		•	•	• Fi	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] having or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] lters or screens for the moulding	48/91 48/92 48/94 48/95 48/96 49/00	· B	ilo de her	w- esi	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] w-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01]
48/67 48/68 48/685 48/69	• •		•	• Fi	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] having or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] heters or screens for the moulding aterial [2019.01]	48/91 48/92 48/94 48/95	· B	ilo do her	w- esi	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] w-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the
48/67 48/68 48/685 48/69	• • •		•	• Fi	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] hrrels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] hters or screens for the moulding aterial [2019.01] Arrangements for replacing filters, e.g.	48/91 48/92 48/94 48/95 48/96 49/00	B a th	Slo de her	w- esi Core	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] w-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01]
48/67 48/68 48/685 48/69 48/691		•	•	• Fi	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] hrrels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] hters or screens for the moulding aterial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01]	48/91 48/92 48/94 48/95 48/96 49/00 49/02	B a th	ilo de her	w- esi Core	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] v-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01]
48/67 48/68 48/685 48/69			•	• Fi	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] hrrels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] heres or screens for the moulding herial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01] in the form of webs displaceable for using	48/91 48/92 48/94 48/95 48/96 49/00 49/02 49/04 49/06	B a th	ilo de her	w- esi Con	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] v-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01] Injection blow-moulding [4, 2006.01]
48/67 48/68 48/685 48/69 48/691	• • • • • • • • • • • • • • • • • • • •		•	• Fi	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] urrels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] ters or screens for the moulding aterial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01] in the form of webs displaceable for using adjacent areas consecutively [2019.01]	48/91 48/92 48/94 48/95 48/96 49/00 49/02 49/04 49/06 49/08	B a th	Slo de her I	w- esi ref ore	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] v-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01] Injection blow-moulding [4, 2006.01] iaxial stretching during blow-moulding [4, 2006.01]
48/67 48/68 48/685 48/69 48/691	• • • • • • • • • • • • • • • • • • • •		•	Fi m	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] urrels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] ters or screens for the moulding aterial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01] in the form of webs displaceable for using adjacent areas consecutively [2019.01] Substantially flat filters mounted at the	48/91 48/92 48/94 48/95 48/96 49/00 49/02 49/04 49/06	B a th	Slo de her I	w- esi ref ore	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] v-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01] Injection blow-moulding [4, 2006.01]
48/67 48/68 48/685 48/69 48/691	• • • • • • • • • • • • • • • • • • • •		•	Fi m	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] trels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] ters or screens for the moulding aterial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01] in the form of webs displaceable for using adjacent areas consecutively [2019.01] Substantially flat filters mounted at the end of an extruder screw perpendicular to	48/91 48/92 48/94 48/95 48/96 49/00 49/02 49/04 49/06 49/08	B a th	Slo de her	w- esi ref Cor Sia	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] v-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01] Injection blow-moulding [4, 2006.01] iaxial stretching during blow-moulding [4, 2006.01]
48/67 48/68 48/685 48/69 48/691 48/692 48/693			•	Fi m	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] mrels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] ters or screens for the moulding aterial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01] in the form of webs displaceable for using adjacent areas consecutively [2019.01] Substantially flat filters mounted at the end of an extruder screw perpendicular to the feed axis [2019.01]	48/91 48/92 48/94 48/95 48/96 49/00 49/02 49/04 49/06 49/08 49/10 49/12	Batth	ilo de her H	w- esi Con Sia	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] w-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01] iaxial stretching during blow-moulding [4, 2006.01] using mechanical means [4, 2006.01] • Stretching rods [4, 2006.01]
48/67 48/68 48/685 48/69 48/691 48/693			•	Fi m	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] trels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] lters or screens for the moulding aterial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01] in the form of webs displaceable for using adjacent areas consecutively [2019.01] Substantially flat filters mounted at the end of an extruder screw perpendicular to the feed axis [2019.01] Cylindrical or conical filters [2019.01]	48/91 48/92 48/94 48/95 48/96 49/00 49/02 49/04 49/06 49/08 49/10 49/12 49/14	Battle	Slo de her	w- esi ref Con Bia	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] w-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01] injection blow-moulding [4, 2006.01] iaxial stretching during blow-moulding [4, 2006.01] • Stretching rods [4, 2006.01] • Clamps [4, 2006.01]
48/67 48/68 48/685 48/691 48/693 48/694 48/695			•	Fi m	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] hrels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] lters or screens for the moulding aterial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01] in the form of webs displaceable for using adjacent areas consecutively [2019.01] Substantially flat filters mounted at the end of an extruder screw perpendicular to the feed axis [2019.01] Cylindrical or conical filters [2019.01] ow dividers, e.g. breaker plates [2019.01]	48/91 48/92 48/94 48/95 48/96 49/00 49/02 49/04 49/06 49/08 49/10 49/12	Battle	Slo de her	w- esi ref Sia	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] w-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01] injection blow-moulding [4, 2006.01] iaxial stretching during blow-moulding [4, 2006.01] • Stretching rods [4, 2006.01] • Clamps [4, 2006.01] using pressure difference, e.g. pre-
48/67 48/68 48/685 48/69 48/691 48/693			•	Fi m	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] trels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] deers or screens for the moulding aterial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01] in the form of webs displaceable for using adjacent areas consecutively [2019.01] Substantially flat filters mounted at the end of an extruder screw perpendicular to the feed axis [2019.01] Cylindrical or conical filters [2019.01] ow dividers, e.g. breaker plates [2019.01] comprising means for dividing,	48/91 48/92 48/94 48/95 48/96 49/00 49/02 49/04 49/06 49/08 49/10 49/12 49/14 49/16	Batth	Slo de de la companya	w- esi asia	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] w-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01] iaxial stretching during blow-moulding [4, 2006.01] using mechanical means [4, 2006.01] • Stretching rods [4, 2006.01] • Clamps [4, 2006.01] using pressure difference, e.g. pre-blowing [4, 2006.01]
48/67 48/68 48/685 48/691 48/693 48/694 48/695			•	Fi m	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] trels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] ters or screens for the moulding aterial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01] in the form of webs displaceable for using adjacent areas consecutively [2019.01] Substantially flat filters mounted at the end of an extruder screw perpendicular to the feed axis [2019.01] Cylindrical or conical filters [2019.01] ow dividers, e.g. breaker plates [2019.01] comprising means for dividing, distributing and recombining melt	48/91 48/92 48/94 48/95 48/96 49/00 49/02 49/04 49/06 49/08 49/10 49/12 49/14	Batth	ilo de her	w-esi ref Core	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] v-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01] iaxial stretching during blow-moulding [4, 2006.01] using mechanical means [4, 2006.01] • Stretching rods [4, 2006.01] • Clamps [4, 2006.01] using pressure difference, e.g. pre-blowing [4, 2006.01] sing several blowing steps (B29C 49/16 takes
48/67 48/68 48/685 48/691 48/693 48/694 48/695			•	Fi m	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] hrels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] hters or screens for the moulding herial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01] in the form of webs displaceable for using adjacent areas consecutively [2019.01] Substantially flat filters mounted at the end of an extruder screw perpendicular to the feed axis [2019.01] Cylindrical or conical filters [2019.01] ow dividers, e.g. breaker plates [2019.01] comprising means for dividing, distributing and recombining melt flows [2019.01]	48/91 48/92 48/94 48/95 48/96 49/00 49/02 49/04 49/06 49/08 49/10 49/12 49/14 49/16	Battle	Slo do her	w- esi ref Con Bia	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] v-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01] injection blow-moulding [4, 2006.01] iaxial stretching during blow-moulding [4, 2006.01] • Stretching rods [4, 2006.01] • Clamps [4, 2006.01] sing pressure difference, e.g. pre-blowing [4, 2006.01] sing several blowing steps (B29C 49/16 takes recedence) [4, 2006.01]
48/67 48/68 48/685 48/691 48/693 48/694 48/695			•	Fi m	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] hrels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] heres or screens for the moulding aterial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01] in the form of webs displaceable for using adjacent areas consecutively [2019.01] Substantially flat filters mounted at the end of an extruder screw perpendicular to the feed axis [2019.01] Cylindrical or conical filters [2019.01] ow dividers, e.g. breaker plates [2019.01] comprising means for dividing, distributing and recombining melt flows [2019.01] for layer multiplication (extrusion of	48/91 48/92 48/94 48/95 48/96 49/00 49/02 49/04 49/06 49/08 49/10 49/12 49/14 49/16	Battle	islo de	w- esi a li Bia in li Bia	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] v-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01] injection blow-moulding [4, 2006.01] iaxial stretching during blow-moulding [4, 2006.01] • Stretching rods [4, 2006.01] • Clamps [4, 2006.01] sing pressure difference, e.g. pre-blowing [4, 2006.01] sing several blowing steps (B29C 49/16 takes recedence) [4, 2006.01] f articles having inserts or
48/67 48/68 48/695 48/691 48/693 48/694 48/695 48/70			•	Fi m	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] hrels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] heres or screens for the moulding herial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01] in the form of webs displaceable for using adjacent areas consecutively [2019.01] Substantially flat filters mounted at the end of an extruder screw perpendicular to the feed axis [2019.01] Cylindrical or conical filters [2019.01] ow dividers, e.g. breaker plates [2019.01] comprising means for dividing, distributing and recombining melt flows [2019.01] for layer multiplication (extrusion of multi-component articles	48/91 48/92 48/94 48/95 48/96 49/00 49/02 49/04 49/06 49/08 49/10 49/12 49/14 49/16 49/18 49/20		Sloode her	w- esi Tesi Sia Sia Sia Sia Sia Sia Sia Sia Sia Si	fixing or setting of the final dimensions of the extruded article [2019.01] Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] w-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01] Injection blow-moulding [4, 2006.01] iaxial stretching during blow-moulding [4, 2006.01] v Stretching rods [4, 2006.01] Clamps [4, 2006.01] clamps [4, 2006.01] sing several blowing steps (B29C 49/16 takes recedence) [4, 2006.01] farticles having inserts or binforcements [4, 2006.01]
48/67 48/68 48/695 48/691 48/693 48/694 48/695 48/70			•	Fi m	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] hrels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] heres or screens for the moulding aterial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01] in the form of webs displaceable for using adjacent areas consecutively [2019.01] Substantially flat filters mounted at the end of an extruder screw perpendicular to the feed axis [2019.01] Cylindrical or conical filters [2019.01] ow dividers, e.g. breaker plates [2019.01] comprising means for dividing, distributing and recombining melt flows [2019.01] for layer multiplication (extrusion of	48/91 48/92 48/94 48/95 48/96 49/00 49/02 49/04 49/06 49/08 49/10 49/12 49/14 49/16		Sloode her	w- esi Tesi Sia Sia Sia Sia Sia Sia Sia Sia Sia Si	fixing or setting of the final dimensions of the extruded article [2019.01] • Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] • by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] v-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01] injection blow-moulding [4, 2006.01] iaxial stretching during blow-moulding [4, 2006.01] • Stretching rods [4, 2006.01] • Clamps [4, 2006.01] sing pressure difference, e.g. pre-blowing [4, 2006.01] sing several blowing steps (B29C 49/16 takes recedence) [4, 2006.01] f articles having inserts or
48/67 48/68 48/695 48/691 48/693 48/694 48/695 48/70			•	Fi m····································	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] hrels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] heres or screens for the moulding herial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01] in the form of webs displaceable for using adjacent areas consecutively [2019.01] Substantially flat filters mounted at the end of an extruder screw perpendicular to the feed axis [2019.01] Cylindrical or conical filters [2019.01] ow dividers, e.g. breaker plates [2019.01] comprising means for dividing, distributing and recombining melt flows [2019.01] for layer multiplication (extrusion of multi-component articles	48/91 48/92 48/94 48/95 48/96 49/00 49/02 49/04 49/06 49/08 49/10 49/12 49/14 49/16 49/18 49/20	Batth	is i	w-esi ref	fixing or setting of the final dimensions of the extruded article [2019.01] Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] w-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01] Injection blow-moulding [4, 2006.01] iaxial stretching during blow-moulding [4, 2006.01] v Stretching rods [4, 2006.01] Clamps [4, 2006.01] clamps [4, 2006.01] sing several blowing steps (B29C 49/16 takes recedence) [4, 2006.01] farticles having inserts or binforcements [4, 2006.01]
48/67 48/68 48/685 48/691 48/692 48/693 48/695 48/70 48/71			•	Fi m · · · · · · · · · · · · · · · · · ·	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] hrels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] heres or screens for the moulding aterial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01] in the form of webs displaceable for using adjacent areas consecutively [2019.01] Substantially flat filters mounted at the end of an extruder screw perpendicular to the feed axis [2019.01] Cylindrical or conical filters [2019.01] ow dividers, e.g. breaker plates [2019.01] comprising means for dividing, distributing and recombining melt flows [2019.01] for layer multiplication (extrusion of multi-component articles B29C 48/16) [2019.01]	48/91 48/92 48/94 48/95 48/96 49/00 49/02 49/04 49/06 49/08 49/10 49/12 49/14 49/16 49/18 49/20 49/22		is is is is in the second of t	w-lesi reference in the control of a control	fixing or setting of the final dimensions of the extruded article [2019.01] Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] w-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01] Injection blow-moulding [4, 2006.01] iaxial stretching during blow-moulding [4, 2006.01] v Stretching rods [4, 2006.01] Clamps [4, 2006.01] ising pressure difference, e.g. pre-blowing [4, 2006.01] sing several blowing steps (B29C 49/16 takes recedence) [4, 2006.01] farticles having inserts or einforcements [4, 2006.01] sing multilayered preforms or parisons [4, 2006.01] ining or labelling [4, 2006.01]
48/67 48/68 48/685 48/691 48/692 48/693 48/695 48/70 48/71			•	Fi m · · · · · · · · · · · · · · · · · ·	whereby the secondary thread provides clearance to the barrel for material movement [2019.01] having incorporated mixing devices not provided for in groups B29C 48/52-B29C 48/66 [2019.01] hrels or cylinders [2019.01] characterised by their inner surfaces, e.g. having grooves, projections or threads [2019.01] heres or screens for the moulding aterial [2019.01] Arrangements for replacing filters, e.g. with two parallel filters for alternate use [2019.01] in the form of webs displaceable for using adjacent areas consecutively [2019.01] Substantially flat filters mounted at the end of an extruder screw perpendicular to the feed axis [2019.01] Cylindrical or conical filters [2019.01] ow dividers, e.g. breaker plates [2019.01] comprising means for dividing, distributing and recombining melt flows [2019.01] for layer multiplication (extrusion of multi-component articles B29C 48/16) [2019.01] edback means, i.e. part of the molten	48/91 48/92 48/94 48/95 48/96 49/00 49/02 49/04 49/06 49/08 49/10 49/12 49/14 49/16 49/18 49/20 49/22 49/24		is to the state of	w-lesi prefaction of a control	fixing or setting of the final dimensions of the extruded article [2019.01] Heating, e.g. for cross linking [2019.01] Measuring, controlling or regulating [2019.01] Lubricating [2019.01] by adding lubricant to the moulding material [2019.01] Safety devices [2019.01] v-moulding, i.e. blowing a preform or parison to sired shape within a mould; Apparatus efor [4, 2006.01] ombined blow-moulding and manufacture of the reform or the parison [4, 2006.01] Extrusion blow-moulding [4, 2006.01] Injection blow-moulding [4, 2006.01] iaxial stretching during blow-moulding [4, 2006.01] v Stretching rods [4, 2006.01] Clamps [4, 2006.01] ising pressure difference, e.g. pre-blowing [4, 2006.01] sing several blowing steps (B29C 49/16 takes recedence) [4, 2006.01] farticles having inserts or einforcements [4, 2006.01] sing multilayered preforms or parisons [4, 2006.01]

