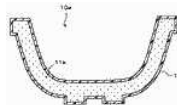
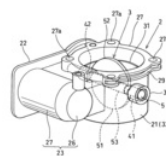
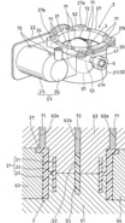
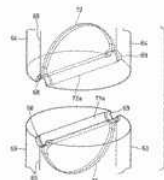
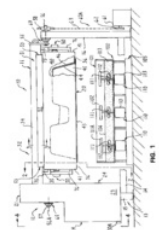
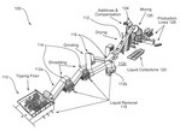
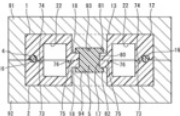
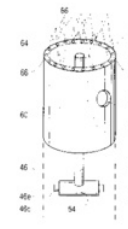
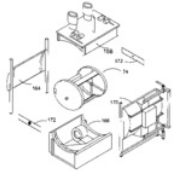


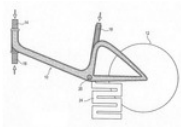
62 results for (recirculation and tubular and molded and plastic and chamber and combustion)/TI/AB/TX AND (B29C)/IPC - Collection: FAMPAT

#	  Title	Publication number	Publ. date	Applicant/Assignee			
1.	Biodegradable molding	EP1486532	2004-12-15	 NISSEI	100 %		
A bowl-shaped container (10a) which is as a biodegradable molded article adheres a coating film (12) mainly made of biodegradable plastic and having at least hydrophobicity to the surface of the main body (11a) of the container mainly made of starch. The main body (11a) is molded through steam expansion of a slurry or dough molding material containing high-amylose starch and water, or a slurry or dough molding material containing starch, polyvinyl alcohol and water. For these reasons, it is possible to accomplish sufficient strength and at least sufficient water resistance, to exert a very excellent biodegradability and further to provide a biodegradable molded article having excellent moisture absorption strength mainly made of starch even if the biodegradable molded article has a complicated shape. <IMAGE> 							
2.	Forming method of throttle apparatus for internal combustion engine	US20050097745	2005-05-12	 DENSO	80 %		
A molding dies have a first shaft holding portion and a second shaft holding portion. The first shaft holding portion supports an outer surface of a metal shaft which is exposed between an axial end surface of the throttle valve and a first collar molded in the throttle body. The second shaft holding portion supports an outer surface of the metal shaft which is exposed between the other axial end surface and a second collar molded in the throttle body. The first and the second collar have a first and second shaft holes into which the metal shaft is inserted. The first and the second holding portions restrict a flowing of melted resin into the first and the second shaft holes. 							
3.	Forming method of throttle apparatus for internal combustion engine	US20050097744	2005-05-12	 DENSO	79 %		
A throttle valve and the throttle body are formed substantially simultaneously in the same dies. When a movable die moves away from a fixed die, a body ejector pin, a valve ejector pin, and a motor housing ejector pin simultaneously push a bore wall of the throttle body, a motor housing, and peripheral edge of the throttle the valve in a radial direction respectively. A deformation of the throttle valve can be avoided because a stress concentration on the metal shaft of the throttle valve is reduced in opening the dies. 							
4.	Forming method of throttle apparatus for internal combustion engine	US20050097743	2005-05-12	 DENSO	78 %		
A throttle valve and the throttle body are formed substantially simultaneously in the same dies. The melted resin is injected in to a cavity through a pair of valve gates. The gas evaporated from a melted resin and remaining air in the cavity are expelled from the cavity into the atmosphere through a gas purge passage. A first and a second split lines of a first and second insert dies function as the gas purge passage. A shortshot and a corrosion generated by the gas can be avoided. 							
5.	Use of moulding materials	EP2481775	2012-08-01	 LANXESS DEUTSCHLAND	78 %		
Use of molding composition comprising (in parts by wt.): (a) at least one polyamide and/or copolyamide (40-98.98); (b) at least one copolymer (1-10); (c) at least one di- or polyfunctional branching or chain-extending active additive (0.01-10); and (d) at least one impact modifier (0.01-40) for improving the durability of products, moldings, components, molding parts or semifinished products for motor vehicles, preferably in internal combustion engines, with respect to resistance against crankcase gases and/or crankcase components, is claimed. Use of molding composition comprising (in parts by wt.): (a) at least one polyamide and/or copolyamide (40-98.98); (b) at least one copolymer (1-10) comprising at least one olefin, preferably alpha -olefin and at least a methacrylic or acrylic acid ester of an aliphatic alcohol, where the melt flow index of the copolymer is greater than 10 g/10 minutes and the melt flow index is determined or measured at 190[deg] C and at a load of 2.16 kg; (c) at least one di- or polyfunctional branching or chain-extending active additive (0.01-10) comprising at least two and not > 15 branching or chain extension acting functional groups per molecule; and (d) at least one impact modifier (0.01-40) different from the components (b) and (c) for improving the durability of products, moldings, components, molding parts or semifinished products for motor vehicles, preferably in internal combustion engines, with respect to resistance against crankcase gases and/or crankcase components, comprising producing products, moldings, molded parts or components by means of extrusion, profile extrusion, blow molding, preferably standard extrusion blow molding, three dimensional extrusion blow molding, suction blow molding and sequential co-extrusion, or injection molding of molding composition, and mounting the produced products, moldings, moldings and components as air-carrying components or components for air-conducting components in motor vehicles, preferably in internal combustion engines, preferably as clean air ducts or charge air tubes, preferably charge air flow or as charge-air reflux, intake pipe, crankcase ventilation or gearbox ventilation. (From EP2481776 A1)  (I)  (II)  (III)  (IV)							