49/30	 having movable moulds or mould 	51/34	 for undercut articles [4, 2006.01]
	parts [4, 2006.01]	51/36	 specially adapted for vacuum
49/32	 moving "to and fro" [4, 2006.01] 		forming [4, 2006.01]
49/34	• • • the mould parts moving "hand-over- hand" [4, 2006.01]	51/38	 Opening, closing or clamping means [4, 2006.01]
49/36	 rotatable about one axis [4, 2006.01] 	51/40	 Venting means [4, 2006.01]
49/38	• • mounted on movable endless	51/42	 Heating or cooling [4, 2006.01]
	supports [4, 2006.01]	51/44	Removing or ejecting moulded
49/40	• • • • on co-operating drums [4, 2006.01]		articles [4, 2006.01]
49/42	 Component parts, details or accessories; Auxiliary operations [4, 2006.01] 	51/46	• • Measuring, controlling or regulating [4, 2006.01]
49/44	 for applying pressure through the walls of an 	53/00	Shaping by bending, folding, twisting, straightening
43/44	inflated bag [4, 2006.01]		or flattening; Apparatus therefor (B29C 61/10 takes
49/46	characterised by using particular environment or		precedence) [4, 2006.01]
437 40	blow fluids other than air [4, 2006.01]	53/02	 Bending or folding (B29C 53/22, B29C 53/34,
49/48	• • Moulds [4, 2006.01]		B29C 53/36, B29C 53/56 take
49/50	 having cutting or deflashing means [4, 2006.01] 		precedence) [4, 2006.01]
49/52	• • having decorating or printing	53/04	 of plates or sheets [4, 2006.01]
49/52	means [4, 2006.01]	53/06	 Forming folding lines by pressing or
40 / 5 4			scoring [4, 2006.01]
49/54	• • • for undercut articles [4, 2006.01]	53/08	• • of tubes [4, 2006.01]
49/56	• • Opening, closing or clamping means [4, 2006.01]	53/10	• • of blown tubular films, e.g. gusseting [4, 2006.01]
49/58	• • Blowing means [4, 2006.01]	53/12	 helically, e.g. for making springs [4, 2006.01]
49/60	• • • Blow-needles [4, 2006.01]	53/14	• Twisting [4, 2006.01]
49/62	 Venting means [4, 2006.01] 	53/14	• Straightening or flattening [4, 2006.01]
49/64	 Heating or cooling preforms, parisons or blown 		
	articles [4, 2006.01]	53/18	• • of plates or sheets [4, 2006.01]
49/66	 Cooling by refrigerant introduced into the 	53/20	• • of tubes [4, 2006.01]
	blown article [4, 2006.01]	53/22	• Corrugating [4, 2006.01]
49/68	 Ovens specially adapted for heating preforms 	53/24	 of plates or sheets [4, 2006.01]
	or parisons [4, 2006.01]	53/26	• • • parallel with direction of feed [4, 2006.01]
49/70	 Removing or ejecting blown articles from the 	53/28	• • transverse to direction of feed [4, 2006.01]
	mould [4, 2006.01]	53/30	 of tubes (by blow-moulding
49/72	 Deflashing outside the mould [4, 2006.01] 		B29C 49/00) [4, 2006.01]
49/74	 Deflashing the neck portion [4, 2006.01] 	53/32	• Coiling (B29C 53/56 takes precedence) [4, 2006.01]
49/76	 Neck calibration [4, 2006.01] 	53/34	• Rim rolling (of tube ends B29C 57/12) [4, 2006.01]
49/78	 Measuring, controlling or regulating [4, 2006.01] 	53/36	• Bending and joining, e.g. for making hollow articles
49/80	• • • Testing, e.g. for leaks [4, 2006.01]	F2/20	 (B29C 53/56 takes precedence) [4, 2006.01] by bending sheets or strips at right angles to the
51/00	Shaping by thermoforming, e.g. shaping sheets in	53/38	longitudinal axis of the article being formed and
31/00	matched moulds or by deep-drawing; Apparatus		joining the edges [4, 2006.01]
	therefor [4, 2006.01]	53/40	• • • for articles of definite length, i.e. discrete
51/02	Combined thermoforming and manufacture of the	33/40	articles [4, 2006.01]
31/02	preform [4, 2006.01]	53/42	• • using internal forming surfaces, e.g.
51/04	Combined thermoforming and prestretching, e.g.	33/42	mandrels [4, 2006.01]
31/04	biaxial stretching [4, 2006.01]	F2 / 4.4	
51/06	 using pressure difference [4, 2006.01] 	53/44	• • • • rotatable about the axis of the article [4, 2006.01]
51/08	Deep-drawing or matched-mould forming, i.e. using	53/46	
31/00	mechanical means only [4, 2006.01]	33/40	• • • using external forming surfaces, e.g. sleeves [4, 2006.01]
F1 /10	-	F2 / 40	
51/10	• Forming by pressure difference, e.g.	53/48	• • • for articles of indefinite length, i.e. bending a
E1 /10	vacuum [4, 2006.01]	F2 /F0	strip progressively [4, 2006.01]
51/12	of articles having inserts or winforcements [4, 2006 01]	53/50	• • • using internal forming surfaces, e.g.
E1 /1 4	reinforcements [4, 2006.01]	E2 /E2	mandrels [4, 2006.01]
51/14	• using multilayered preforms or sheets [4, 2006.01]	53/52	• • • using external forming surfaces, e.g.
51/16	• Lining or labelling [4, 2006.01]	ED /E4	sleeves [4, 2006.01]
51/18	 Thermoforming apparatus [4, 2006.01] 	53/54	• • • Guiding, aligning or shaping
51/20	 having movable moulds or mould 	ED /EC	edges [4, 2006.01]
	parts [4, 2006.01]	53/56	• Winding and joining, e.g. winding
51/22	 rotatable about an axis [4, 2006.01] 	ED / E0	spirally [4, 2006.01]
51/24	 mounted on movable endless 	53/58	• • helically [4, 2006.01]
	supports [4, 2006.01]	53/60	• • using internal forming surfaces, e.g.
51/26	 Component parts, details or accessories; Auxiliary 		mandrels [4, 2006.01]
	operations [4, 2006.01]	53/62	• • • rotatable about the winding axis [4, 2006.01
51/28	 for applying pressure through the wall of an 	53/64	• • • • and moving axially [4, 2006.01]
	inflated bag or diaphragm [4, 2006.01]	53/66	 • • • with axially movable winding feed
51/30	• • Moulds [4, 2006.01]		member [4, 2006.01]
51/32	 having cutting means [4, 2006.01] 		

53/68	 • • • with rotatable winding feed 	61/08	• • by stretching tubes [4, 2006.01]
	member [4, 2006.01]	61/10	 by bending plates or sheets [4, 2006.01]
53/70	• • • • and moving axially [4, 2006.01]		
53/72	• • • using external forming surfaces [4, 2006.01]	63/00	Lining or sheathing, i.e. applying preformed layers
53/74	 using a forming surface in the shape of an 		or sheathings of plastics; Apparatus therefor
	endless belt which is recycled after the forming		(B29C 73/00 takes precedence; by blowing B29C 49/00;
	operation [4, 2006.01]		by thermoforming B29C 51/00) [4, 5, 2006.01]
53/76	• • • about more than one axis [4, 2006.01]	63/02	• using sheet or web-like material (B29C 63/26 takes
53/78	• • using profiled sheets or strips [4, 2006.01]	CD /O 4	precedence) [4, 2006.01]
53/80	 Component parts, details or accessories; Auxiliary 	63/04	• • by folding, winding, bending or the
	operations [4, 2006.01]	C2 /0C	like [4, 2006.01]
53/82	 Cores or mandrels [4, 2006.01] 	63/06	• • • around tubular articles [4, 2006.01]
53/84	 Heating or cooling [4, 2006.01] 	63/08	• • • by winding helically [4, 2006.01]
		63/10	• • • around tubular articles [4, 2006.01]
55/00	Shaping by stretching, e.g. drawing through a die;	63/12	• • • by winding spirally [4, 2006.01]
	Apparatus therefor (B29C 61/08 takes	63/14	• • • around tubular articles [4, 2006.01]
FF (0D	precedence) [4, 2006.01]	63/16	• • applied by "rubber" bag or diaphragm [4, 2006.01]
55/02	• of plates or sheets [4, 2006.01]	63/18	• using tubular layers or sheathings (B29C 63/26 takes
55/04	• • uniaxial, e.g. oblique [4, 2006.01]	60.400	precedence) [4, 2006.01]
55/06	• • • parallel with the direction of feed [4, 2006.01]	63/20	• • using pressure difference, e.g.
55/08	• • • transverse to the direction of feed [4, 2006.01]	CD /DD	vacuum [4, 2006.01]
55/10	• • multiaxial [4, 2006.01]	63/22	• using layers or sheathings having a shape adapted to
55/12	• • • biaxial [4, 2006.01]		the shape of the article (B29C 63/26 takes precedence) [4, 2006.01]
55/14	• • • successively [4, 2006.01]	63/24	• using threads [4, 2006.01]
55/16	• • • simultaneously [4, 2006.01]	63/26	 Lining or sheathing of internal surfaces (B29C 63/38
55/18	 by squeezing between surfaces, e.g. 	03/20	takes precedence) [4, 2006.01]
	rollers [4, 2006.01]	63/28	 applied by "rubber" bag or diaphragm [4, 2006.01]
55/20	• • Edge clamps [4, 2006.01]	63/30	 using sheet or web-like material [4, 2006.01]
55/22	• of tubes [4, 2006.01]	63/32	 by winding helically [4, 2006.01]
55/24	• • radial [4, 2006.01]	63/34	 using tubular layer or sheathings [4, 2006.01]
55/26	• • biaxial [4, 2006.01]	63/36	• • being turned inside out [4, 2006.01]
55/28	 of blown tubular films, e.g. by inflation [4, 2006.01] 		being turned inside out [4, 2000.01]
		C2/20	have liberation of internal stresses [4, 2006,01]
55/30	• Drawing through a die [4, 2006.01]	63/38	• by liberation of internal stresses [4, 2006.01]
	• Drawing through a die [4, 2006.01]	63/40	• • using sheet or web-like material [4, 2006.01]
55/30 57/00	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; 	63/40 63/42	using sheet or web-like material [4, 2006.01]using tubular layers or sheathings [4, 2006.01]
57/00	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] 	63/40	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted
	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a 	63/40 63/42 63/44	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01]
57/00 57/02	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] 	63/40 63/42 63/44	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01]
57/00 57/02 57/04	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] 	63/40 63/42 63/44	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01]
57/00 57/02 57/04 57/06	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01]
57/00 57/02 57/04 57/06 57/08	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] 	63/40 63/42 63/44	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-
57/00 57/02 57/04 57/06 57/08 57/10	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01]
57/00 57/02 57/04 57/06 57/08	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition,
57/00 57/02 57/04 57/06 57/08 57/10 57/12	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by
57/00 57/02 57/04 57/06 57/08 57/10	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48 64/00	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01]
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] Surface shaping, e.g. embossing; Apparatus therefor [4, 2006.01]	63/40 63/42 63/44 63/46 63/48 64/00	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g.
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] Surface shaping, e.g. embossing; Apparatus therefor [4, 2006.01] by mechanical means, e.g. pressing [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48 64/00	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] Surface shaping, e.g. embossing; Apparatus therefor [4, 2006.01] by mechanical means, e.g. pressing [4, 2006.01] using rollers or endless belts [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48 64/00	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01]
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04 59/06	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] Surface shaping, e.g. embossing; Apparatus therefor [4, 2006.01] by mechanical means, e.g. pressing [4, 2006.01] using rollers or endless belts [4, 2006.01] using vacuum drums [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48 64/00	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01] using individual droplets, e.g. from jetting
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04 59/06 59/08	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] Surface shaping, e.g. embossing; Apparatus therefor [4, 2006.01] by mechanical means, e.g. pressing [4, 2006.01] using rollers or endless belts [4, 2006.01] using vacuum drums [4, 2006.01] by flame treatment [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48 64/00 64/10 64/106	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01] using individual droplets, e.g. from jetting heads [2017.01]
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04 59/06 59/08 59/10	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] Surface shaping, e.g. embossing; Apparatus therefor [4, 2006.01] by mechanical means, e.g. pressing [4, 2006.01] using rollers or endless belts [4, 2006.01] using vacuum drums [4, 2006.01] by flame treatment [4, 2006.01] by electric discharge treatment [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48 64/00	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01] using individual droplets, e.g. from jetting heads [2017.01] using filamentary material being melted, e.g.
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04 59/06 59/08 59/10 59/12	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] Surface shaping, e.g. embossing; Apparatus therefor [4, 2006.01] by mechanical means, e.g. pressing [4, 2006.01] using rollers or endless belts [4, 2006.01] using vacuum drums [4, 2006.01] by flame treatment [4, 2006.01] in an environment other than air [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48 64/00 64/10 64/112 64/118	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01] using individual droplets, e.g. from jetting heads [2017.01] using filamentary material being melted, e.g. fused deposition modelling [FDM] [2017.01]
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04 59/06 59/08 59/10 59/12 59/14	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] Surface shaping, e.g. embossing; Apparatus therefor [4, 2006.01] by mechanical means, e.g. pressing [4, 2006.01] using rollers or endless belts [4, 2006.01] using vacuum drums [4, 2006.01] by flame treatment [4, 2006.01] in an environment other than air [4, 2006.01] by plasma treatment [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48 64/00 64/10 64/106	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01] using individual droplets, e.g. from jetting heads [2017.01] using filamentary material being melted, e.g. fused deposition modelling [FDM] [2017.01] using layers of liquid which are selectively
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04 59/06 59/08 59/10 59/12 59/14 59/16	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] Surface shaping, e.g. embossing; Apparatus therefor [4, 2006.01] by mechanical means, e.g. pressing [4, 2006.01] using rollers or endless belts [4, 2006.01] using vacuum drums [4, 2006.01] by flame treatment [4, 2006.01] in an environment other than air [4, 2006.01] by plasma treatment [4, 2006.01] by wave energy or particle radiation [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48 64/00 64/10 64/112 64/118 64/124	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01] using individual droplets, e.g. from jetting heads [2017.01] using filamentary material being melted, e.g. fused deposition modelling [FDM] [2017.01] using layers of liquid which are selectively solidified [2017.01]
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04 59/06 59/08 59/10 59/12 59/14	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] Surface shaping, e.g. embossing; Apparatus therefor [4, 2006.01] by mechanical means, e.g. pressing [4, 2006.01] using rollers or endless belts [4, 2006.01] using vacuum drums [4, 2006.01] by flame treatment [4, 2006.01] in an environment other than air [4, 2006.01] by plasma treatment [4, 2006.01] by wave energy or particle radiation [4, 2006.01] by liberation of internal stresses, e.g. plastic 	63/40 63/42 63/44 63/46 63/48 64/00 64/10 64/112 64/118	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01] using individual droplets, e.g. from jetting heads [2017.01] using filamentary material being melted, e.g. fused deposition modelling [FDM] [2017.01] using layers of liquid which are selectively solidified [2017.01] characterised by the energy source therefor,
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04 59/06 59/08 59/10 59/12 59/14 59/16	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] Surface shaping, e.g. embossing; Apparatus therefor [4, 2006.01] by mechanical means, e.g. pressing [4, 2006.01] using rollers or endless belts [4, 2006.01] using vacuum drums [4, 2006.01] by flame treatment [4, 2006.01] in an environment other than air [4, 2006.01] by plasma treatment [4, 2006.01] by wave energy or particle radiation [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48 64/00 64/10 64/112 64/118 64/124	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01] using individual droplets, e.g. from jetting heads [2017.01] using filamentary material being melted, e.g. fused deposition modelling [FDM] [2017.01] using layers of liquid which are selectively solidified [2017.01] characterised by the energy source therefor, e.g. by global irradiation combined with a
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04 59/06 59/08 59/10 59/12 59/14 59/16	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] Surface shaping, e.g. embossing; Apparatus therefor [4, 2006.01] using rollers or endless belts [4, 2006.01] using vacuum drums [4, 2006.01] by flame treatment [4, 2006.01] by electric discharge treatment [4, 2006.01] in an environment other than air [4, 2006.01] by plasma treatment [4, 2006.01] by wave energy or particle radiation [4, 2006.01] by liberation of internal stresses, e.g. plastic memory [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48 64/00 64/10 64/112 64/118 64/124	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01] using individual droplets, e.g. from jetting heads [2017.01] using filamentary material being melted, e.g. fused deposition modelling [FDM] [2017.01] using layers of liquid which are selectively solidified [2017.01] characterised by the energy source therefor, e.g. by global irradiation combined with a mask [2017.01]
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04 59/06 59/08 59/10 59/12 59/14 59/16 59/18	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] by mechanical means, e.g. pressing [4, 2006.01] using rollers or endless belts [4, 2006.01] using vacuum drums [4, 2006.01] by flame treatment [4, 2006.01] by electric discharge treatment [4, 2006.01] in an environment other than air [4, 2006.01] by plasma treatment [4, 2006.01] by wave energy or particle radiation [4, 2006.01] by liberation of internal stresses, e.g. plastic memory [4, 2006.01] Shaping by liberation of internal stresses; Making preforms having internal stresses; Apparatus	63/40 63/42 63/44 63/46 63/48 64/00 64/10 64/106 64/112 64/118 64/124	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01] using individual droplets, e.g. from jetting heads [2017.01] using filamentary material being melted, e.g. fused deposition modelling [FDM] [2017.01] using layers of liquid which are selectively solidified [2017.01] characterised by the energy source therefor, e.g. by global irradiation combined with a mask [2017.01]
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04 59/06 59/08 59/10 59/12 59/14 59/16 59/18	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] by mechanical means, e.g. pressing [4, 2006.01] using rollers or endless belts [4, 2006.01] using vacuum drums [4, 2006.01] by flame treatment [4, 2006.01] by electric discharge treatment [4, 2006.01] in an environment other than air [4, 2006.01] by plasma treatment [4, 2006.01] by wave energy or particle radiation [4, 2006.01] by liberation of internal stresses, e.g. plastic memory [4, 2006.01] Shaping by liberation of internal stresses; Making preforms having internal stresses; Apparatus therefor (for surface shaping B29C 59/18; for lining 	63/40 63/42 63/44 63/46 63/48 64/00 64/10 64/106 64/112 64/118 64/124	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01] using individual droplets, e.g. from jetting heads [2017.01] using filamentary material being melted, e.g. fused deposition modelling [FDM] [2017.01] using layers of liquid which are selectively solidified [2017.01] characterised by the energy source therefor, e.g. by global irradiation combined with a mask [2017.01] the energy source being concentrated, e.g.
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04 59/06 59/08 59/10 59/12 59/14 59/16 59/18	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] surface shaping, e.g. embossing; Apparatus therefor [4, 2006.01] using rollers or endless belts [4, 2006.01] using vacuum drums [4, 2006.01] by flame treatment [4, 2006.01] by electric discharge treatment [4, 2006.01] in an environment other than air [4, 2006.01] by plasma treatment [4, 2006.01] by wave energy or particle radiation [4, 2006.01] by liberation of internal stresses, e.g. plastic memory [4, 2006.01] Shaping by liberation of internal stresses; Making preforms having internal stresses; Apparatus therefor (for surface shaping B29C 59/18; for lining articles B29C 63/38; for joining preformed parts 	63/40 63/42 63/44 63/46 63/48 64/00 64/10 64/112 64/118 64/124 64/129	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01] using individual droplets, e.g. from jetting heads [2017.01] using filamentary material being melted, e.g. fused deposition modelling [FDM] [2017.01] using layers of liquid which are selectively solidified [2017.01] characterised by the energy source therefor, e.g. by global irradiation combined with a mask [2017.01] the energy source being concentrated, e.g. scanning lasers or focused light
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04 59/06 59/08 59/10 59/12 59/14 59/16 59/18 61/00	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] by mechanical means, e.g. pressing [4, 2006.01] using rollers or endless belts [4, 2006.01] using vacuum drums [4, 2006.01] by flame treatment [4, 2006.01] by electric discharge treatment [4, 2006.01] in an environment other than air [4, 2006.01] by plasma treatment [4, 2006.01] by wave energy or particle radiation [4, 2006.01] by liberation of internal stresses, e.g. plastic memory [4, 2006.01] by liberation of internal stresses; Making preforms having internal stresses; Apparatus therefor (for surface shaping B29C 59/18; for lining articles B29C 63/38; for joining preformed parts B29C 65/66) [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48 64/00 64/10 64/106 64/112 64/118 64/124 64/129 64/135	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01] using individual droplets, e.g. from jetting heads [2017.01] using filamentary material being melted, e.g. fused deposition modelling [FDM] [2017.01] using layers of liquid which are selectively solidified [2017.01] characterised by the energy source therefor, e.g. by global irradiation combined with a mask [2017.01] the energy source being concentrated, e.g. scanning lasers or focused light sources [2017.01]
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04 59/06 59/08 59/10 59/12 59/14 59/16 59/18 61/00	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Rim rolling [4, 2006.01] Surface shaping, e.g. embossing; Apparatus therefor [4, 2006.01] using rollers or endless belts [4, 2006.01] using vacuum drums [4, 2006.01] by flame treatment [4, 2006.01] by electric discharge treatment [4, 2006.01] in an environment other than air [4, 2006.01] by plasma treatment [4, 2006.01] by wave energy or particle radiation [4, 2006.01] by liberation of internal stresses, e.g. plastic memory [4, 2006.01] by liberation of internal stresses; Making preforms having internal stresses; Apparatus therefor (for surface shaping B29C 59/18; for lining articles B29C 63/38; for joining preformed parts B29C 65/66) [4, 2006.01] Thermal shrinking [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48 64/00 64/10 64/106 64/112 64/118 64/124 64/129 64/135	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01] using individual droplets, e.g. from jetting heads [2017.01] using filamentary material being melted, e.g. fused deposition modelling [FDM] [2017.01] using layers of liquid which are selectively solidified [2017.01] characterised by the energy source therefor, e.g. by global irradiation combined with a mask [2017.01] the energy source being concentrated, e.g. scanning lasers or focused light sources [2017.01] using only solid materials [2017.01] using sheet material, e.g. laminated object manufacturing [LOM] or laminating sheet
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04 59/06 59/08 59/10 59/12 59/14 59/16 59/18 61/00	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Closing [4, 2006.01] Rim rolling [4, 2006.01] surface shaping, e.g. embossing; Apparatus therefor [4, 2006.01] using rollers or endless belts [4, 2006.01] using vacuum drums [4, 2006.01] by flame treatment [4, 2006.01] in an environment other than air [4, 2006.01] in an environment other than air [4, 2006.01] by plasma treatment [4, 2006.01] by liberation of internal stresses, e.g. plastic memory [4, 2006.01] by liberation of internal stresses; Making preforms having internal stresses; Apparatus therefor (for surface shaping B29C 59/18; for lining articles B29C 63/38; for joining preformed parts B29C 65/66) [4, 2006.01] Thermal shrinking [4, 2006.01] Thermal shrinking [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48 64/00 64/10 64/106 64/112 64/118 64/124 64/129 64/135	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01] using individual droplets, e.g. from jetting heads [2017.01] using filamentary material being melted, e.g. fused deposition modelling [FDM] [2017.01] otharacterised by the energy source therefor, e.g. by global irradiation combined with a mask [2017.01] the energy source being concentrated, e.g. scanning lasers or focused light sources [2017.01] using only solid materials [2017.01] using sheet material, e.g. laminated object manufacturing [LOM] or laminating sheet material precut to local cross sections of the 3D
57/00 57/02 57/04 57/06 57/08 57/10 57/12 59/00 59/02 59/04 59/06 59/08 59/10 59/12 59/14 59/16 59/18 61/00	 Drawing through a die [4, 2006.01] Shaping of tube ends, e.g. flanging, belling or closing; Apparatus therefor [4, 2006.01] Belling or enlarging, e.g. combined with forming a groove [4, 2006.01] using mechanical means [4, 2006.01] elastically deformable [4, 2006.01] using pressure difference [4, 2006.01] Rim rolling [4, 2006.01] Surface shaping, e.g. embossing; Apparatus therefor [4, 2006.01] using rollers or endless belts [4, 2006.01] using vacuum drums [4, 2006.01] by flame treatment [4, 2006.01] by electric discharge treatment [4, 2006.01] in an environment other than air [4, 2006.01] by plasma treatment [4, 2006.01] by wave energy or particle radiation [4, 2006.01] by liberation of internal stresses, e.g. plastic memory [4, 2006.01] by liberation of internal stresses; Making preforms having internal stresses; Apparatus therefor (for surface shaping B29C 59/18; for lining articles B29C 63/38; for joining preformed parts B29C 65/66) [4, 2006.01] Thermal shrinking [4, 2006.01] 	63/40 63/42 63/44 63/46 63/48 64/00 64/10 64/106 64/112 64/118 64/124 64/129 64/135	 using sheet or web-like material [4, 2006.01] using tubular layers or sheathings [4, 2006.01] the shape of the layers or sheathings being adapted to the shape of the articles [4, 2006.01] of internal surfaces [4, 2006.01] Preparation of the surfaces [4, 2006.01] Additive manufacturing, i.e. manufacturing of three-dimensional [3D] objects by additive deposition, additive agglomeration or additive layering, e.g. by 3D printing, stereolithography or selective laser sintering [2017.01] Processes of additive manufacturing [2017.01] using only liquids or viscous materials, e.g. depositing a continuous bead of viscous material [2017.01] using individual droplets, e.g. from jetting heads [2017.01] using filamentary material being melted, e.g. fused deposition modelling [FDM] [2017.01] using layers of liquid which are selectively solidified [2017.01] characterised by the energy source therefor, e.g. by global irradiation combined with a mask [2017.01] the energy source being concentrated, e.g. scanning lasers or focused light sources [2017.01] using only solid materials [2017.01] using sheet material, e.g. laminated object manufacturing [LOM] or laminating sheet