6.	Molding apparatus and process employing heated fluid	WO00/54950	2000-09-21	KONAL ENGINEERING & EQUIPMENT KONAL ENGINEERING & EQUIPMEN	78 %	
A molding apparatus and method for forming a thermoplastic shell or skin product. The molding apparatus includes a hollow mold housing provided with a mold tool thereon, which together define a fluid chamber within the mold housing. A quantity of heated liquid is supplied at a predetermined or operating temperature to the chamber of the mold housing from a liquid supply via an elongate feed pipe until a rear surface of the mold tool is covered. The mold housing is then oscillated to uniformly distribute the heated liquid within the chamber and to effect uniform heating of the mold tool. Heating devices are located within the chamber of the mold housing to add heat to the liquid within the housing chamber to maintain a desired liquid temperature.						
7.	A composite material and method of preparing the same from substantially unsorted waste	EP2387475	2011-11-23	UBQ MAT NOVA ARENA NOVARENA TECHNOLOGIES TYPE NON QUEUE METEORIEOL TIDY U B Q MAT 2 more...	78 %	
A composite material having thermoplastic properties and comprising organic matter and optionally one or both of inorganic matter and plastic with unique characteristics is provided. Such a composite material may be prepared from waste such as domestic waste. For preparation of the composite material, waste is dried, optionally particulated. The dried and optionally particulated waste material is then heated, while mixing under shear forces. The composite material is processed to obtain useful articles.						
8.	Method for producing hollow body of flow measuring device, involves molding pair of half hollow bodies, where pair of half hollow bodies have connecting sections and hollow part molding sections containing primary molding material	DE102010061348	2011-07-07	DENSO	78 %	
The method involves molding a pair of half hollow bodies, where the pair of half hollow bodies has connecting sections and hollow part molding sections containing a primary molding material. The connecting sections of the pair of half hollow bodies have external partitions and central partitions. A molding tool is provided for the secondary formation. The pair of half hollow bodies is held in the molding tool. An independent claim is also included for a flow measuring device with a flow rate sensor.						
9.	Method and apparatus, with redundancies, for treating substrate plastic parts to accept paint without using adhesion promoters	EP1387756	2004-02-11	FTS GLOBAL IP HOLDINGS FRSS AKAFSTSS USA MICHIGAN 4 8 5 0 7 FLINT LINDEN CREEK PARKWAY 4 3 7 0 FTS SYSTEM FTS SYSTEMS 3 more...	78 %	
A method and device of treating an irregularly shaped article to prepare the article for painting is provided. The device includes a burner which can produce an adjustable flame tongue which can fit into crevices, openings and other irregular topographical features of an item to be painted or otherwise coated. The burner device further provides means to apply a grafting chemical on a freshly oxidized surface. Further, the invention provides means to colorize treated objects so that they may be recognized as having been treated. In another embodiment, the grafting chemicals may be enhanced with electrolytic solutions such that electrostatic methods of painting may be subsequently employed on the item. In an alternate embodiment, the burner is adapted to spray a powder inside of a generally enclosed flame, and is used in conjunction with chop guns to manufacture glass or carbon fiber preforms. In a preferred embodiment all of the main systems of the present invention are provided with redundancies that allow the continuous operation of the device. Further, the device provides means to run and modify the process either locally or by remote communication means.						
10.	Bi-axial rotational molding oven	US20020187213	2002-12-12	DURRANT RICHARD A	77 %	
A rotational molding oven for forming an object from a mold containing resin therein. The oven includes a cavity receiving the mold therein and a combustion chamber for providing heat inside of the cavity. A spool is rotatively positioned within the cavity, the sides of which spool substantially form the sides of the cavity, and a drive tube engages the mold and extends between first and second flanged disks of the spool. A first motor is positioned outside the cavity and rotates the spool and a second motor is positioned outside the cavity and rotates the mold within the spool. Heat in the cavity melts the resin within the mold and rotating the spool and mold by the first and second motors causes the melted resin to be evenly distributed throughout the mold. The drive tube may be selectively positioned at a peripheral edge or at a center of the spool.						