see, ps. spectives beer satistering or melting [2017.01] sting only generous substances, e.g. vapour deposition [2017.01] sting only generous substances, e.g. vapour deposition [2017.01] sting only generous substances, e.g. vapour deposition [2017.01] sting or combination of solid and fluid materials, e.g. a proofer selectively bound by a liquid hinder, and the properties of the proof of the	e.g. by selective laser simering or melting [2017.01] 64/159 • using noty pascons substances, e.g. vapour deposition [2017.01] 64/167 • using a combination of solid and flaid materials, e.g. a powder selectively bound by a liquid bruder, catalyst, hibblor or energy absorber [2017.01] 64/171 • objects [2017.01] 64/172 • objects [2017.01] 64/173 • objects [2017.01] 64/176 • respentially [2017.01] 64/177 • respentially [2017.01] 64/178 • immediate the pattern of a part of the pattern								
susing robos [2017.01] 64/176 - v. using a combination of solid and fluid materials, e.g. a proved resterively bound by a liquid binder, carabyst, hibbitor or energy obsorber [2017.01] 64/176 - v. sequentially [2017.01] 64/176 - v. sequentially [2017.01] 64/178 - v. in parallel batches [2017.01] 64/178 - v. in parallel batches [2017.01] 64/179 - v. sequentially [2017.01] 64/179 - v. sequentially [2017.01] 64/179 - v. sequentially [2017.01] 64/170 - v. sequentially [2017.01] 64/170 - v. sequentially [2017.01] 64/171 - v. sequentially [2017.01] 64/171 - v. sequentially [2017.01] 64/172 - v. during [1,	susing only gaseous substances, e.g. vapour operation [2017.01] complete proposition [2017.01] containing control solid and fluid materials, e.g. a power settively bound by a liquid binder, catalyst, simbistion of solid and fluid materials, e.g. a power settively bound by a liquid binder, catalyst, simbistion of covering absorber [2017.01] control (surface shaping	64/153	•	•	e.g. by selective laser sintering or				gas [2017.01]
deposition [2017.01] 64/17 - specially adapted for manufacturing multiple 3D objects (2017.01] 64/17 - specially adapted for manufacturing multiple 3D objects (2017.01] 64/18 - specially adapted for manufacturing multiple 3D objects (2017.01) 64/18 - specially adapted for manufacturing multiple 3D objects (2017.01) 64/18 - specially adapted for manufacturing multiple 3D objects (2017.01) 64/18 - involving additional operations performed on the added layers, e.g. amounting, grainding or thickness control (surface shaping #207.5900; afferture and additional operations performed on the added layers, e.g. amounting, grainding or thickness control (surface shaping #207.5900; afferture and the surface of the part of the pa	deposition [2017.01] 64/185	64/159			9	64/379	•	•	
e.g., a powder selectively bound by a liquid hinder, catalyst, inhibitor or energy shorter [2017.01] 64/171 . specially dapted for manufacturing multiple 3D objects [2017.01] 64/182 . in parallel barbets [2017.01] 64/183 . involving additional operations performed on the added layers, e.g., smoothing, grinding or thickness control (surface shaping 1829; 59/00); after-trained of articles without altering their shape 1829; (71/00) [2017.01]	e.g., å powder selectively bound by a liquid bindiner, calalyst, inhibitor or energy sharotre (2017:01) 64/171 • specially adapted for manufacturing multiple 3D objects [2017:01] 64/182 • sequentially [2017:01] 64/188 • involving additional operations performed on the added layers, e.g., smoothing, grinding or thickness control (surface shaping 822%; 59/08); after-treatment of articles without aftering their shape B29% (71/00) [2017:01] 64/194 • dadrig lay-up [2017:01] 64/207 • Apparatus for additive manufacturing. Details thereof or accessories thereof [2017:01] 64/207 • Apparatus for additive manufacturing. Details thereof or accessories thereof [2017:01] 64/209 • Means for adplying layers [2017:01] 64/201 • Feals, Nozac, [2017:01] 64/223 • Foils or films, e.g. for transferring layers of building martial from one working station to another [2017:01] 64/224 • Foils or films, e.g. for transferring layers of building martial from one working station to another [2017:01] 64/225 • Foils or films, e.g. for transferring layers of building martial from one working station to another [2017:01] 64/226 • For formotion in a direction within the plane of a layer [2017:01] 64/227 • For formotion in a direction within the plane of a layer [2017:01] 64/227 • Hussings, e.g. machine hussings [2017:01] 64/228 • For formotion in a direction within the plane of a layer [2017:01] 64/239 • For formotion in a direction within the plane of a layer [2017:01] 64/230 • For formotion in a direction within the plane of a layer [2017:01] 64/231 • For formotion in a direction within the plane of a layer [2017:01] 64/232 • For formotion in a direction within the plane of a layer [2017:01] 64/233 • For formotion in a direction within the plane of a layer [2017:01] 64/231 • For formotion in a direction within the plane of a layer [2017:01] 64/232 • For formotion in a direction within the plane of a layer [2017:01] 64/233 • For formotion in a direction within the plane of a layer [2017:01] 64/235 • For formotion in a direction within the plane				deposition [2017.01]	64/386	•	•	Data acquisition or data processing for additive
64/17 -	64/70	64/165	•	•	e.g. a powder selectively bound by a liquid binder,	64/393	•	•	 for controlling or regulating additive
1641716 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	1647176 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	64/171				64/40		S	~ *
64/108 -	64/188				objects [2017.01]	01/10		n	nanufacture and intended to be sacrificed after
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control (surface shaping B29C 5300; after- treament of articles without altering their shape B29C 71400 [2017.01] 64/194 • A during lay-up [2017.01] 64/205 • A Means for applying layers [2017.01] 64/205 • Means for applying layers [2017.01] 64/208 • Doctor blades [2017.01] 64/218 • Obottor blades [2017.01] 64/218 • Color blades [2017.01] 64/218 • Folis or films, e.g. for transferring layers of building material from one working station to another [2017.01] 64/227 • Driving means [2017.01] 64/228 • Folis or films, e.g. for transferring layers of building material from one working station to another [2017.01] 64/227 • Driving means [2017.01] 64/228 • Platforms or substrates (support structures intercled to be secrificed after memofacture B29C 64409 [2017.01] 64/255 • Housings, e.g. machine housings [2017.01] 64/265 • Housings, e.g. machine housings [2017.01] 64/267 • Inclosures for the building material, e.g. powder containers [2017.01] 64/267 • Profession in the building material, e.g. powder containers [2017.01] 64/267 • Profession substrates (support structures intercled to be secrificed after memofacture B29C 64409 [2017.01] 64/267 • Platforms or substrates (support structures intercled to be secrificed after memofacture B29C 64409 [2017.01] 64/267 • Platforms or substrates (support structures intercled to be secrificed after memofacture B29C 64409 [2017.01] 64/267 • Platforms or substrates (support structures intercled to be secrificed after memofacture B29C 64409 [2017.01] 64/268 • Justing based because and substrates (support structures intercled to be secrificed after memofacture B29C 64409 [2017.01] 64/271 • Justing material (support structures intercled to be secrificed after memofacture B29C 64409 [2017.01] 64/280 • Justing based element (support structures intercled to be secrificed after memofacture B29C 64409 [2017.01] 64/260 • Arrangements for tradiation [2017.01] 64/273 • Justing based element (support structures intercled to be secrificed after memoral structures intercled to be secrificed after	Control (surface shaping B29C 5900, after-treament of articles without alteries their shape B29C 71/00) [2017.01] 63/12 - \(\text{during lay-up [2017.01]} \) 65/06 - \(\text{during lay-up [2017.01]} \) 65/10 - \(\text{using ultrasonic vibrations } \) 4, 2006.01] 65/10 - \(\text{using ultrasonic vibrations } \) 4, 2006.01] 65/10 - \(\text{using ultrasonic vibrations } \) 4, 2006.01] 65/12 - \(\text{and welding bar 14, 2006.01]} \) 65/12 - \(\text{using ultrasonic vibrations } \) 4, 2006.01] 65/12 - \(\text{using ultrasonic vibrations } \) 65/14 - \(\text{using ultrasonic vibrations } \) 65/16 - \(involving additional operations performed on the		tł	her	refor [4, 5, 2006.01]
R29C 71/00] [2017.01]	Region (17/100) [2017.01]				control (surface shaping B29C 59/00; after-	65/02			
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Note(s) 14	Note(s).14 1				 for motion along the axis orthogonal to the 				 characterised by the means for heating the
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B29C 64/40] [2017.01]	B29C 64/40 [2017.01] 65/28 • • • • Flame or combustible material [4, 2006.01]	04/243	-	-		65/26			
64/25 • Housings, e.g. machine housings [2017.01] 65/30 • • Electrical means [4, 2006.01]	64/25 Proceedings Function								
64/255 Enclosures for the building material, e.g. powder containers [2017.01] 65/34 Using heated elements which remain in the joint, e.g. "verlorenes Schweisselement" [4, 2006.01] 64/264 Arrangements for irradiation [2017.01] 65/36 heated by induction [4, 2006.01] heated by induction [4, 2006.01] 64/277 using multiple radiation means, e.g. micromirrors or multiple light-emitting diodes [LED] [2017.01] 65/40 heated by induction [4, 2006.01] evels [2017.01] 65/40 heated by induction [4, 2006.01] evels [2017.01] evels [2017.01] 65/40 heated by induction [4, 2006.01] evels [2017.01] evels [2017.	64/255 Enclosures for the building material, e.g. powder containers [2017.01] 65/34 Using heated elements which remain in the joint, e.g. "verlorenes Schweisselement" [4, 2006.01] 64/264 Arrangements for irradiation [2017.01] 65/36 Handling heated elements which remain in the joint, e.g. "verlorenes Schweisselement" [4, 2006.01] 64/268 Using laser beams; using electron beams [EB] [2017.01] 65/36 Hinpulse heating [4, 2006.01] EB] [2017.01] 65/38 Hinpulse heating [4, 2006.01] EB] [2017.01] 65/40 Applying molten plastics, e.g. hot melt (using welding bar B29C 65/12; by moulding B29C 65/70] [4, 2006.01] EB] [2017.01] 65/44 Joining a heated one-plastics, e.g. hot melt (using welding bar B29C 65/70] [4, 2006.01] EB] [2017.01] 65/44 Joining a heated parts [4, 2006.01] EB] [2017.01] 65/46 Using adhesive [4, 2006.01] EB] [2017.01] EB	64/25			·				
containers [2017.01] 65/34 • using heated elements which remain in the joint, e.g. "verlorenes Schweisselement" [4, 2006.01] 64/264 • Arrangements for irradiation [2017.01] 65/36 • • heated by induction [4, 2006.01] 64/268 • using laser beams; using electron beams [EB] [2017.01] 65/40 • Applying molten plastics, e.g. hot melt (using welding bar B29C 65/70) [4, 2006.01] 65/47 • pulsed; frequency modulated [2017.01] 65/48 • using multiple radiation means, e.g. micromirrors or multiple light-emitting diodes [LED] [2017.01] 65/44 • between pre-assembled parts [4, 2006.01] 65/45 • between pre-assembled parts [4, 2006.01] 65/46 • objectively applied activators or inhibitors [2017.01] 65/56 • using adhesive [4, 2006.01] 65/56 • using adhesive [4, 2006.01] 65/56 • between pre-assembled parts [4, 2006.01] 65/56 • using adhesive [4, 2006.01] 65/56 • using adhesive [4, 2006.01] 65/56 • using adhesive [4, 2006.01] 65/56 • using mechanical means [4, 2006.01] 65/56 • using a non-plastics e	Containers [2017.01]								
64/264 • Arrangements for irradiation [2017.01] 65/36 • • heated by induction [4, 2006.01] 64/268 • • using laser beams; using electron beams [EB] [2017.01] 65/40 • Applying molten plastics, e.g. hot melt (using welding bar B29C 65/12; by moulding bar B29C 65/10 [4, 2006.01] 65/42 • • between pre-assembled parts [4, 2006.01] 65/44 • • Joining a heated non-plastics element to a plastics element [4, 2006.01] 65/46 • • heated by induction [4, 2006.01] 65/46 • • heated by induction [4, 2006.01] 65/46 • • between pre-assembled parts [4, 2006.01] 65/46 • • heated by induction [4, 2006.01] 65/46 • heated by induc	64/264 • Arrangements for irradiation [2017.01] 65/36 • • heated by induction [4, 2006.01] 64/268 • • using laser beams; using electron beams [EB] [2017.01] 65/38 • • Impulse heating [4, 2006.01] 64/273 • • • using delectron beams [EB] [2017.01] 65/40 • Applying molten plastics, e.g. hot melt (using welding bar B29C 65/12; by moulding B29C				containers [2017.01]				using heated elements which remain in the joint,
64/268 • • using laser beams; using electron beams [EB] [2017.01] 65/40 • Applying molten plastics, e.g. hot melt (using welding bar B29C 65/12; by moulding B29C 65/70) [4, 2006.01] 64/277 • vusing multiple radiation means, e.g. micromirrors or multiple light-emitting diodes [LED] [2017.01] 65/44 • between pre-assembled parts [4, 2006.01] 65/45 • of the same type, e.g. using different energy levels [2017.01] 65/46 • otherwise [2017.01] 65/46 • ot	64/268				9 -				_
[EB] [2017.01] 65/40 · Applying molten plastics, e.g. hot melt (using welding bar B29C 65/12; by moulding B29C 65/70] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4, 2006.01] [4	[EB] [2017.01] 65/40	64/264	•	•	Arrangements for irradiation [2017.01]	65/36	•	•	 heated by induction [4, 2006.01]
64/273 • • • pulsed; frequency modulated [2017.01] 64/277 • • using multiple radiation means, e.g. micromirrors or multiple light-emitting diodes [LED] [2017.01] 64/282 • • • of the same type, e.g. using different energy levels [2017.01] 64/286 • • Optical filters, e.g. masks [2017.01] 64/291 • • for operating globally, e.g. together with selectively applied activators or inhibitors [2017.01] 64/30 • Auxiliary operations or equipment [2017.01] 64/307 • Handling of material to be used in additive manufacturing [2017.01] 64/314 • • Preparation [2017.01] 64/329 • • Feeding [2017.01] 64/331 • • Preparation [2017.01] 64/332 • • • Metering [2017.01] 64/333 • • • Metering [2017.01] 64/334 • • • Metering [2017.01] 64/355 • Cleaning [2017.01] 64/357 • Recycling [2017.01] 64/357 • Recycling [2017.01] 64/357 • Recycling [2017.01] 64/357 • Recycling [2017.01] 65/68 • welding bar B29C 65/12; by moulding B29C 65/70; [4, 2006.01] 65/44 • • between pre-assembled parts [4, 2006.01] 65/45 • • heated by induction [4, 2006.01] 65/48 • using adhesives [4, 2006.01] 65/50 • using adhesive tape [4, 2006.01] 65/51 • between pre-assembled parts [4, 2006.01] 65/52 • Applying the adhesive [4, 2006.01] 65/53 • using mechanical means [4, 2006.01] 65/54 • • between pre-assembled parts [4, 2006.01] 65/55 • using mechanical means [4, 2006.01] 65/56 • Stitching [4, 2006.01] 65/64 • Joining a non-plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 65/66 • by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01] 65/68 • using auxiliary shrinkable element [4, 2006.01] 65/69 • using auxiliary shrinkable element [4, 2006.01]	64/277 • • • pulsed; frequency modulated [2017.01] 64/277 • • • using multiple radiation means, e.g. micromirrors or multiple light-emitting diodes [LED] [2017.01] 65/44 64/282 • • • of the same type, e.g. using different energy levels [2017.01] 65/46 64/286 • • • Optical filters, e.g. masks [2017.01] 65/48 64/291 • • for operating globally, e.g. together with selectively applied activators or inhibitors [2017.01] 65/50 64/300 • Auxiliary operations or equipment [2017.01] 65/50 64/301 • Heating elements [2017.01] 65/50 64/302 • • Preparation [2017.01] 65/60 64/314 • • Preparation [2017.01] 65/60 64/321 • • Feeding [2017.01] 65/64 64/322 • • • using hoppers [2017.01] 65/64 64/333 • • • Of two or more materials [2017.01] 65/66 64/343 • • Metering [2017.01] 65/66 64/343 • • Metering [2017.01] 65/66 64/344 • • Olaming and the selement to a plastics element [4, 2006.01] 64/345 • • Cleaning [2017.01] 65/66 64/345 • • Using an on-plastics element to a plastics element [4, 2006.01] 65/64 • • between pre-assembled parts [4, 2006.01] 65/66 • by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01]	64/268	•	•		65/38	•	•	Impulse heating [4, 2006.01]
64/277	64/277					65/40	•	•	
micromirrors or multiple light-emitting diodes [LED] [2017.01] 65/42 • • • between pre-assembled parts [4, 2006.01] 65/42 • • • between pre-assembled parts [4, 2006.01] 65/48 • • Joining a heated non-plastics element to a plastics element [4, 2006.01] 65/48 • • heated by induction [4, 2006.01] 65/48 • using adhesives [4, 2006.01] 65/49 • using adhesive tape [4, 2006.01] 65/50 • using adhesive tape [4, 2006.01] 65/50 • heated by induction [4, 2006.01] 65/50 • using adhesive tape [4, 2006.01] 65/50 • heated by induction [4, 2006.01] 65/50 • using adhesive tape [4, 2006.01] 65/50 • heated by induction [4, 2006.01] 65/50 • using adhesive tape [4, 2006.01] 65/50 • heated by induction [4, 2006.01] 65/50 • using adhesive tape [4, 2006.01] 65/50 • heated by induction [4, 2006.01] 65/50 • heated by induction [4, 2006.01] 65/50 • using adhesive tape [4, 2006.01] 65/50 • heated by induction [4, 2	micromirrors or multiple light-emitting diodes [LED] [2017.01]	64/273							
[LED] [2017.01] 65/44 · Joining a heated non-plastics element to a plastics element [4, 2006.01] 64/286 · · Optical filters, e.g. masks [2017.01] 65/46 · · heated by induction [4, 2006.01] 64/291 · · for operating globally, e.g. together with selectively applied activators or inhibitors [2017.01] 65/54 · · between pre-assembled parts [4, 2006.01] 64/295 · Heating elements [2017.01] 65/54 · · between pre-assembled parts [4, 2006.01] 64/30 · Auxiliary operations or equipment [2017.01] 65/58 · Snap connection [4, 2006.01] 64/307 · Handling of material to be used in additive manufacturing [2017.01] 65/62 · Stitching [4, 2006.01] 65/64 · · Preparation [2017.01] 65/64 · · Preparation [2017.01] 65/64 · · Stitching [4, 2006.01] 65/64 · · Distribution of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01] 65/68 · using auxiliary shrinkable element [4, 2006.01] 65/69 · using auxiliary shrinkable	[LED] [2017.01] 65/44 • Joining a heated non-plastics element to a plastics element [4, 2006.01] [4, 2006.01] 64/286 • Optical filters, e.g. masks [2017.01] 65/48 • using adhesives [4, 2006.01] 64/291 • of or operating globally, e.g. together with selectively applied activators or inhibitors [2017.01] 65/52 • Applying the adhesive [4, 2006.01] 64/295 • Heating elements [2017.01] 65/54 • obstween pre-assembled parts [4, 2006.01] 64/30 • Auxiliary operations or equipment [2017.01] 65/56 • using mechanical means [4, 2006.01] 64/307 • Handling of material to be used in additive manufacturing [2017.01] 65/60 • Riveting [4, 2006.01] 65/60 • Riveting [4, 2006.01] 65/61 • Using a non-plastics element to a plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 64/336 • • of two or more materials [2017.01] 65/66 • by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01]	64/277	•	•					
64/282 • • • of the same type, e.g. using different energy levels [2017.01] 65/46 • • heated by induction [4, 2006.01] 64/286 • • Optical filters, e.g. masks [2017.01] 65/48 • using adhesives [4, 2006.01] 64/291 • • for operating globally, e.g. together with selectively applied activators or inhibitors [2017.01] 65/52 • Applying the adhesive [4, 2006.01] 65/54 • • between pre-assembled parts [4, 2006.01] 64/295 • Heating elements [2017.01] 65/56 • using mechanical means [4, 2006.01] 64/30 • Auxiliary operations or equipment [2017.01] 65/58 • Snap connection [4, 2006.01] 64/30 • Handling of material to be used in additive manufacturing [2017.01] 65/62 • Stitching [4, 2006.01] 65/62 • Stitching [4, 2006.01] 65/64 • Joining a non-plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 64/335 • Metering [2017.01] 65/68 • using auxiliary shrinkable element [4, 2006.01] 65/68 • using auxiliary shrinkable element [4, 2006.01] 65/68 • using auxiliary shrinkable element [4, 2006.01] 65/69 • by moulding (using a particular moulding technique,	64/282 • • • • of the same type, e.g. using different energy levels [2017.01] 65/46 • • heated by induction [4, 2006.01] 64/286 • • Optical filters, e.g. masks [2017.01] 65/48 using adhesives [4, 2006.01] 64/291 • • for operating globally, e.g. together with selectively applied activators or inhibitors [2017.01] 65/52 • Applying the adhesive [4, 2006.01] 65/54 • • between pre-assembled parts [4, 2006.01] 64/295 • Heating elements [2017.01] 65/56 using mechanical means [4, 2006.01] 64/30 • Auxiliary operations or equipment [2017.01] 65/58 • Snap connection [4, 2006.01] 64/307 • Handling of material to be used in additive manufacturing [2017.01] 65/62 • Stitching [4, 2006.01] 65/64 • Joining a non-plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 64/336 • • • of two or more materials [2017.01] 65/66 • by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01] 64/343 • • Metering [2017.01] 65/68 • using auxiliary shrinkable element [4, 2006.01]								
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64/286 • • Optical filters, e.g. masks [2017.01] 65/48 • using adhesives [4, 2006.01] 64/291 • • for operating globally, e.g. together with selectively applied activators or inhibitors [2017.01] 65/52 • Applying the adhesive [4, 2006.01] 65/54 • • between pre-assembled parts [4, 2006.01] 65/54 • • between pre-assembled parts [4, 2006.01] 65/58 • Using mechanical means [4, 2006.01] 65/58 • Snap connection [4, 2006.01] 65/60 • Riveting [4, 2006.01] 65/62 • Stitching [4, 2006.01] 65/62 • Stitching [4, 2006.01] 65/64 • Stitching [4, 2006.01] 65/64 • Using a non-plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 64/334 • • Metering [2017.01] 65/68 • Using a non-plastics element [4, 2006.01] 65/68 • Using a non-plastics element [4, 2006.01] 65/68 • Using a non-plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 65/68 • Using a non-plastics element [64/286 • • • Optical filters, e.g. masks [2017.01] 65/48 • using adhesives [4, 2006.01] 65/49 • • for operating globally, e.g. together with selectively applied activators or inhibitors [2017.01] 65/52 • Applying the adhesive [4, 2006.01] 65/54 • • between pre-assembled parts [4, 2006.01] 65/54 • • between pre-assembled parts [4, 2006.01] 65/56 • using mechanical means [4, 2006.01] 65/58 • Snap connection [4, 2006.01] 65/58 • Snap connection [4, 2006.01] 65/60 • Riveting [4, 2006.01] 65/60 • Riveting [4, 2006.01] 65/62 • Stitching [4, 2006.01] 65/64 • Joining a non-plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 65/63 • Metering [2017.01] 65/66 • White parts to be joined [4, 2006.01] 65/68 • using adhesives [4, 2006.01] 65/50 • Living adhesive [4, 2006.01] 65/54 • Applying the adhesive [4, 2006.01] 65/56 • Using mechanical means [4, 2006.01] 65/56 • Using mechanical means [4, 2006.01] 65/60 • Riveting [4, 2006.01] 65/60 • Stitching [4, 2006.01] 65/64 • Joining a non-plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 65/66 • White parts to be joined [4, 2006.01] 65/68 • Using auxiliary shrinkable element [4, 2006.01]	047202				GE / AG			
64/291 • • • for operating globally, e.g. together with selectively applied activators or inhibitors [2017.01] 65/52 • Applying the adhesive [4, 2006.01] 65/54 • • between pre-assembled parts [4, 2006.01] 65/54 • • between pre-assembled parts [4, 2006.01] 65/56 • using mechanical means [4, 2006.01] 65/58 • Snap connection [4, 2006.01] 65/58 • Snap connection [4, 2006.01] 65/60 • Riveting [4, 2006.01] 65/60 • Riveting [4, 2006.01] 65/62 • Stitching [4, 2006.01] 65/62 • Stitching [4, 2006.01] 65/64 • Joining a non-plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 65/63 • • Metering [2017.01] 65/66 • by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01] 65/68 • using auxiliary shrinkable element [4, 2006.01]	64/291 • • • for operating globally, e.g. together with selectively applied activators or inhibitors [2017.01] 65/52 • Applying the adhesive [4, 2006.01] 65/54 • • between pre-assembled parts [4, 2006.01] 65/56 • using mechanical means [4, 2006.01] 65/58 • Snap connection [4, 2006.01] 65/60 • Riveting [4, 2006.01] 65/60 • Riveting [4, 2006.01] 65/60 • Stitching [4, 2006.01] 65/60 • Stitching [4, 2006.01] 65/64 • Joining a non-plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 65/66 • by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01] 65/68 • using adhesive tape [4, 2006.01] 65/54 • btween pre-assembled parts [4, 2006.01] 65/58 • Snap connection [4, 2006.01] 65/60 • Riveting [4, 2006.01] 65/60 • Stitching [4, 2006.01] 65/64 • Joining a non-plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 65/66 • by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01] 65/68 • using auxiliary shrinkable element [4, 2006.01]	64/286							
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manufacturing [2017.01] 65/62 · Stitching [4, 2006.01] 65/64 · Preparation [2017.01] 65/64 · Joining a non-plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 65/63 · · using hoppers [2017.01] 65/66 · by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01] 65/68 · using auxiliary shrinkable element [4, 2006.01] 65/67 · by moulding (using a particular moulding technique,	manufacturing [2017.01] 65/62 • Stitching [4, 2006.01] 64/314 • • Preparation [2017.01] 65/64 • Joining a non-plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 64/336 • • • of two or more materials [2017.01] 65/66 • by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01] 64/35 • Cleaning [2017.01] 65/68 • using auxiliary shrinkable element [4, 2006.01]					65/58			
64/314 • • • Preparation [2017.01] 65/62 • • Stitching [4, 2006.01] 64/321 • • • Feeding [2017.01] 65/64 • • Joining a non-plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 64/336 • • • • of two or more materials [2017.01] 65/66 • by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01] 64/35 • • Cleaning [2017.01] 65/68 • • using auxiliary shrinkable element [4, 2006.01] 64/357 • Recycling [2017.01] 65/70 • by moulding (using a particular moulding technique,	64/314 • • • Preparation [2017.01] 65/62 • • Stitching [4, 2006.01] 65/64 64/321 • • • Feeding [2017.01] 65/64 • • Joining a non-plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 65/64 • by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01] 65/68 • • using auxiliary shrinkable element [4, 2006.01]	64/307	•	•		65/60	•	•	Riveting [4, 2006.01]
64/314 • • • Preparation [2017.01] 64/321 • • • Feeding [2017.01] 64/329 • • • using hoppers [2017.01] 64/336 • • • of two or more materials [2017.01] 64/343 • • Metering [2017.01] 64/35 • Cleaning [2017.01] 64/357 • Recycling [2017.01] 65/68 • Joining a non-plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] • by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01] • using auxiliary shrinkable element [4, 2006.01] • by moulding (using a particular moulding technique,	64/314 • • • Preparation [2017.01] 64/321 • • • Feeding [2017.01] 64/329 • • • using hoppers [2017.01] 64/336 • • • of two or more materials [2017.01] 64/343 • • • Metering [2017.01] 64/35 • • Cleaning [2017.01] 65/68 • Joining a non-plastics element to a plastics element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 65/66 • by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01]	0.4/5:1				65/62			
64/321 • • • Feeding [2017.01] element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 64/336 • • • of two or more materials [2017.01] 65/66 by liberation of internal stresses, e.g. shrinking of one of the parts to be joined [4, 2006.01] 64/35 • Cleaning [2017.01] 65/68 • using auxiliary shrinkable element [4, 2006.01] 64/357 • Recycling [2017.01] 65/70 by moulding (using a particular moulding technique,	64/321 • • • Feeding [2017.01] element, e.g. by force (B29C 65/44 takes precedence) [4, 2006.01] 64/336 • • • of two or more materials [2017.01] 65/66 by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01] 64/35 • Cleaning [2017.01] 65/68 • using auxiliary shrinkable element [4, 2006.01]				-				-
64/329 • • • • using hoppers [2017.01] precedence) [4, 2006.01] 64/336 • • • of two or more materials [2017.01] 65/66 by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01] 64/35 • Cleaning [2017.01] 65/68 • using auxiliary shrinkable element [4, 2006.01] 64/357 • Recycling [2017.01] 65/70 by moulding (using a particular moulding technique,	64/329 • • • using hoppers [2017.01] precedence) [4, 2006.01] 64/336 • • • of two or more materials [2017.01] 65/66 by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01] 64/35 • Cleaning [2017.01] 65/68 • using auxiliary shrinkable element [4, 2006.01]								
64/336 • • • of two or more materials [2017.01] 65/66 • by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01] 64/35 • Cleaning [2017.01] 65/68 • using auxiliary shrinkable element [4, 2006.01] 64/357 • Recycling [2017.01] 65/70 • by moulding (using a particular moulding technique,	64/336 · · · of two or more materials [2017.01] 65/66 · by liberation of internal stresses, e.g. shrinking of on of the parts to be joined [4, 2006.01] 64/35 · Cleaning [2017.01] 65/68 · using auxiliary shrinkable element [4, 2006.01]				~				
64/343 • • • Metering [2017.01] of the parts to be joined [4, 2006.01] 64/35 • • Cleaning [2017.01] 65/68 • using auxiliary shrinkable element [4, 2006.01] 64/357 • • Recycling [2017.01] 65/70 • by moulding (using a particular moulding technique,	64/343 • • • Metering [2017.01] of the parts to be joined [4, 2006.01] 64/35 • • Cleaning [2017.01] 65/68 • • using auxiliary shrinkable element [4, 2006.01]					65/66	•	b	y liberation of internal stresses, e.g. shrinking of one
64/357 • • Recycling [2017.01] 65/70 • by moulding (using a particular moulding technique,								0	f the parts to be joined [4, 2006.01]
64/357 • • Recycling [2017.01] 65/70 • by moulding (using a particular moulding technique,		64/35	•	•	Cleaning [2017.01]	65/68	•		
		64/357	•	•	Recycling [2017.01]				-
64/364 • • Conditioning of environment [2017.01] see the relevant place for that technique) [4, 2006.01]	64/364 • • Conditioning of environment [2017.01] see the relevant place for that technique) [4, 2006.01]				* *				

65/72	 by combined operations, e.g. welding and stitching [4, 2006.01] 	70/12 • • • using fibres of short length, e.g. in the form of a mat [6, 2006.01]
65/74	 by welding and severing [4, 2006.01] 	70/14 • • • • oriented [6, 2006.01]
65/76	Making non-permanent or releasable joints [4, 2006.01]	70/16 • • • using fibres of substantial or continuous length [6, 2006.01]
65/78	 Means for handling the parts to be joined, e.g. for making containers or hollow articles [4, 2006.01] 	70/18 • • • • • in the form of a mat, e.g. sheet moulding compound [SMC] [6, 2006.01]
65/80	• • Rotatable transfer means [4, 2006.01]	70/20 • • • • oriented in a single direction, e.g. roving
65/82	• Testing the joint [4, 2006.01]	or other parallel fibres [6, 2006.01] 70/22 • • • • oriented in at least two directions forming
67/00	Shaping techniques not covered by groups B29C 39/00-B29C 65/00, B29C 70/00 or B29C 73/00 [4, 6, 2006.01, 2017.01]	a two dimensional structure [6, 2006.01] 70/24 • • • • oriented in at least three directions
67/02	 Moulding by agglomerating [4, 2006.01, 2017.01] 	forming a three dimensional structure [6, 2006.01]
67/04	• • Sintering (combined with compression B29C 43/00) [4, 2006.01, 2017.01]	70/26 • • Non-fibrous reinforcements only [6, 2006.01]
67/06	• Coagulating [4, 2006.01, 2017.01]	70/28 • Shaping operations therefor [6, 2006.01]
67/08	Screen moulding, e.g. forcing the moulding material	<u>Note(s) [6]</u>
	through a perforated screen on to a moulding surface [4, 2006.01]	This group <u>covers</u>:the shaping of coherent fibrous
67/20	 for porous or cellular articles, e.g. of foam plastics, coarse-pored [4, 2006.01] 	reinforcements which are pre-impregnated or without binder, or of non-coherent
67/24	• characterised by the choice of material [4, 2006.01]	reinforcements of fibres placed in a mould or on a support;
69/00	Combinations of shaping techniques not provided for	 the impregnation or introduction of a
	in a single one of main groups B29C 39/00-	plastics matrix in reinforcements during shaping.
	B29C 67/00, e.g. associations of moulding and joining techniques; Apparatus therefor [4, 2006.01]	2. This group <u>does not cover</u> :
69/02	• of moulding techniques only [4, 2006.01]	the moulding by a single technique of plastics matrix material mixed with and
70/00	Shaping composites, i.e. plastics material comprising	containing reinforcing fibres of short length,
	reinforcements, fillers or preformed parts, e.g.	which is covered by the appropriate place for that technique;
	inserts [6, 2006.01]	the pretreatment, e.g. impregnation, of
	Note(s) [6]	reinforcements per se, i.e. independently of
	In this group, the following terms or expressions are used with the meanings indicated:	their shaping, which is covered by group B29B 15/08.
	 "reinforcement" means a structure in the form of fibres, wires, rods, bars, sections, 	70/30 • • • Shaping by lay-up, i.e. applying fibres, tape or broadsheet on a mould, former or core; Shaping
	plates or blocks, which improves the strength of an article;	by spray-up, i.e. spraying of fibres on a mould, former or core [6, 2006.01]
	 "filler" means a relatively inert substance in 	70/32 • • • on a rotating mould, former or
	the form of particles, powder, beads, flakes or spheres, which improves the physical	core [6, 2006.01] 70/34 • • • and shaping or impregnating by
	<pre>properties or increases the bulk or weight of an article;</pre>	compression [6, 2006.01]
	 "preformed part" means a part made of any 	70/36 • • • and impregnating by casting, e.g. vacuum casting [6, 2006.01]
	material, being completely shaped to have a determined form and which is not used as a	70/38 • • • • Automated lay-up, e.g. using robots, laying filaments according to predetermined
	reinforcement, e.g. wires or nets forced only into the surface of an article;	patterns [6, 2006.01]
	 "insert" means a preformed part 	70/40 • • • Shaping or impregnating by compression (B29C 70/34 takes precedence) [6, 2006.01]
	incorporated in an article during moulding.	70/42 • • • • for producing articles of definite length, i.e. discrete articles [6, 2006.01]
70/02	comprising combinations of reinforcements and	70/44 • • • • using isostatic pressure, e.g. pressure
70702	fillers incorporated in matrix material, forming one or more layers, with or without non-reinforced or non-	difference-moulding, vacuum bag- moulding, autoclave-moulding or
	filled layers [6, 2006.01]	expanding rubber-moulding [6, 2006.01]
70/04	 comprising reinforcements only, e.g. self-reinforcing plastics [6, 2006.01] 	70/46 • • • • using matched moulds, e.g. for deforming sheet moulding compounds [SMC] or
70/06	• • Fibrous reinforcements only [6, 2006.01]	prepregs [6, 2006.01]
70/08	• • comprising combinations of different forms of fibrous reinforcements incorporated in matrix	70/48 • • • • • and impregnating the reinforcements in the closed mould, e.g. resin transfer moulding [RTM] [6, 2006.01]
	material, forming one or more layers, with or without non-reinforced layers [6, 2006.01]	70/50 • • • for producing articles of indefinite length,
70/10	 characterised by the structure of fibrous reinforcements [6, 2006.01] 	e.g. prepregs, sheet moulding compounds [SMC] or cross moulding compounds
	.,	[XMC] [6, 2006.01]