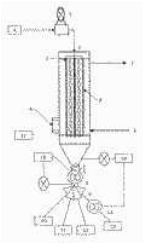
11.	Method for producing a plastic frame for a two-wheeled vehicle	EP3313720	2018-05-02	PLASTIC INNOVATION	77 %
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The invention relates to a method for producing a **plastic** frame for a two-wheeled vehicle by means of **plastic** injection molding, said **plastic** frame having at least one cavity in the interior, said method comprising a series of steps, wherein, after a preferably thermoplastic **plastic** melt has been injected into a closed injection-molding tool, a fluid is injected in order to displace the **plastic** core out of the component cavity.



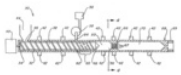
12.	Method and apparatus for producing formed article	EP1829912	2007-09-05	ASAHI KASEI CHEMICALS ASAHI CHEMICAL ASAHIKASEI CHEMICALS	77 %
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A method for producing a **molded** product consisting of a resin polymerized by a melt polycondensation reaction, comprising continuous feeding of a prepolymer in molten state from a prepolymer feeding port to a polymerization reactor, discharging from holes of a porous plate, followed by polymerization while dropping along a supporting substrate under reduced pressure, and molding by transferring to at least one molding machine in molten state without solidification, wherein transfer pressure to said molding machine is controlled so as to maintain at an arbitrary pressure from 0.1 to 100 MPa (absolute pressure).



13.	Method and apparatus for polymer foam extrusion, in particular microcellular foam	EP0923443	1999-06-23	TREXEL TOREKUSERU	76 %
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Continuous polymeric extrusion nucleation systems and methods useful for making polymeric microcellular foamed materials, including crystalline and semi-crystalline polymeric microcellular materials, are provided. Pressure drop rate is an important feature in some embodiments, and the invention provides systems for controlling these and other parameters. One aspect involves a multiple-pathway nucleator that is separated from a shaping die by a residence **chamber**. Another aspect involves a die for making advantageously thick articles, including a multiple-pathway nucleation section. Microcellular material can be continuously extruded onto wire, resulting in a very thin, essentially closed-cell microcellular insulating coating secured to a wire. Other very thin microcellular products can be fabricated as well.



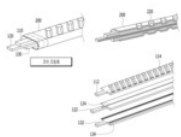
14.	Method of using a carrier sheet in a continuous high internal phase emulsion foam forming process	EP2373470	2011-10-12	PROCTER & GAMBLE	76 %
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A method for continuous High Internal Phase Emulsion (HIPE) foam production. A HIPE is produced then extruded onto a carrier sheet positioned on a belt surface.