70/52	• • • • Pultrusion, i.e. forming and compressing by continuously pulling through a	70/84	 Moulding material on preformed parts to be joined [6, 2006.01]
70/54	die [6, 2006.01]• • Component parts, details or accessories;	70/86	• • Incorporating in coherent impregnated reinforcing layers [6, 2006.01]
70/56	Auxiliary operations [6, 2006.01] • • • Tensioning reinforcements before or during	70/88	 characterised primarily by possessing specific properties, e.g. electrically conductive or locally
70/58	shaping [6, 2006.01] • comprising fillers only [6, 2006.01]		reinforced [6, 2006.01]
, 0, 50	Note(s) [6]	71/00	After-treatment of articles without altering their shape; Apparatus therefor (B29C 44/56,
	Moulding of plastics matrix material mixed with fillers		B29C 73/00 take precedence; surface shaping
	by a single technique is classified in the appropriate		B29C 59/00) [4, 5, 6, 2006.01]
	place for that technique.	71/02	 Thermal after-treatment [4, 2006.01]
70/60	 comprising a combination of distinct filler types incorporated in matrix material, forming one or 	71/04	• by wave energy or particle radiation [4, 2006.01]
	more layers, and with or without non-filled	73/00	Repairing of articles made from plastics or
	layers [6, 2006.01]		substances in a plastic state, e.g. of articles shaped or
70/62	 the filler being oriented during moulding (for 		produced by using techniques covered by this subclass or subclass B29D (retreading tyres
70/64	fibres of short length B29C 70/14) [6, 2006.01] • the filler influencing the surface characteristics of		B29D 30/54; devices for covering leaks in pipes or
70/04	the filler influencing the surface characteristics of the material, e.g. by concentrating near the surface		hoses F16L 55/16) [5, 2006.01]
	or by incorporation into the surface by force [6, 2006.01]	73/02	• using liquid or paste-like material (B29C 73/16 takes precedence) [5, 2006.01]
70/66	the filler comprising hollow constituents, e.g.	73/04	 using preformed elements [5, 2006.01]
70700	syntactic foam [6, 2006.01]	73/06	 using plugs sealing in the hole [5, 2006.01]
70/68	 by incorporating or moulding on preformed parts, e.g. inserts or layers [6, 2006.01] 	73/08	• • • Apparatus therefor, e.g. for inserting [5, 2006.01]
	Note(s) [6]	73/10	• • using patches sealing on the surface of the article (B29C 73/14 takes precedence) [5, 2006.01]
	This group <u>does not cover</u> : incorporating, or moulding on, preformed	73/12	• • • Apparatus therefor, e.g. for applying (B29C 73/30 takes precedence) [5, 2006.01]
	parts by a single technique, which is	73/14	 using elements composed of two parts joined
	covered by the appropriate place for that technique;		together after having been placed one on each side of the article [5, 2006.01]
	 pretreatment of preformed parts <u>per se</u>, i.e. 	73/16	 Auto-repairing or self-sealing arrangements or
	independently of their shaping, which is		agents [5, 2006.01]
70/70	covered by group B29B 15/00.Completely encapsulating inserts [6, 2006.01]	73/18	 the article material itself being self-sealing, e.g. by compression [5, 2006.01]
70/72	 Encapsulating inserts having non-encapsulated 	73/20	• • • the article material only consisting in part of a
	projections, e.g. extremities or terminal portions of		deformable sealing material [5, 2006.01]
5 0 / 5 4	electrical components [6, 2006.01]	73/22	• • the article containing elements including a sealing
70/74	 Moulding material on a relatively small portion of the preformed part, e.g. outsert 		composition, e.g. powder being liberated when the
	moulding [6, 2006.01]	72 /24	article is damaged [5, 2006.01]
70/76	• • Moulding on edges or extremities of the	73/24	 Apparatus or accessories not otherwise provided for [5, 2006.01]
, 0, , 0	preformed part [6, 2006.01]	73/26	 for mechanical pretreatment [5, 2006.01]
70/78	Moulding material on one side only of the	73/28	 for clamping and stretching flexible material, e.g.
	preformed part [6, 2006.01]	75/20	inner tubes [5, 2006.01]
70/80	• • Moulding sealing material into closure	73/30	 for local pressing or local heating [5, 2006.01]
E0 (00	members [6, 2006.01]	73/32	• • • using an elastic element, e.g. inflatable
70/82	Forcing wires, nets or the like partially or completely into the surface of an article of the		bag [5, 2006.01]
	completely into the surface of an article, e.g. by cutting and pressing [6, 2006.01]	73/34	• • • for local heating [5, 2006.01]
	catting and pressing [0, 2000.01]		

PRODUCING PARTICULAR ARTICLES FROM PLASTICS OR FROM SUBSTANCES IN A PLASTIC STATE (making granules B29B 9/00; making preforms B29B 11/00) [4]

Note(s) [4]

- 1. Attention is drawn to Note (3) following the title of class B29.
- 2. In this subclass, it is desirable to add the indexing codes of subclass B29K.

1/00 Producing articles provided with screw threads [1, 2006.01]

5/00 Producing elements of slide fasteners; Combined making and attaching of elements of slide fasteners [1, 4, 2006.01]

5/02	 the fasteners having separate interlocking members [4, 2006.01] 	28/00	Producing nets or the like [4, 2006.01]
5/04	the interlocking members being formed by	29/00	Producing belts or bands [1, 4, 2006.01]
	continuous meander of filamentary	29/06	 Conveyor belts [4, 2006.01]
	material [4, 2006.01]	29/08	 Toothed driving belts [4, 2006.01]
5/06	 the interlocking members being formed by continuous helix [4, 2006.01] 	29/10	 Driving belts having wedge-shaped cross- section [4, 2006.01]
5/08	 the interlocking members being formed by profiled or castellated edge of a stringer [4, 2006.01] 	30/00	Producing pneumatic or solid tyres or parts thereof
5/10	 the interlocking members being formed by continuous profiled strip [4, 2006.01] 		(producing inner tubes B29D 23/24; connection of valves to inflatable elastic bodies B60C 29/00) [4, 2006.01]
7/00	Producing flat articles, e.g. films or sheets	30/02	• Solid tyres [4, 2006.01]
	(B29D 24/00 takes precedence) [1, 4, 2006.01]	30/04	Resilient fillings for rubber tyres; Filling tyres
7/01	• Films or sheets [4, 2006.01]	20./00	therewith [4, 2006.01]
11/00	Producing optical elements, e.g. lenses or	30/06	• Pneumatic tyres or parts thereof [4, 2006.01]
11/00	prisms [1, 4, 2006.01]	30/08	• • Building tyres [4, 2006.01]
11/02	 Artificial eyes from organic plastic material [1, 2006.01] 	30/10	 on round cores, i.e. the shape of the core is approximately identical with the shape of the completed tyre [4, 2006.01]
12/00	Producing frames [1, 2006.01]	30/12	• • • Cores [4, 2006.01]
12/00	• Spectacle frames [1, 2006.01]	30/14	• • • Rolling-down or pressing-down the layers in
12/02	Speciacle frames [1, 2000.01]		the building process [4, 2006.01]
15/00	Producing gear wheels or similar articles with grooves or projections, e.g. control knobs [1, 2006.01]	30/16	• • • • Applying the layers; Guiding or stretching the layers during application [4, 2006.01]
		30/18	• • • Fitting the bead-rings or bead-cores; Folding
16/00	Producing articles with corrugations (B29D 23/18 takes precedence) [4, 2006.01]		the textile layers around the rings or cores [4, 2006.01]
17/00	Producing carriers of records containing fine grooves	30/20	• • • by the flat-tyre method, i.e. building on cylindrical drums [4, 2006.01]
	or impressions, e.g. disc records for needle playback or cylinder records; Producing record discs from	30/22	• • • Breaker plies being applied in the unexpanded state [4, 2006.01]
	master stencils [1, 4, 6, 2006.01]	30/24	• • • • Drums [4, 2006.01]
19/00	Producing buttons or semi-finished parts of buttons [1, 2006.01]	30/26	• • • • • Accessories or details, e.g. membranes or transfer rings [4, 2006.01]
19/04	by cutting, milling, turning, stamping, or perforating moulded parts; Surface treatment of	30/28	• • • Rolling-down or pressing-down the layers in the building process [4, 2006.01]
19/06	buttons [1, 2006.01] • Devices for feeding semi-finished parts to the	30/30	• • • • Applying the layers; Guiding or stretching the layers during application [4, 2006.01]
	processing machines [1, 2006.01]	30/32	• • • Fitting the bead-rings or bead-cores; Folding
19/08	 Making holes in buttons or in semi-finished parts thereof [1, 2006.01] 		the textile layers around the rings or cores [4, 2006.01]
24 / 22		30/34	• • • by jointly covering two bead-rings, located
21/00	Producing hair combs or similar toothed or slotted articles [1, 2006.01]		parallel to each other at a distance apart, with fabric or cord layers [4, 2006.01]
21/04	• by sawing, milling, cutting, or similar	30/36	• Expansion of tyres in a flat form, e.g. of tyres built by the flat-tyre method or by jointly covering two
21/06	operations [1, 2006.01] • Polishing [1, 2006.01]		bead-rings [4, 2006.01]
22/02	Decidentes hallow and the feet have did	30/38	Textile inserts, e.g. cord or canvas layers, for
22/00	Producing hollow articles (tubular articles B29D 23/00; pneumatic tyres B29D 30/00) [4, 2006.01]		tyres; Treatment of inserts prior to building the tyre (manufacture of layers comprising fibrous
22/02	 Inflatable articles [7, 2006.01] 		parallel reinforcements of substantial or
22/04	• Spherical articles, e.g. balls (B29D 22/02 takes	30/40	continuous length B29C 70/20) [4, 2006.01] • • Chemical pretreatment of textile inserts before
	precedence) [7, 2006.01]	30/40	building the tyre [4, 2006.01]
23/00	Producing tubular articles (B29D 24/00 takes precedence) [1, 4, 2006.01]	30/42	 • Endless textile bands without beadrings [4, 2006.01]
23/14 23/18	Cigar or cigarette holders [1, 4, 2006.01]Pleated hoses [1, 4, 2006.01]	30/44	 • Stretching or treating the layers before
23/18	• Flexible squeeze tubes, e.g. for	30/46	 application on the drum [4, 2006.01] Cutting textile inserts to required
23/24	cosmetics [1, 4, 2006.01] • Endless tubes, e.g. inner tubes for pneumatic	30/48	shape [4, 2006.01]Bead-rings or bead-cores; Treatment thereof prior
_5, _7	tyres [6, 2006.01]	30/50	to building the tyre [4, 2006.01] • Covering, e.g. by winding, the separate bead-
24/00	Producing articles with hollow walls [4, 2006.01]	3U/ 3U	rings or bead-cores with textile material, e.g.
25/00	Producing frameless domes [1, 2006.01]		with flipper strips [4, 2006.01]

30/52	 Unvulcanised treads, e.g. on used tyres; 		Note(s) [2010.01]
30/54 30/56 30/58 30/60	 Retreading [4, 5, 2006.01] Retreading [4, 2006.01] Retreading with prevulcanised tread [4, 2006.01] Applying bands of rubber treads, i.e. applying camel backs [4, 2006.01] by winding narrow strips [4, 2006.01] 	35/02	 Classification is made in this group if the moulding technique is of interest. The assembling of individual parts by mechanical joining is classified in subclass A43D, e.g. by gluing shoe parts A43D 25/00. made in one piece using a moulding technique, e.g. by injection moulding or casting [2010.01]
30/62	• • • by extrusion or injection of the tread on	35/04	 having multilayered parts [2010.01]
30/64 30/66	 carcass [4, 2006.01] Tyre spreaders [4, 2006.01] Moulding treads on to tyre casings, e.g. non-skid treads with spikes [4, 2006.01] 	35/06	 having soles or heels formed and joined on to preformed uppers using a moulding technique, e.g. by injection moulding, pressing and vulcanising [2010.01]
30/68	• • • Cutting profiles into the treads of	35/08	 having multilayered parts [2010.01]
30/70 30/72	tyres [4, 2006.01] • Annular breakers [4, 2006.01] • Side-walls [4, 2006.01]	35/10	 having preformed soles or heels joined on to preformed uppers using a moulding technique, e.g. by feeding or injecting plastics material between the parts to be joined [2010.01]
33/00	Producing bushes for bearings [2010.01]	35/12	 Producing parts thereof, e.g. soles, heels or uppers, by a moulding technique [2010.01]
35/00	Producing footwear [2010.01]	35/14	• • Multilayered parts [2010.01]
		99/00	Subject matter not provided for in other groups of this subclass [2010.01]

B29K INDEXING SCHEME ASSOCIATED WITH SUBCLASSES B29B, B29C OR B29D, RELATING TO MOULDING MATERIALS OR TO MATERIALS FOR REINFORCEMENTS, FILLERS OR PREFORMED PARTS, e.g. INSERTS [4]

Note(s) [4]

- 1. This subclass constitutes an indexing scheme associated with subclasses B29B, B29C or B29D.
- 2. In this subclass, the following term is used with the meaning indicated:
 - "rubber" covers:
 - a. natural or conjugated diene rubbers;
 - b. rubber in general (for a specific rubber, other than a natural rubber or a conjugated diene rubber, <u>see</u> the group provided for such macromolecular compounds).

Subclass index

COMPOSITIONS FOR MOULDING MATERIALS; CONDITION, FORM OR STATE OF MOULDED	
MATERIAL	1/00-105/00
COMPOSITIONS FOR REINFORCEMENTS	201/00-311/00
COMPOSITIONS FOR FILLERS	401/00-511/00
COMPOSITIONS FOR PREFORMED PARTS	601/00-711/00

	tions for moulding materials; Condition, form or state ed material [6]	21/00	Use of unspecified rubbers as moulding material [4, 2006.01]
1/00	Use of cellulose, modified cellulose or cellulose derivatives, e.g. viscose, as moulding	23/00	Use of polyalkenes as moulding material [4, 2006.01]
	material [4, 2006.01]	25/00	Use of polymers of vinyl-aromatic compounds as moulding material [4, 2006.01]
7/00	Use of natural rubber as moulding material [4, 2006.01]	27/00	Use of polyvinylhalogenides as moulding material [4, 2006.01]
9/00	Use of rubber derived from conjugated dienes, as moulding material [4, 2006.01]	27/06 27/12	 PVC, i.e. polyvinylchloride [4, 2006.01] containing fluorine [4, 2006.01]
9/06	• SB polymers, i.e. butadiene-styrene polymers [4, 2006.01]	27/18	• PTFE, i.e. polytetrafluorethene [4, 2006.01]
19/00	Use of rubber not provided for in a single one of main groups B29K 7/00-B29K 9/00, as moulding material [4, 2006.01]	29/00	Use of polyvinylalcohols, polyvinylethers, polyvinylaldehydes, polyvinylketones or polyvinylketals as moulding material [4, 2006.01]
		31/00	Use of polyvinylesters as moulding

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material [4, 2006.01]

33/00	Use of polymers of unsaturated acids or derivatives thereof, as moulding material (B29K 35/00 takes precedence) [4, 2006.01]	95/00	Use of bituminous materials as moulding material [4, 2006.01]
33/04	 Polymers of esters [4, 2006.01] 	96/00	Use of specified macromolecular materials not
33/18	 Polymers of citers [4, 2006.01] 		provided for in a single one of main groups
			B29K 1/00-B29K 95/00, as moulding
33/20	• • PAN, i.e. polyacrylonitrile [4, 2006.01]		material [4, 2006.01]
25/00	He of polymous of uncerturated polycophoguile acids	96/02	• Graft polymers [4, 2006.01]
35/00	Use of polymers of unsaturated polycarboxylic acids	96/04	• Block polymers [4, 2006.01]
	as moulding material [4, 2006.01]	30/04	Diock polymers [4, 2000.01]
45/00	Use of polymers of uncerturated systic compounds	101/00	Use of unspecified macromolecular compounds as
43/00	Use of polymers of unsaturated cyclic compounds	101/00	moulding material (use of unspecified rubbers
	having no unsaturated aliphatic groups in a side-		B29K 21/00) [4, 2006.01]
	chain, e.g. coumarone-indene resins, as moulding	101/10	
	material [4, 2006.01]	101/10	 Thermosetting resins [4, 2006.01]
EE /00	Hardward and an about all and are trade.	101/12	 Thermoplastic materials [6, 2006.01]
55/00	Use of specific polymers obtained by polymerisation		
	reactions only involving carbon-to-carbon	103/00	Use of resin-bonded materials as moulding
	unsaturated bonds, not provided for in a single one		material [4, 2006.01]
	of main groups B29K 23/00-B29K 45/00, as moulding	103/04	 Inorganic materials [4, 2006.01]
	material [4, 2006.01]	103/06	 Metal powders, metal carbides or the
55/02	 ABS polymers, i.e. acrylonitrile-butadiene-styrene 	100,00	like [4, 2006.01]
	polymers [4, 2006.01]	102/00	
		103/08	• • Mineral aggregates, e.g. sand, clay or the
59/00	Use of polyacetals as moulding material [4, 2006.01]		like [4, 2006.01]
		105/00	Condition forms on state of monday
61/00	Use of condensation polymers of aldehydes or	105/00	Condition, form or state of moulded
	ketones, as moulding material [4, 2006.01]		material [4, 2006.01]
61/04	• Phenoplasts [4, 2006.01]	105/02	 heat-shrinkable [4, 2006.01]
61/20	• Aminoplasts [4, 2006.01]	105/04	 cellular or porous [4, 2006.01]
01/20	Animoplasts [4, 2000.01]	105/06	 containing reinforcements, fillers or
63/00	Use of epoxy resins as moulding material [4, 2006.01]		inserts [4, 2006.01]
03/00	Ose of epoxy resins as mountaing material [4, 2000.01]	105/08	 of continuous length, e.g. cords, rovings, mats,
67/00	Use of polyesters as moulding material [4, 2006.01]	105/00	fabrics, strands or yarns [4, 2006.01]
07700	Ose of polyesters as mountaing material [4, 2000.01]	105/10	• • • oriented [4, 2006.01]
69/00	Use of polycarbonates as moulding	105/10	
05/00	material [4, 2006.01]	105/12	 of short lengths, e.g. chopped filaments, staple
	material [4, 2000.01]		fibres or bristles [4, 2006.01]
71/00	Use of polyethers as moulding material [4, 2006.01]	105/14	• • • oriented [4, 2006.01]
/1/00	Ose of polyethers as mountaing material [4, 2000.01]	105/16	 Fillers [4, 2006.01]
73/00	Use of other polymers having oxygen as the only	105/18	• • • oriented [4, 2006.01]
75/00	hetero atom in the main chain, as moulding	105/20	• • Inserts [4, 2006.01]
	material [4, 2006.01]		
	material [4, 2000.01]	105/22	• • • metallic [4, 2006.01]
75/00	Use of polyureas or polyurethanes as moulding	105/24	 cross-linked or vulcanised [4, 2006.01]
75/00	material [4, 2006.01]	105/26	• Scrap [4, 2006.01]
	material [4, 2000.01]	105/28	• opaque [4, 2006.01]
77/00	Use of polyamides, e.g. polyesteramides, as moulding	105/30	• reflecting [4, 2006.01]
77700	material [4, 2006.01]	105/32	_
	material [4, 2000.01]		• transparent [4, 2006.01]
79/00	Use of other polymers having nitrogen, with or	105/34	 insulating [4, 2006.01]
75/00	without oxygen or carbon only, in the main chain, as		
	moulding material [4, 2006.01]		
	mounting material [4, 2000.01]	<u>Composi</u>	tions for reinforcements [6]
81/00	Use of polymers having sulfur, with or without	204 (00	** 6 11 1 16 1 11 11 11 11
01/00	nitrogen, oxygen or carbon only, in the main chain,	201/00	Use of cellulose, modified cellulose or cellulose
	as moulding material [4, 2006.01]		derivatives, e.g. viscose, as reinforcement [6, 2006.01]
	as motituing material [4, 2000.01]	20-100	6 1 11 1 6 70 000 01
83/00	Use of polymers having silicon, with or without	207/00	Use of natural rubber as reinforcement [6, 2006.01]
03/00	sulfur, nitrogen, oxygen or carbon only, in the main	200/00	
		209/00	Use of rubber derived from conjugated dienes, as
	chain, as moulding material [4, 2006.01]		reinforcement [6, 2006.01]
05/00	The of a character having alcorate other than allians	209/06	 SB polymers, i.e. butadiene-styrene
85/00	Use of polymers having elements other than silicon,		polymers [6, 2006.01]
	nitrogen, oxygen or carbon only, in the main chain,		
	as moulding material [4, 2006.01]	219/00	Use of rubber not provided for in a single one of
00/00	II of		main groups B29K 207/00 or B29K 209/00, as
86/00	Use of specific polymers obtained by		reinforcement [6, 2006.01]
	polycondensation or polyaddition, not provided for		
	in a single one of main groups B29K 59/00-	221/00	Use of unspecified rubbers as
	B29K 85/00, as moulding material [4, 2006.01]		reinforcement [6, 2006.01]
04/00	The of the control of		-
91/00	Use of waxes as moulding material [4, 2006.01]	223/00	Use of polyalkenes as reinforcement [6, 2006.01]

225/00	Use of polymers of vinyl-aromatic compounds as reinforcement [6, 2006.01]	283/00	Use of polymers having silicon, with or without sulfur, nitrogen, oxygen or carbon only, in the main chain, as reinforcement [6, 2006.01]
227/00	Use of polyvinylhalogenides as		Cham, as remiorcement [0, 2000.01]
227700	reinforcement [6, 2006.01]	285/00	Use of polymers having elements other than silicon,
227/06		203/00	
227/06	• PVC, i.e. polyvinylchloride [6, 2006.01]		nitrogen, oxygen or carbon only, in the main chain,
227/12	 containing fluorine [6, 2006.01] 		as reinforcement [6, 2006.01]
227/18	• • PTFE, i.e. polytetrafluoroethene [6, 2006.01]	286/00	Use of specific polymers obtained by
229/00	Use of polyvinylalcohols, polyvinylethers, polyvinylaldehydes, polyvinylketones or	200/00	Use of specific polymers obtained by polycondensation or polyaddition, not provided for in a single one of main groups B29K 259/00-B29K 285/00, as reinforcement [6, 2006.01]
	polyvinylketals as reinforcement [6, 2006.01]		D23K 203/00, as remitorcement [0, 2000.01]
231/00	Use of polyvinylesters as reinforcement [6, 2006.01]	295/00	Use of bituminous materials as reinforcement [6, 2006.01]
233/00	Use of polymers of unsaturated acids or derivatives		
233,00	thereof, as reinforcement (B29K 235/00 takes	296/00	Use of specific macromolecular materials not
	precedence) [6, 2006.01]		provided for in a single one of main groups
222/04			B29K 201/00-B29K 295/00, as
233/04	• Polymers of esters [6, 2006.01]		reinforcement [6, 2006.01]
233/18	 Polymers of nitriles [6, 2006.01] 	296/02	• Graft polymers [6, 2006.01]
233/20	 PAN, i.e. polyacrylonitrile [6, 2006.01] 		
		296/04	• Block polymers [6, 2006.01]
235/00	Use of polymers of unsaturated polycarboxylic acids	201 /00	TT((C. 1
	as reinforcement [6, 2006.01]	301/00	Use of unspecified macromolecular compounds as
	,		reinforcement (use of unspecified rubbers
245/00	Use of polymers of unsaturated cyclic compounds		B29K 221/00) [6, 2006.01]
	having no unsaturated aliphatic groups in a side-	301/10	 Thermosetting resins [6, 2006.01]
	chain, e.g. coumarone-indene resins, as	301/12	 Thermoplastic materials [6, 2006.01]
	reinforcement [6, 2006.01]		•
	remorement [0, 200001]	303/00	Use of resin-bonded materials as
255/00	Use of specific polymers obtained by polymerisation		reinforcement [6, 2006.01]
	reactions only involving carbon-to-carbon	303/04	 Inorganic materials [6, 2006.01]
	unsaturated bonds, not provided for in a single one	303/06	 Metal powders, metal carbides or the
	of main groups B29K 223/00-B29K 245/00, as	3037 00	like [6, 2006.01]
	reinforcement [6, 2006.01]	202/00	
255/02	ABS polymers, i.e. acrylonitrile-butadiene-styrene	303/08	Mineral aggregates, e.g. sand, clay or the
233/02	polymers [6, 2006.01]		like [6, 2006.01]
	porymers [0, 2000.01]	305/00	Use of metals, their alloys or their compounds, as
259/00	Use of polyacetals as reinforcement [6, 2006.01]	303/00	reinforcement [6, 2006.01]
2557 00	ose of polyacetais as remitoreement [0, 2000.01]		Tennorcement [0, 2000.01]
261/00	Use of condensation polymers of aldehydes or		Note(s) [6]
2017.00	ketones, as reinforcement [6, 2006.01]		• •
261/04	• Phenoplasts [6, 2006.01]		Alloys or compounds of specified metals are indexed
			with the same code as the specified metals.
261/20	• Aminoplasts [6, 2006.01]	305/02	• Aluminium [6, 2006.01]
262/00	II	305/04	 Lead [6, 2006.01]
263/00	Use of epoxy resins as reinforcement [6, 2006.01]	305/06	• Tin [6, 2006.01]
267/00	I f	305/08	 Transition metals [6, 2006.01]
267/00	Use of polyesters as reinforcement [6, 2006.01]	305/10	• • Copper [6, 2006.01]
260/00	Use of nelvesylenates as winforcement [6, 2006 01]		
269/00	Use of polycarbonates as reinforcement [6, 2006.01]	305/12	• • Iron [6, 2006.01]
271/00	Use of polyethers as reinforcement [6, 2006.01]	307/00	Use of elements other than metals as
2/1/00	Ose of polyethers as remioreement [0, 2000.01]	307/00	
273/00	Use of other polymers having oxygen as the only	DO= /00	reinforcement [6, 2006.01]
275700	hetero atom in the main chain, as	307/02	• Boron [6, 2006.01]
	reinforcement [6, 2006.01]	307/04	• Carbon [6, 2006.01]
	Temforcement [0, 2000.01]		
275/00	Use of polyureas or polyurethanes as	309/00	Use of inorganic materials not provided for in groups
275700	reinforcement [6, 2006.01]		B29K 303/00-B29K 307/00, as
	remore (0, 2000.01)		reinforcement [6, 2006.01]
277/00	Use of polyamides, e.g. polyesteramides, as	309/02	 Ceramics [6, 2006.01]
277700	reinforcement [6, 2006.01]	309/04	 Carbides; Nitrides [6, 2006.01]
	remoteement [0, 2000,01]	309/06	• Concrete [6, 2006.01]
279/00	Use of other polymers having nitrogen, with or		
	without oxygen or carbon only, in the main chain, as	309/08	• Glass [6, 2006.01]
	reinforcement [6, 2006.01]	309/10	• Mica [6, 2006.01]
	remoteement [0, 2000,01]	309/12	• Asbestos [6, 2006.01]
281/00	Use of polymers having sulfur, with or without	_	
_31,00	nitrogen, oxygen or carbon only, in the main chain,	311/00	Use of natural products or their composites, not
	as reinforcement [6, 2006.01]		provided for in groups B29K 201/00-B29K 309/00, as
	as remioreement to, 2000,011		reinforcement [6, 2006.01]
		311/02	• Cork [6, 2006.01]