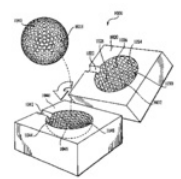
15.	Core assembly for molding hollow structure, and method for molding hollow structure using same	KR20180047253	2018-05-10	MH TECHNOLOGIES	76 %
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The present invention relates to a core assembly for molding a hollow structure, and a method for molding the hollow structure using the same. To this end, the core assembly comprises: an upper core having a concave shape corresponding to a shape formed on an upper surface of the hollow structure; a middle core disposed at a lower portion of the upper core, and having a rail formed at a lower surface, an upper surface, or both along a longitudinal direction; and a lower core disposed at the bottom of the middle core, and having the rail formed at the upper surface along the longitudinal direction. According to the present invention, it is possible to stably and easily form functional grooves and engraved patterns of various shapes on outer surfaces of pipes, housings, and exhaust gas **recirculation** (EGR) coolers for vehicles at low cost. COPYRIGHT KIPO 2018



16.	A process and apparatus for producing a golf ball with deep dimples	WO03/068331	2003-08-21	TRAVIS MATHEW CALLAWAY GOLF SPALDING SPORTS WORLDWIDE	76 %
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An apparatus for making a golf ball (10) with deep dimples (18) are disclosed. The golf ball (10) comprises a core and a cover layer, wherein the cover layer provides deep dimples (18) that extend through the cover layer and/or into a layer or component underneath.

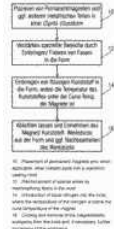


17. [Method for producing a workpiece, and workpiece](#) WO2008/064796 2008-06-05

EFFICIENT ENERGY

 76 %

The invention relates to a method for the fast and cost-effective production of workpieces with magnets, wherein permanent magnets are placed in a casting mold. Next, reinforcement material is introduced to reinforce one or multiple selected areas. Following this step, a liquid casting material is introduced into the mold, wherein the temperature of the liquid casting material is below the Curie temperature of the permanent magnet. Following the cooling of the casting material, the workpiece, with the permanent magnet and the hardened casting material, is removed from the mold. Particularly by the use of **plastic** and **plastic** injection molding technology and by the use of reinforcement fibers which are likewise placed in the mold before injection, the method achieves the cost-effective production of a workpiece, said workpiece comprising a radial wheel, a shaft, a motor/generator section, and a bearing and a counter bearing.



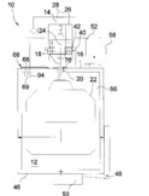
The flowchart illustrates the process for producing a workpiece with magnets. It begins with a step for placing permanent magnets in a casting mold. This is followed by introducing reinforcement material to reinforce selected areas. Then, a liquid casting material is introduced into the mold, with its temperature being below the Curie temperature of the permanent magnet. After cooling, the workpiece is removed from the mold. The final step involves the use of plastic and plastic injection molding technology, along with reinforcement fibers, to achieve cost-effective production of a workpiece that includes a radial wheel, a shaft, a motor/generator section, and a bearing and a counter bearing.

18. [Rotational molding oven](#) WO01/83183 2001-11-08

CELL MOLD

 76 %

A rotational molding oven for forming an object from a mold. The oven includes a cavity for retaining the mold, a burner for heating the cavity and melting the resin and a device for rocking the mold between - 45 DEG and 45 DEG from a horizontal plane. The rocking device is outside, extending into the cavity, maintaining the mold in the center of the cavity. The rocking device facilitates distribution of resin within the mold and improves thermal flow of heat within the cavity thereby increasing thermal efficiency and minimizing the size of the cavity. The rocking device includes a first track outside the cavity, a carriage assembly, a drive assembly connected to the carriage assembly and a guide assembly connected between the first track and carriage assembly for translating up and down the first track, causing the carriage assembly to move therewith and the mold to rock about the central axis of the cavity. The carriage assembly is positioned below the guide assembly at all points during translational movement. The drive assembly includes a spindle bearing connected to the carriage assembly and a spindle arm extending from the spindle bearing and through a side of the cavity for releasably connecting to the mold for rotating the mold through multiple complete 360 DEG rotations in either a clockwise or counterclockwise direction. A cooling system consisting of exhaust fan, air intake damper and water spray is positioned in the cavity for cooling the mold containing the melted resin.



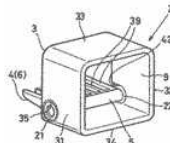
The diagram shows a cross-sectional view of a rotational molding oven. It features a central cavity where a mold is placed. A burner is positioned to heat the cavity and melt the resin. A rocking device, consisting of a first track, a carriage assembly, and a drive assembly, is used to move the mold between -45 degrees and 45 degrees from a horizontal plane. A cooling system, including an exhaust fan, air intake damper, and water spray, is located within the cavity to cool the mold containing the melted resin.