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244/04			
311/04	• Linoleum [6, 2006.01]	463/00	Use of epoxy resins as filler [6, 2006.01]
311/06	• Bone, horn or ivory [6, 2006.01]	467/00	Her of polyectors as filler [6, 2006 01]
311/08	• Leather [6, 2006.01]	407/00	Use of polyesters as filler [6, 2006.01]
311/10 311/12	Natural fibres, e.g. wool, cotton [6, 2006.01]Paper, e.g. cardboard [6, 2006.01]	469/00	Use of polycarbonates as filler [6, 2006.01]
311/14	• Wood, e.g. woodboard or fibreboard [6, 2006.01]	471/00	Use of polyethers as filler [6, 2006.01]
<u>Composi</u>	tions for fillers [6]	473/00	Use of other polymers having oxygen as the only hetero atom in the main chain, as filler [6, 2006.01]
401/00	Use of cellulose, modified cellulose or cellulose derivatives, e.g. viscose, as filler [6, 2006.01]	475/00	Use of polyureas or polyurethanes as filler [6, 2006.01]
407/00	Use of natural rubber as filler [6, 2006.01]	477/00	Use of polyamides, e.g. polyesteramides, as filler [6, 2006.01]
409/00	Use of rubber derived from conjugated dienes, as filler [6, 2006.01]	479/00	Use of other polymers having nitrogen, with or
409/06	• SB polymers, i.e. butadiene-styrene polymers [6, 2006.01]		without oxygen or carbon only, in the main chain, as filler [6, 2006.01]
419/00	Use of rubber not provided for in a single one of main groups B29K 407/00 or B29K 409/00, as filler [6, 2006.01]	481/00	Use of polymers having sulfur, with or without nitrogen, oxygen or carbon only, in the main chain, as filler [6, 2006.01]
421/00 423/00	Use of unspecified rubbers as filler [6, 2006.01]	483/00	Use of polymers having silicon, with or without sulfur, nitrogen, oxygen or carbon only, in the main chain, as filler [6, 2006.01]
423/00	Use of polyalkenes as filler [6, 2006.01]		
425/00	Use of polymers of vinyl-aromatic compounds as filler [6, 2006.01]	485/00	Use of polymers having elements other than silicon, nitrogen, oxygen or carbon only, in the main chain, as filler [6, 2006.01]
427/00	Use of polyvinylhalogenides as filler [6, 2006.01]		• •
427/06	• PVC, i.e. polyvinylchloride [6, 2006.01]	486/00	Use of specific polymers obtained by
427/12	• containing fluorine [6, 2006.01]		polycondensation or polyaddition, not provided for
427/18	• • PTFE, i.e. polytetrafluoroethene [6, 2006.01]		in a single one of main groups B29K 459/00- B29K 485/00, as filler [6, 2006.01]
429/00	Use of polyvinylalcohols, polyvinylethers, polyvinylaldehydes, polyvinylketones or	491/00	Use of waxes as filler [6, 2006.01]
	polyvinylketals as filler [6, 2006.01]		
	polyvinyiketais as liner [0, 2000.01]	495/00	Use of bituminous materials as filler [6, 2006.01]
431/00	Use of polyvinylesters as filler [6, 2006.01]	495/00 496/00	Use of specific macromolecular materials not
	Use of polyvinylesters as filler [6, 2006.01] Use of polymers of unsaturated acids or derivatives		Use of specific macromolecular materials not provided for in a single one of main groups
	Use of polywinylesters as filler [6, 2006.01] Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes	496/00	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01]
433/00	Use of polywinylesters as filler [6, 2006.01] Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01]		Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] • Graft polymers [6, 2006.01]
433/00 433/04	Use of polyvinylesters as filler [6, 2006.01] Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] • Polymers of esters [6, 2006.01]	496/00 496/02	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01]
433/00 433/04 433/18	Use of polyvinylesters as filler [6, 2006.01] Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] • Polymers of esters [6, 2006.01] • Polymers of nitriles [6, 2006.01]	496/00 496/02	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] • Graft polymers [6, 2006.01] • Block polymers [6, 2006.01] Use of unspecified macromolecular compounds as
433/00 433/04	Use of polyvinylesters as filler [6, 2006.01] Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] • Polymers of esters [6, 2006.01]	496/00 496/02 496/04	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] • Graft polymers [6, 2006.01] • Block polymers [6, 2006.01] Use of unspecified macromolecular compounds as filler (use of unspecified rubbers
433/00 433/04 433/18	Use of polyvinylesters as filler [6, 2006.01] Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] Polymers of esters [6, 2006.01] Polymers of nitriles [6, 2006.01] PAN, i.e. polyacrylonitrile [6, 2006.01] Use of polymers of unsaturated polycarboxylic acids	496/00 496/02 496/04 501/00	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] • Graft polymers [6, 2006.01] • Block polymers [6, 2006.01] Use of unspecified macromolecular compounds as filler (use of unspecified rubbers B29K 421/00) [6, 2006.01]
433/00 433/04 433/18 433/20	Use of polyvinylesters as filler [6, 2006.01] Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] Polymers of esters [6, 2006.01] Polymers of nitriles [6, 2006.01] PAN, i.e. polyacrylonitrile [6, 2006.01]	496/00 496/02 496/04	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] • Graft polymers [6, 2006.01] • Block polymers [6, 2006.01] Use of unspecified macromolecular compounds as filler (use of unspecified rubbers
433/00 433/04 433/18 433/20	Use of polyvinylesters as filler [6, 2006.01] Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] Polymers of esters [6, 2006.01] Polymers of nitriles [6, 2006.01] PAN, i.e. polyacrylonitrile [6, 2006.01] Use of polymers of unsaturated polycarboxylic acids	496/00 496/02 496/04 501/00 501/10 501/12	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] • Graft polymers [6, 2006.01] • Block polymers [6, 2006.01] Use of unspecified macromolecular compounds as filler (use of unspecified rubbers B29K 421/00) [6, 2006.01] • Thermosetting resins [6, 2006.01] • Thermoplastic materials [6, 2006.01]
433/00 433/04 433/18 433/20 435/00	Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] • Polymers of esters [6, 2006.01] • Polymers of nitriles [6, 2006.01] • PAN, i.e. polyacrylonitrile [6, 2006.01] Use of polymers of unsaturated polycarboxylic acids as filler [6, 2006.01] Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a side-	496/00 496/02 496/04 501/00 501/10 501/12 503/00	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] • Graft polymers [6, 2006.01] • Block polymers [6, 2006.01] Use of unspecified macromolecular compounds as filler (use of unspecified rubbers B29K 421/00) [6, 2006.01] • Thermosetting resins [6, 2006.01] • Thermoplastic materials [6, 2006.01] Use of resin-bonded materials as filler [6, 2006.01]
433/00 433/04 433/18 433/20 435/00	Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] • Polymers of esters [6, 2006.01] • Polymers of nitriles [6, 2006.01] • PAN, i.e. polyacrylonitrile [6, 2006.01] Use of polymers of unsaturated polycarboxylic acids as filler [6, 2006.01] Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a sidechain, e.g. coumarone-indene resins, as	496/00 496/02 496/04 501/00 501/10 501/12 503/00 503/04	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] • Graft polymers [6, 2006.01] • Block polymers [6, 2006.01] Use of unspecified macromolecular compounds as filler (use of unspecified rubbers B29K 421/00) [6, 2006.01] • Thermosetting resins [6, 2006.01] • Thermoplastic materials [6, 2006.01] Use of resin-bonded materials as filler [6, 2006.01] • Inorganic materials [6, 2006.01]
433/00 433/04 433/18 433/20 435/00	Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] • Polymers of esters [6, 2006.01] • Polymers of nitriles [6, 2006.01] • PAN, i.e. polyacrylonitrile [6, 2006.01] Use of polymers of unsaturated polycarboxylic acids as filler [6, 2006.01] Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a side-	496/00 496/02 496/04 501/00 501/10 501/12 503/00	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] • Graft polymers [6, 2006.01] • Block polymers [6, 2006.01] Use of unspecified macromolecular compounds as filler (use of unspecified rubbers B29K 421/00) [6, 2006.01] • Thermosetting resins [6, 2006.01] • Thermoplastic materials [6, 2006.01] Use of resin-bonded materials as filler [6, 2006.01]
433/00 433/04 433/18 433/20 435/00	Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] Polymers of esters [6, 2006.01] Polymers of nitriles [6, 2006.01] PAN, i.e. polyacrylonitrile [6, 2006.01] Use of polymers of unsaturated polycarboxylic acids as filler [6, 2006.01] Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a sidechain, e.g. coumarone-indene resins, as filler [6, 2006.01] Use of specific polymers obtained by polymerisation reactions only involving carbon-to-carbon	496/00 496/02 496/04 501/00 501/10 501/12 503/00 503/04	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] • Graft polymers [6, 2006.01] • Block polymers [6, 2006.01] Use of unspecified macromolecular compounds as filler (use of unspecified rubbers B29K 421/00) [6, 2006.01] • Thermosetting resins [6, 2006.01] • Thermoplastic materials [6, 2006.01] Use of resin-bonded materials as filler [6, 2006.01] • Inorganic materials [6, 2006.01] • Metal powders, metal carbides or the
433/00 433/04 433/18 433/20 435/00 445/00	Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] Polymers of esters [6, 2006.01] Polymers of nitriles [6, 2006.01] PAN, i.e. polyacrylonitrile [6, 2006.01] Use of polymers of unsaturated polycarboxylic acids as filler [6, 2006.01] Use of polymers of unsaturated polycarboxylic acids as filler [6, 2006.01] Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a sidechain, e.g. coumarone-indene resins, as filler [6, 2006.01] Use of specific polymers obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in a single one of main groups B29K 423/00-B29K 445/00, as filler [6, 2006.01]	496/00 496/02 496/04 501/00 501/10 501/12 503/00 503/04 503/06	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] Graft polymers [6, 2006.01] Block polymers [6, 2006.01] Use of unspecified macromolecular compounds as filler (use of unspecified rubbers B29K 421/00) [6, 2006.01] Thermosetting resins [6, 2006.01] Thermoplastic materials [6, 2006.01] Use of resin-bonded materials as filler [6, 2006.01] Inorganic materials [6, 2006.01] Metal powders, metal carbides or the like [6, 2006.01] Mineral aggregates, e.g. sand, clay or the
433/00 433/04 433/18 433/20 435/00 445/00	Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] Polymers of esters [6, 2006.01] Polymers of nitriles [6, 2006.01] PAN, i.e. polyacrylonitrile [6, 2006.01] Use of polymers of unsaturated polycarboxylic acids as filler [6, 2006.01] Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a sidechain, e.g. coumarone-indene resins, as filler [6, 2006.01] Use of specific polymers obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in a single one of main groups B29K 423/00-B29K 445/00, as	496/00 496/02 496/04 501/00 501/10 501/12 503/00 503/04 503/08	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] Graft polymers [6, 2006.01] Block polymers [6, 2006.01] Use of unspecified macromolecular compounds as filler (use of unspecified rubbers B29K 421/00) [6, 2006.01] Thermosetting resins [6, 2006.01] Thermoplastic materials [6, 2006.01] Use of resin-bonded materials as filler [6, 2006.01] Inorganic materials [6, 2006.01] Metal powders, metal carbides or the like [6, 2006.01] Mineral aggregates, e.g. sand, clay or the like [6, 2006.01] Use of metals, their alloys or their compounds, as filler [6, 2006.01]
433/00 433/04 433/18 433/20 435/00 445/00	Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] Polymers of esters [6, 2006.01] Polymers of nitriles [6, 2006.01] PAN, i.e. polyacrylonitrile [6, 2006.01] Use of polymers of unsaturated polycarboxylic acids as filler [6, 2006.01] Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a sidechain, e.g. coumarone-indene resins, as filler [6, 2006.01] Use of specific polymers obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in a single one of main groups B29K 423/00-B29K 445/00, as filler [6, 2006.01] ABS polymers, i.e. acrylonitrile-butadiene-styrene	496/00 496/02 496/04 501/00 501/10 501/12 503/00 503/04 503/08 505/00	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] Graft polymers [6, 2006.01] Block polymers [6, 2006.01] Use of unspecified macromolecular compounds as filler (use of unspecified rubbers B29K 421/00) [6, 2006.01] Thermosetting resins [6, 2006.01] Thermoplastic materials [6, 2006.01] Use of resin-bonded materials as filler [6, 2006.01] Inorganic materials [6, 2006.01] Metal powders, metal carbides or the like [6, 2006.01] Mineral aggregates, e.g. sand, clay or the like [6, 2006.01] Use of metals, their alloys or their compounds, as filler [6, 2006.01] Note(s) [6] Alloys or compounds of specified metals are indexed with the same code as the specified metals.
433/00 433/04 433/18 433/20 435/00 445/00 455/00	Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] Polymers of esters [6, 2006.01] Polymers of nitriles [6, 2006.01] PAN, i.e. polyacrylonitrile [6, 2006.01] Use of polymers of unsaturated polycarboxylic acids as filler [6, 2006.01] Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a sidechain, e.g. coumarone-indene resins, as filler [6, 2006.01] Use of specific polymers obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in a single one of main groups B29K 423/00-B29K 445/00, as filler [6, 2006.01] ABS polymers, i.e. acrylonitrile-butadiene-styrene polymers [6, 2006.01] Use of polyacetals as filler [6, 2006.01]	496/00 496/02 496/04 501/00 501/10 501/12 503/00 503/04 503/08 505/00	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] Graft polymers [6, 2006.01] Block polymers [6, 2006.01] Use of unspecified macromolecular compounds as filler (use of unspecified rubbers B29K 421/00) [6, 2006.01] Thermosetting resins [6, 2006.01] Thermoplastic materials [6, 2006.01] Use of resin-bonded materials as filler [6, 2006.01] Inorganic materials [6, 2006.01] Metal powders, metal carbides or the like [6, 2006.01] Mineral aggregates, e.g. sand, clay or the like [6, 2006.01] Use of metals, their alloys or their compounds, as filler [6, 2006.01] Note(s) [6] Alloys or compounds of specified metals are indexed with the same code as the specified metals. Aluminium [6, 2006.01]
433/00 433/04 433/18 433/20 435/00 445/00	Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] Polymers of esters [6, 2006.01] Polymers of nitriles [6, 2006.01] PAN, i.e. polyacrylonitrile [6, 2006.01] Use of polymers of unsaturated polycarboxylic acids as filler [6, 2006.01] Use of polymers of unsaturated polycarboxylic acids as filler [6, 2006.01] Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a sidechain, e.g. coumarone-indene resins, as filler [6, 2006.01] Use of specific polymers obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in a single one of main groups B29K 423/00-B29K 445/00, as filler [6, 2006.01] ABS polymers, i.e. acrylonitrile-butadiene-styrene polymers [6, 2006.01]	496/00 496/02 496/04 501/00 501/10 501/12 503/00 503/04 503/08 505/00	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] Graft polymers [6, 2006.01] Block polymers [6, 2006.01] Use of unspecified macromolecular compounds as filler (use of unspecified rubbers B29K 421/00) [6, 2006.01] Thermosetting resins [6, 2006.01] Thermoplastic materials [6, 2006.01] Use of resin-bonded materials as filler [6, 2006.01] Inorganic materials [6, 2006.01] Metal powders, metal carbides or the like [6, 2006.01] Mineral aggregates, e.g. sand, clay or the like [6, 2006.01] Use of metals, their alloys or their compounds, as filler [6, 2006.01] Note(s) [6] Alloys or compounds of specified metals are indexed with the same code as the specified metals. Aluminium [6, 2006.01]
433/00 433/04 433/18 433/20 435/00 445/00 455/00	Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] Polymers of esters [6, 2006.01] Polymers of nitriles [6, 2006.01] PAN, i.e. polyacrylonitrile [6, 2006.01] Use of polymers of unsaturated polycarboxylic acids as filler [6, 2006.01] Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a sidechain, e.g. coumarone-indene resins, as filler [6, 2006.01] Use of specific polymers obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in a single one of main groups B29K 423/00-B29K 445/00, as filler [6, 2006.01] ABS polymers, i.e. acrylonitrile-butadiene-styrene polymers [6, 2006.01] Use of polyacetals as filler [6, 2006.01] Use of condensation polymers of aldehydes or	496/00 496/02 496/04 501/00 501/10 501/12 503/00 503/08 505/00 505/00	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] Graft polymers [6, 2006.01] Block polymers [6, 2006.01] Use of unspecified macromolecular compounds as filler (use of unspecified rubbers B29K 421/00) [6, 2006.01] Thermosetting resins [6, 2006.01] Thermoplastic materials [6, 2006.01] Use of resin-bonded materials as filler [6, 2006.01] Inorganic materials [6, 2006.01] Metal powders, metal carbides or the like [6, 2006.01] Mineral aggregates, e.g. sand, clay or the like [6, 2006.01] Use of metals, their alloys or their compounds, as filler [6, 2006.01] Note(s) [6] Alloys or compounds of specified metals are indexed with the same code as the specified metals. Aluminium [6, 2006.01] Lead [6, 2006.01]
433/00 433/04 433/18 433/20 435/00 445/00 455/00 455/02 459/00 461/00	Use of polymers of unsaturated acids or derivatives thereof, as filler (B29K 435/00 takes precedence) [6, 2006.01] Polymers of esters [6, 2006.01] Polymers of nitriles [6, 2006.01] PAN, i.e. polyacrylonitrile [6, 2006.01] Use of polymers of unsaturated polycarboxylic acids as filler [6, 2006.01] Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a sidechain, e.g. coumarone-indene resins, as filler [6, 2006.01] Use of specific polymers obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in a single one of main groups B29K 423/00-B29K 445/00, as filler [6, 2006.01] ABS polymers, i.e. acrylonitrile-butadiene-styrene polymers [6, 2006.01] Use of condensation polymers of aldehydes or ketones, as filler [6, 2006.01]	496/00 496/02 496/04 501/00 501/10 501/12 503/00 503/04 503/08 505/00	Use of specific macromolecular materials not provided for in a single one of main groups B29K 401/00-B29K 495/00, as filler [6, 2006.01] Graft polymers [6, 2006.01] Block polymers [6, 2006.01] Use of unspecified macromolecular compounds as filler (use of unspecified rubbers B29K 421/00) [6, 2006.01] Thermosetting resins [6, 2006.01] Thermoplastic materials [6, 2006.01] Use of resin-bonded materials as filler [6, 2006.01] Inorganic materials [6, 2006.01] Metal powders, metal carbides or the like [6, 2006.01] Mineral aggregates, e.g. sand, clay or the like [6, 2006.01] Use of metals, their alloys or their compounds, as filler [6, 2006.01] Note(s) [6] Alloys or compounds of specified metals are indexed with the same code as the specified metals. Aluminium [6, 2006.01]

505/10	• • Copper [6, 2006.01]	631/00	Use of polyvinylesters for preformed parts, e.g. for
505/12	• • Iron [6, 2006.01]		inserts [6, 2006.01]
505/14	 Noble metals, e.g. silver, gold or 	600/00	
	platinum [6, 2006.01]	633/00	Use of polymers of unsaturated acids or derivatives
=0= /00			thereof, for preformed parts, e.g. for inserts (B29K 635/00 takes precedence) [6, 2006.01]
507/00	Use of elements other than metals as	633/04	 Polymers of esters [6, 2006.01]
507/02	filler [6, 2006.01]	633/18	 Polymers of nitriles [6, 2006.01]
	• Boron [6, 2006.01]	633/20	 PAN, i.e. polyacrylonitrile [6, 2006.01]
507/04	• Carbon [6, 2006.01]	055720	17111, i.e. polyderylomane [0, 2000.01]
509/00	Use of inorganic materials not provided for in groups	635/00	Use of polymers of unsaturated polycarboxylic acids
	B29K 503/00-B29K 507/00, as filler [6, 2006.01]		for preformed parts, e.g. for inserts [6, 2006.01]
509/02	• Ceramics [6, 2006.01]	C4E /00	Use of volumers of uncerturated systic compounds
509/04	• • Carbides; Nitrides [6, 2006.01]	645/00	Use of polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a side-
509/06	• Concrete [6, 2006.01]		chain, e.g. coumarone-indene resins, for preformed
509/08	• Glass [6, 2006.01]		parts, e.g. for inserts [6, 2006.01]
509/10	• Mica [6, 2006.01]		
509/12	• Asbestos [6, 2006.01]	655/00	Use of specific polymers obtained by polymerisation
E11/00	Use of natural products or their composites not		reactions only involving carbon-to-carbon unsaturated bonds, not provided for in a single one
511/00	Use of natural products or their composites, not provided for in groups B29K 401/00-B29K 509/00, as		of main groups B29K 623/00-B29K 645/00, for
	filler [6, 2006.01]		preformed parts, e.g. for inserts [6, 2006.01]
511/02	• Cork [6, 2006.01]	655/02	ABS polymers, i.e. acrylonitrile-butadiene-styrene
511/04	• Linoleum [6, 2006.01]		polymers [6, 2006.01]
511/06	• Bone, horn or ivory [6, 2006.01]	.=	
511/08	• Leather [6, 2006.01]	659/00	Use of polyacetals for preformed parts, e.g. for
511/10	• Natural fibres, e.g. wool or cotton [6, 2006.01]		inserts [6, 2006.01]
511/12	• Paper, e.g. cardboard [6, 2006.01]	661/00	Use of condensation polymers of aldehydes or
511/14	• Wood, e.g. woodboard or fibreboard [6, 2006.01]		ketones, for preformed parts, e.g. for
			inserts [6, 2006.01]
		661/04	 Phenoplasts [6, 2006.01]
Composi	tions for preformed parts, e.g. inserts [6]	661/20	 Aminoplasts [6, 2006.01]
601/00	Use of cellulose, modified cellulose or cellulose	663/00	Use of enoxy resins for preformed parts, e.g. for
601/00	Use of cellulose, modified cellulose or cellulose derivatives, e.g. viscose, for preformed parts, e.g. for	663/00	Use of epoxy resins for preformed parts, e.g. for inserts [6, 2006.01]
601/00			inserts [6, 2006.01]
	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01]	663/00 667/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for
601/00	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for		inserts [6, 2006.01]
	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01]	667/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01]
	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for		inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for
607/00	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01]	667/00 669/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01]
607/00	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] • SB polymers, i.e. butadiene-styrene	667/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for
607/00	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01]	667/00 669/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01]
607/00 609/00 609/06	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] • SB polymers, i.e. butadiene-styrene polymers [6, 2006.01]	667/00 669/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for inserts [6, 2006.01]
607/00	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] • SB polymers, i.e. butadiene-styrene	667/00 669/00 671/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for
607/00 609/00 609/06	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] • SB polymers, i.e. butadiene-styrene polymers [6, 2006.01] Use of rubber not provided for in a single one of	667/00 669/00 671/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having oxygen as the only
607/00 609/00 609/06 619/00	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] • SB polymers, i.e. butadiene-styrene polymers [6, 2006.01] Use of rubber not provided for in a single one of main groups B29K 607/00 or B29K 609/00, for preformed parts, e.g. for inserts [6, 2006.01]	667/00 669/00 671/00 673/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having oxygen as the only hetero atom in the main chain, for preformed parts, e.g. for inserts [6, 2006.01]
607/00 609/00 609/06	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] • SB polymers, i.e. butadiene-styrene polymers [6, 2006.01] Use of rubber not provided for in a single one of main groups B29K 607/00 or B29K 609/00, for preformed parts, e.g. for inserts [6, 2006.01] Use of unspecified rubbers for preformed parts, e.g.	667/00 669/00 671/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having oxygen as the only hetero atom in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polyureas or polyurethanes for preformed
607/00 609/00 609/06 619/00	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] • SB polymers, i.e. butadiene-styrene polymers [6, 2006.01] Use of rubber not provided for in a single one of main groups B29K 607/00 or B29K 609/00, for preformed parts, e.g. for inserts [6, 2006.01]	667/00 669/00 671/00 673/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having oxygen as the only hetero atom in the main chain, for preformed parts, e.g. for inserts [6, 2006.01]
607/00 609/00 609/06 619/00	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] • SB polymers, i.e. butadiene-styrene polymers [6, 2006.01] Use of rubber not provided for in a single one of main groups B29K 607/00 or B29K 609/00, for preformed parts, e.g. for inserts [6, 2006.01] Use of unspecified rubbers for preformed parts, e.g.	667/00 669/00 671/00 673/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having oxygen as the only hetero atom in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polyureas or polyurethanes for preformed
607/00 609/00 609/06 619/00	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] • SB polymers, i.e. butadiene-styrene polymers [6, 2006.01] Use of rubber not provided for in a single one of main groups B29K 607/00 or B29K 609/00, for preformed parts, e.g. for inserts [6, 2006.01] Use of unspecified rubbers for preformed parts, e.g. for inserts [6, 2006.01]	667/00 669/00 671/00 673/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having oxygen as the only hetero atom in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polyureas or polyurethanes for preformed parts, e.g. for inserts [6, 2006.01]
607/00 609/00 609/06 619/00 621/00 623/00	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] SB polymers, i.e. butadiene-styrene polymers [6, 2006.01] Use of rubber not provided for in a single one of main groups B29K 607/00 or B29K 609/00, for preformed parts, e.g. for inserts [6, 2006.01] Use of unspecified rubbers for preformed parts, e.g. for inserts [6, 2006.01] Use of polyalkenes for preformed parts, e.g. for inserts [6, 2006.01]	667/00 669/00 671/00 673/00 675/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having oxygen as the only hetero atom in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polyureas or polyurethanes for preformed parts, e.g. for inserts [6, 2006.01] Use of polyamides, e.g. polyesteramides, for preformed parts, e.g. for inserts [6, 2006.01]
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607/00 609/00 609/06 619/00 621/00 623/00 625/00	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] • SB polymers, i.e. butadiene-styrene polymers [6, 2006.01] Use of rubber not provided for in a single one of main groups B29K 607/00 or B29K 609/00, for preformed parts, e.g. for inserts [6, 2006.01] Use of unspecified rubbers for preformed parts, e.g. for inserts [6, 2006.01] Use of polyalkenes for preformed parts, e.g. for inserts [6, 2006.01] Use of polymers of vinyl-aromatic compounds for preformed parts, e.g. for inserts [6, 2006.01] Use of polyvinylhalogenides for preformed parts, e.g. for inserts [6, 2006.01]	667/00 669/00 671/00 673/00 675/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having oxygen as the only hetero atom in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polyureas or polyurethanes for preformed parts, e.g. for inserts [6, 2006.01] Use of polyamides, e.g. polyesteramides, for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having nitrogen, with or without oxygen or carbon only, in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polymers having sulfur, with or without
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607/00 609/00 609/06 619/00 621/00 623/00 627/00 627/06 627/12	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] SB polymers, i.e. butadiene-styrene polymers [6, 2006.01] Use of rubber not provided for in a single one of main groups B29K 607/00 or B29K 609/00, for preformed parts, e.g. for inserts [6, 2006.01] Use of unspecified rubbers for preformed parts, e.g. for inserts [6, 2006.01] Use of polyalkenes for preformed parts, e.g. for inserts [6, 2006.01] Use of polywinylhalogenides for preformed parts, e.g. for inserts [6, 2006.01] Use of polyvinylhalogenides for preformed parts, e.g. for inserts [6, 2006.01] Output [6, 2006.01] Output [6, 2006.01]	667/00 669/00 671/00 673/00 675/00 679/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having oxygen as the only hetero atom in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polyureas or polyurethanes for preformed parts, e.g. for inserts [6, 2006.01] Use of polyamides, e.g. polyesteramides, for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having nitrogen, with or without oxygen or carbon only, in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polymers having sulfur, with or without
607/00 609/00 609/06 619/00 621/00 623/00 625/00 627/06	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] • SB polymers, i.e. butadiene-styrene polymers [6, 2006.01] Use of rubber not provided for in a single one of main groups B29K 607/00 or B29K 609/00, for preformed parts, e.g. for inserts [6, 2006.01] Use of unspecified rubbers for preformed parts, e.g. for inserts [6, 2006.01] Use of polyalkenes for preformed parts, e.g. for inserts [6, 2006.01] Use of polywinylchologenides for preformed parts, e.g. for inserts [6, 2006.01] Use of polyvinylhalogenides for preformed parts, e.g. for inserts [6, 2006.01] • PVC, i.e. polyvinylchloride [6, 2006.01]	667/00 669/00 671/00 673/00 675/00 679/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having oxygen as the only hetero atom in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polyureas or polyurethanes for preformed parts, e.g. for inserts [6, 2006.01] Use of polyamides, e.g. polyesteramides, for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having nitrogen, with or without oxygen or carbon only, in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polymers having sulfur, with or without nitrogen, oxygen or carbon only, in the main chain, for preformed parts, e.g. for inserts [6, 2006.01]
607/00 609/00 609/06 619/00 621/00 623/00 627/00 627/06 627/12 627/18	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] SB polymers, i.e. butadiene-styrene polymers [6, 2006.01] Use of rubber not provided for in a single one of main groups B29K 607/00 or B29K 609/00, for preformed parts, e.g. for inserts [6, 2006.01] Use of unspecified rubbers for preformed parts, e.g. for inserts [6, 2006.01] Use of polyalkenes for preformed parts, e.g. for inserts [6, 2006.01] Use of polywinylhalogenides for preformed parts, e.g. for inserts [6, 2006.01] Use of polyvinylhalogenides for preformed parts, e.g. for inserts [6, 2006.01] PVC, i.e. polyvinylchloride [6, 2006.01] ocontaining fluorine [6, 2006.01]	667/00 669/00 671/00 673/00 675/00 679/00 681/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having oxygen as the only hetero atom in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polyureas or polyurethanes for preformed parts, e.g. for inserts [6, 2006.01] Use of polyamides, e.g. polyesteramides, for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having nitrogen, with or without oxygen or carbon only, in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polymers having sulfur, with or without nitrogen, oxygen or carbon only, in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polymers having silicon, with or without sulfur, nitrogen, oxygen or carbon only, in the main
607/00 609/00 609/06 619/00 621/00 623/00 627/00 627/06 627/12	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] SB polymers, i.e. butadiene-styrene polymers [6, 2006.01] Use of rubber not provided for in a single one of main groups B29K 607/00 or B29K 609/00, for preformed parts, e.g. for inserts [6, 2006.01] Use of unspecified rubbers for preformed parts, e.g. for inserts [6, 2006.01] Use of polyalkenes for preformed parts, e.g. for inserts [6, 2006.01] Use of polywinylhalogenides for preformed parts, e.g. for inserts [6, 2006.01] Use of polyvinylhalogenides for preformed parts, e.g. for inserts [6, 2006.01] PVC, i.e. polyvinylchloride [6, 2006.01] ocontaining fluorine [6, 2006.01] PTFE, i.e. polytetrafluoroethene [6, 2006.01]	667/00 669/00 671/00 673/00 675/00 679/00 681/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having oxygen as the only hetero atom in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polyureas or polyurethanes for preformed parts, e.g. for inserts [6, 2006.01] Use of polyamides, e.g. polyesteramides, for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having nitrogen, with or without oxygen or carbon only, in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polymers having sulfur, with or without nitrogen, oxygen or carbon only, in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polymers having silicon, with or without sulfur, nitrogen, oxygen or carbon only, in the main chain, for preformed parts, e.g. for
607/00 609/00 609/06 619/00 621/00 623/00 627/00 627/06 627/12 627/18	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] • SB polymers, i.e. butadiene-styrene polymers [6, 2006.01] Use of rubber not provided for in a single one of main groups B29K 607/00 or B29K 609/00, for preformed parts, e.g. for inserts [6, 2006.01] Use of unspecified rubbers for preformed parts, e.g. for inserts [6, 2006.01] Use of polyalkenes for preformed parts, e.g. for inserts [6, 2006.01] Use of polymers of vinyl-aromatic compounds for preformed parts, e.g. for inserts [6, 2006.01] Use of polyvinylhalogenides for preformed parts, e.g. for inserts [6, 2006.01] • PVC, i.e. polyvinylchloride [6, 2006.01] • ocntaining fluorine [6, 2006.01] Use of polyvinylalcohols, polyvinylethers, polyvinylaldehydes, polyvinyletones or	667/00 669/00 671/00 673/00 675/00 679/00 681/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having oxygen as the only hetero atom in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polyureas or polyurethanes for preformed parts, e.g. for inserts [6, 2006.01] Use of polyamides, e.g. polyesteramides, for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having nitrogen, with or without oxygen or carbon only, in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polymers having sulfur, with or without nitrogen, oxygen or carbon only, in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polymers having silicon, with or without sulfur, nitrogen, oxygen or carbon only, in the main
607/00 609/00 609/06 619/00 621/00 623/00 627/00 627/06 627/12 627/18	derivatives, e.g. viscose, for preformed parts, e.g. for inserts [6, 2006.01] Use of natural rubber for preformed parts, e.g. for inserts [6, 2006.01] Use of rubber derived from conjugated dienes, for preformed parts, e.g. for inserts [6, 2006.01] SB polymers, i.e. butadiene-styrene polymers [6, 2006.01] Use of rubber not provided for in a single one of main groups B29K 607/00 or B29K 609/00, for preformed parts, e.g. for inserts [6, 2006.01] Use of unspecified rubbers for preformed parts, e.g. for inserts [6, 2006.01] Use of polyalkenes for preformed parts, e.g. for inserts [6, 2006.01] Use of polywinylhalogenides for preformed parts, e.g. for inserts [6, 2006.01] Use of polyvinylhalogenides for preformed parts, e.g. for inserts [6, 2006.01] PVC, i.e. polyvinylchloride [6, 2006.01] ocontaining fluorine [6, 2006.01] PTFE, i.e. polytetrafluoroethene [6, 2006.01]	667/00 669/00 671/00 673/00 675/00 679/00 681/00	inserts [6, 2006.01] Use of polyesters for preformed parts, e.g. for inserts [6, 2006.01] Use of polycarbonates for preformed parts, e.g. for inserts [6, 2006.01] Use of polyethers for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having oxygen as the only hetero atom in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polyureas or polyurethanes for preformed parts, e.g. for inserts [6, 2006.01] Use of polyamides, e.g. polyesteramides, for preformed parts, e.g. for inserts [6, 2006.01] Use of other polymers having nitrogen, with or without oxygen or carbon only, in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polymers having sulfur, with or without nitrogen, oxygen or carbon only, in the main chain, for preformed parts, e.g. for inserts [6, 2006.01] Use of polymers having silicon, with or without sulfur, nitrogen, oxygen or carbon only, in the main chain, for preformed parts, e.g. for

685/00	Use of polymers having elements other than silicon,		Note(s) [6]
	nitrogen, oxygen or carbon only, in the main chain, for preformed parts, e.g. for inserts [6, 2006.01]		Alloys or compounds of specified metals are indexed with the same code as the specified metals.
686/00	Use of specific polymers obtained by	705/02	• Aluminium [6, 2006.01]
0007 00	polycondensation or polyaddition, not provided for	705/04	• Lead [6, 2006.01]
	in a single one of main groups B29K 659/00-	705/06	• Tin [6, 2006.01]
	B29K 685/00, for preformed parts, e.g. for	705/08	 Transition metals [6, 2006.01]
	inserts [6, 2006.01]	705/10	• • Copper [6, 2006.01]
691/00	Her of waves for proformed parts of a for	705/12	• • Iron [6, 2006.01]
691/00	Use of waxes for preformed parts, e.g. for inserts [6, 2006.01]	705/14	Noble metals, e.g. silver, gold or
			platinum [6, 2006.01]
695/00	Use of bituminous materials for preformed parts, e.g. for inserts [6, 2006.01]	707/00	Use of elements other than metals for preformed parts, e.g. for inserts [6, 2006.01]
696/00	Use of specific macromolecular materials not	707/02	• Boron [6, 2006.01]
	provided for in a single one of main groups	707/04	• Carbon [6, 2006.01]
	B29K 601/00-B29K 695/00, for preformed parts, e.g.		
	for inserts [6, 2006.01]	709/00	Use of inorganic materials not provided for in groups
696/02	• Graft polymers [6, 2006.01]		B29K 703/00-B29K 707/00, for preformed parts, e.g. for inserts [6, 2006.01]
696/04	• Block polymers [6, 2006.01]	709/02	• Ceramics [6, 2006.01]
701/00	Use of unspecified macromolecular compounds for	709/04	 Carbides; Nitrides [6, 2006.01]
701/00	preformed parts, e.g. for inserts (use of unspecified	709/06	• Concrete [6, 2006.01]
	rubbers B29K 621/00) [6, 2006.01]	709/08	• Glass [6, 2006.01]
701/10	• Thermosetting resins [6, 2006.01]	709/10	• Mica [6, 2006.01]
701/12	• Thermoplastic materials [6, 2006.01]	709/12	• Asbestos [6, 2006.01]
703/00	Use of resin-bonded materials for preformed parts, e.g. for inserts [6, 2006.01]	711/00	Use of natural products or their composites, not provided for in groups B29K 601/00-B29K 709/00,
703/04	• Inorganic materials [6, 2006.01]		for preformed parts, e.g. for inserts [6, 2006.01]
703/06	Metal powders, metal carbides or the	711/02	• Cork [6, 2006.01]
500 /00	like [6, 2006.01]	711/04	 Linoleum [6, 2006.01]
703/08	• • Mineral aggregates, e.g. sand, clay or the	711/06	 Bone, horn or ivory [6, 2006.01]
	like [6, 2006.01]	711/08	• Leather [6, 2006.01]
705/00	Use of metals, their alloys or their compounds, for	711/10	• Natural fibres, e.g. wool or cotton [6, 2006.01]
	preformed parts, e.g. for inserts [6, 2006.01]	711/12	• Paper, e.g. cardboard [6, 2006.01]
		711/14	 Wood, e.g. woodboard or fibreboard [6, 2006.01]

B29L INDEXING SCHEME ASSOCIATED WITH SUBCLASS B29C, RELATING TO PARTICULAR ARTICLES [4]

Note(s) [4]

This subclass constitutes an indexing scheme associated with subclass B29C.

1/00	Articles provided with screw threads [4, 2006.01]	19/00	Buttons or semi-finished parts of buttons [4, 2006.01]
5/00	Elements of slide fasteners [4, 2006.01]	21/00	Hair combs or similar toothed or slotted articles [4, 2006.01]
7/00	Flat articles, e.g. films or sheets (B29L 24/00 takes precedence) [4, 2006.01]	22/00	Hollow articles (tubular articles B29L 23/00; pneumatic tyres B29L 30/00) [4, 2006.01]
9/00	Layered products [4, 2006.01]	22/02	• Inflatable articles (balls B29L 31/54) [5, 2006.01]
11/00	Optical elements, e.g. lenses, prisms [4, 2006.01]	23/00	Tubular articles (B29L 24/00 takes
12/00	Frames [4, 2006.01]	23/14	precedence) [4, 2006.01]Cigar or cigarette holders [4, 2006.01]
15/00	Gear wheels or similar articles with grooves or	23/18	• Pleated hoses [4, 2006.01]
	projections, e.g. control knobs [4, 2006.01]	23/20	 Flexible squeeze tubes, e.g. for cosmetics [4, 2006.01]
16/00	Articles with corrugations (B29L 23/18 takes precedence) [4, 2006.01]	23/24	• Endless tubes, e.g. inner tubes for pneumatic tyres [6, 2006.01]
17/00	Carriers of records containing fine grooves or impressions, e.g. disc records for needle playback,	24/00	Articles with hollow walls [4, 2006.01]
	cylinder records [4, 2006.01]	25/00	Frameless domes [4, 2006.01]

28/00	Nets or the like [4, 2006.01]	31/28	• Tools, e.g. cutlery [4, 2006.01]
29/00	Belts or bands [4, 2006.01]	31/30	 Vehicles, e.g. ships or aircraft, or body parts thereof [4, 2006.01]
30/00	Pneumatic or solid tyres or parts thereof (inner tubes B29L 23/24) [4, 2006.01]	31/32	 Wheels, pinions, pulleys, castors or rollers [4, 2006.01]
	D23L 23/24) [4, 2000.01]	31/34	• Electrical apparatus, e.g. sparking plugs or parts
31/00	Other particular articles [4, 2006.01]		thereof [4, 2006.01]
31/04	 Bearings [4, 2006.01] 	31/36	 Plugs, connectors, or parts thereof [4, 2006.01]
31/06	• Rods, e.g. connecting rods [4, 2006.01]	31/38	 Loudspeaker cones; Acoustic
31/08	Blades for rotors, stators, fans, turbines or the like,		diaphragms [4, 2006.01]
517 00	e.g. screw propellers [4, 2006.01]	31/40	 Test specimens [4, 2006.01]
31/10	Building elements, e.g. bricks, blocks, tiles, panels,	31/42	• Brushes [4, 2006.01]
01/10	posts, beams [4, 2006.01]	31/44	 Furniture or parts thereof [4, 2006.01]
31/12	• Chains [4, 2006.01]	31/46	 Knobs or handles [4, 2006.01]
31/14	• Filters, sieves or screens [4, 2006.01]	31/48	 Wearing apparel [4, 2006.01]
31/16	Frictional elements, e.g. brake or clutch	31/50	• • Footwear, e.g. shoes or parts thereof [4, 2006.01]
	linings [4, 2006.01]	31/52	 Sports equipment; Toys (B29L 31/54 takes
31/18	Heat-exchangers or parts thereof [4, 2006.01]		precedence) [4, 2006.01]
31/20	• Fuel-blocks, e.g. nuclear fuel elements [4, 2006.01]	31/54	• Balls [4, 2006.01]
31/22	• Hinges [4, 2006.01]	31/56	 Stoppers or lids for bottles, jars, or the
31/24	Pipe joints or couplings (B29L 31/26 takes)		like [4, 2006.01]
J1/27	precedence) [4, 2006.01]	31/58	 Upholstery or cushions, e.g. vehicle upholstery or
31/26	Sealing devices, e.g. packaging for pistons or pipe		interior padding [4, 2006.01]
J1/20	joints [4, 2006.01]	31/60	 Multitubular or multicompartmented articles, e.g.
	Jointo [4, 2000.01]		honeycomb [4, 2006.01]