19. [Method for manufacturing valve unit](#) US20070138693 2007-06-21

DENSO

 76 %

A method of manufacturing a valve unit is disclosed that includes providing a plurality of injection molding dies that define a cavity corresponding in shape to the valve unit. The valve unit includes a housing and a valve, and the housing defines a fluid flow path with an axis having an upstream direction and a downstream direction corresponding to a predetermined direction of fluid flow in the fluid flow path. The valve is cantilevered and includes a valve body having a coupled end rotationally coupled to the housing and a free end, and the valve body rotates about the coupled end to thereby change flow through the fluid flow path. The method also includes simultaneously molding the housing and the valve within the cavity such that the valve body is formed with the free end extending away from the downstream direction of the axis of the fluid flow path.



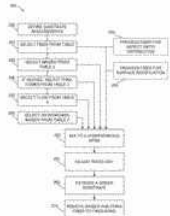
The diagram illustrates a valve unit. It shows a housing that defines a fluid flow path with an axis having an upstream and downstream direction. A valve is cantilevered within the housing, with a valve body that has a coupled end rotationally coupled to the housing and a free end. The valve body can rotate about the coupled end to change the flow through the fluid flow path. The method also includes simultaneously molding the housing and the valve within a cavity.

20. [System for extruding a porous substrate](#) EP1951637 2008-08-06

GEO2 TECHNOLOGIES
2 JIIO TECHNOLOGIES
GEO2 TECHNOLOGIES
GEO2 TECHNOLOGY

 76 %

An extrudable mixture is provided for producing a highly porous substrate wherein fibers, such as organic, inorganic, glass, ceramic or metal fibers, are mixed into a mass that when extruded and cured forms a highly porous substrate. Depending on the particular mixture the present invention enables substrate porosities of about 60% to 90%. The extrudable mixture may use a wide variety of fibers and additives and is adaptable to a wide variety of operating environments. Fibers, which have an aspect ratio greater than 1, are mixed with binders, pore-formers, extrusion aids and fluid to form a homogeneous mass which is extruded into a green substrate. The more volatile material is removed from the green substrate allowing the fibers to interconnect. As curing continues, fiber to fiber bonds form to produce a structure having a substantially open pore network. The resulting porous substrate forms a filter, catalyst host or catalytic converter.



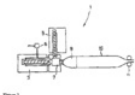
The flowchart describes the process for producing a highly porous substrate. It starts with providing an extrudable mixture containing fibers (organic, inorganic, glass, ceramic, or metal) mixed into a mass. This mixture is then extruded and cured to form a highly porous substrate. The process involves removing more volatile material from the green substrate to allow fibers to interconnect, and as curing continues, fiber-to-fiber bonds form to create a structure with a substantially open pore network. The final product is a porous substrate that can serve as a filter, catalyst host, or catalytic converter.

21. [Polyolefin resin foamed sheet and production method thereof](#) US20020098339 2002-07-25

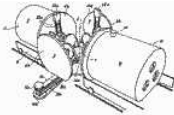
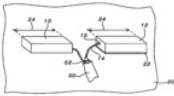
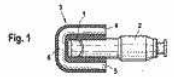
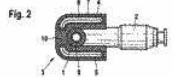
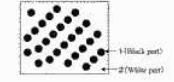
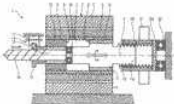
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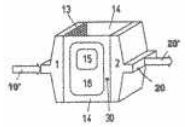
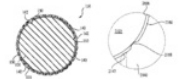
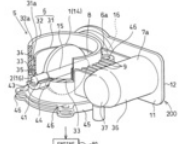
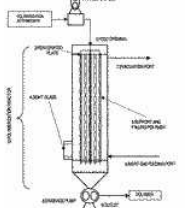
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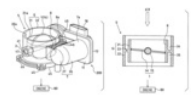
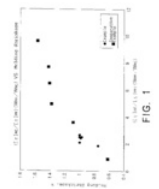
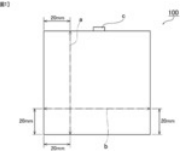
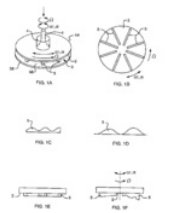
A sheet excellent in surface smoothness in which bubble break in a foamed layer is effectively prevented, and a method of producing this sheet stably are provided. There are provided a polyolefin resin foamed sheet comprising a polyolefin foamed layer, and a polyolefin resin non-foamed layer containing 10% by weight or more of a recycled polyolefin subjected to at least two cycles of a process comprising melting and solidifying polyolefin selected from the group consisting of polyolefin having long chain branched and polyolefin having a weight-average molecular weight of 1x105 or more, and a method of producing a polyolefin resin foamed sheet comprising a polyolefin resin foamed layer and a polyolefin resin non-foamed layer wherein a polyolefin layer 1 containing a foaming agent and a polyolefin layer 2 containing 10% by weight or more of a recycled polyolefin subjected to at least two cycles of a process comprising melting and solidifying polyolefin selected from the group consisting of polyolefin having long chain branch and polyolefin having a weight-average molecular weight of 1 x105 or more are co-extruded, and the polyolefin resin layer 1 is foamed.



The diagram shows a cross-section of a polyolefin resin foamed sheet. It consists of a polyolefin foamed layer and a polyolefin resin non-foamed layer. The non-foamed layer contains at least 10% by weight of a recycled polyolefin that has been subjected to at least two cycles of a process involving melting and solidifying. The method of production involves co-extruding a polyolefin layer 1 containing a foaming agent and a polyolefin layer 2 containing at least 10% by weight of a recycled polyolefin, followed by foaming the polyolefin resin layer 1.

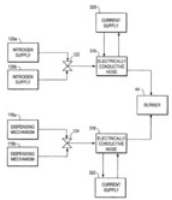
22.	Equipment for moulding a plastic by rotation	FR2659047	1991-09-06	1 DAN	76 %	
Rotomoulding equipment comprising a station (8) including an oven (11) for heating the mould, which can rotate about a first axis, and a turntable (plate) (16b) for receiving the mould, mounted so as to rotate on a support (5b) about a second axis, the said support itself being able to rotate about the first axis, means for rotationally driving the oven and the support about the first axis, and the receiving turntable about the second axis. Means are provided for moving the oven with respect to the support, from an adjacent position, in which the oven (11) and the support (5b) together form a heating chamber (17), closed up over the mould, and in which position the oven and the support are coupled so as to rotate about the axis of translation, to a moved-away position in which the oven (11) and the support (5b) are decoupled and in which the mould is disengaged from the oven (11). <IMAGE>						
23.	Installation of cured in place liners with air and flow-through steam to cure	EP1819959	2007-08-22	1 INA ACQUISITION 2 INSITUTFORM ACQUISITION 3 AJEHNEHJ EHKVIZISHN KORP 4 INA AQISITION 5 2 more...	76 %	
A process for lining an existing pipeline or conduit with a flexible resin impregnated cured in place liner by pulling in the liner and inflating a resin impregnated inflation bladder with air and curing the liner with flow-through steam without loss of pressure is provided. The liner includes a resin absorbent material in tubular form with an impermeable membrane forming an outer layer. The inflation bladder also includes a resin absorbent material in tubular form with an impermeable membrane forming an outer layer and an exhaust assembly at the trailing end and is passed through a pressurized inversion apparatus into the collapsed liner. As the bladder reaches the distal end, the exhaust assembly exits the everting bladder and is coupled to an exhaust hose. Steam is then introduced the inversion apparatus to cure the resin and is exhausted through the exhaust tube. After cure, steam is replaced with air to cool the liner and the ends are cut to restore service through the host pipe.						
24.	Low cost antennas using conductive plastics or conductive composites	EP1427055	2004-06-09	1 INTEGRAL TECHNOLOGIES 2 INTEGRAL TECNOLOGIES 3 INTEGRAL TEHNOLOGIES 4 INTERGRAL TECHNOLOGIES 5 UNIFYING TECHNOLOGY	76 %	
Low cost antennas formed of a conductive loaded resin-based material. The conductive loaded resin-based material comprises conductor fibers or conductor particles in a resin or plastic host wherein the ratio of the weight of the conductor fibers or conductor particles to the weight of the resin or plastic host is between about 0.20 and 0.40. The conductive fibers can be stainless steel, nickel, copper, silver, or the like. The antenna elements can be formed using methods such as injection molding or extrusion. Virtually any antenna fabricated by conventional means such as wire, strip-line, printed circuit boards, or the like can be fabricated using the conductive loaded resin-based materials. The conductive loaded resin-based material used to form the antenna elements can be in the form of a thin flexible woven fabric which can readily cut to the desired shape. <IMAGE>						
25.	Connector for fluid conveying conduits	EP1394402	2004-03-03	1 ROBERT BOSCH	75 %	 
Method for producing a plug connector with at least one connector line for media pipes involves casting of a sleeve, transfer of this sleeve into another mold and casting of a plug connector body of another material. The method for producing a plug connector (40, 50) with at least one connector line (42, 43) for media pipes involves casting of a sleeve (50), transfer of this sleeve into another mold and casting of a plug connector body consisting of another material, with the zones (70) of the sleeve serving as a forming tool. An Independent claim is also included for a resultant plug connector.						
26.	Molding material, prepreg, fiber-reinforced composite material, fiber-reinforced composite material laminate, and process for production of fiber-reinforced molding base material	EP2664643	2013-11-20	1 TORAY INDUSTRIES	75 %	
Disclosed are: A molding material comprising: a composite comprising 1 to 50 wt% of (A) a bundle of continuous reinforcing fibers and 0.1 to 40 wt% of (B) a polyarylene sulfide prepolymer or (B') a polyarylene sulfide; and 10 to 98.9 wt% of (C) a thermoplastic resin adhered to the composite; wherein the composite further comprises (D) a zero-valent transition metal compound or (E) a low-valent iron compound in an amount of 0.001 to 20 mol% based on the amount of sulfur atoms contained in the component (B) or (B'); a prepreg; and a method of producing a fiber-reinforced molding base material. By using the molding material according to the present invention which exhibits excellent economical efficiency and productivity, a molded article having excellent mechanical characteristics can be easily produced.						
27.	Drive for a machine for plastics plastification and plastics injection	WO2007/093470	2007-08-23	1 SIEMENS	75 %	
The drive apparatus (1) is intended for a machine for plastification and injection of plastic . It encompasses a main drive (2) with a hollow shaft (6) rotatable around an axis (4) of rotation, where the main drive can be driven in a first and a second direction of rotation. An axially bisected inner receptacle region (7) with a first subregion (8) and a second subregion (9) has been formed from the hollow shaft (6). Means (10,14) of transmission of rotation arranged at least to some extent in the first subregion (8) have been provided for transmission of a rotational movement of the hollow shaft (6) exclusively in a first direction of rotation to an extruder screw (16) rotatable around the axis (4) of rotation. Means (12,19,20) of conversion raised at least to some extent in the second subregion (9) have been provided for transmission of a rotary movement of the hollow shaft (6) in the first and a second direction of rotation to a support shaft (11) which is rotatable around the axis (4) of rotation and which is displaceable axially in both directions, and for conversion of the transmitted rotary movement to an axial movement of the support shaft (11).						

28.	Production method for fluorocarbon resin composite body, and molded body production method	JP2017019263	2017-01-26	AGC ASAHI GLASS SHANGHAI JIAO TONG UNIVERSITY	75 %	PROBLEM TO BE SOLVED: To provide a production method for a fluorocarbon resin composite body capable of obtaining a molded body excellent in tensile property. SOLUTION: There is provided a production method for a fluorocarbon resin composite body including a molten moldable fluorocarbon resin (A) and a crosslinked fluororubber (B[*]). The method includes a process of kneading the fluorocarbon resin (A), a non-crosslinked fluororubber (B) and a crosslinking agent (C) using a twin screw extruder having two screws. The temperature in the kneading process using the twin screw extruder is the melting point of the resin (A) or higher, and a shear rate when kneading by the twin screw extruder is 240 to 1,600 sec⁻¹. An average discharge speed from the twin screw extruder is 10 kg/hour or more. The ratio (L/D) of length L to outer diameter D in two screws is 20 or more, and the revolutions of the screws are each 50 to 700 rpm. SELECTED DRAWING: None COPYRIGHT: (C)2017,JPO&INPIT
29.	Device for producing melt-spun filaments	WO2007/054375	2007-05-18	UHDE INVENTA FISCHER	75 %	The invention relates to a device for producing melt-spun filaments, comprising a spinning head having at least one spinning nozzle for spinning the filaments and a cooling chamber provided downstream of the spinning head. Said device is connected to a blow chamber having a gas supply for laterally blowing gas onto the filaments. A suction chamber having a gas discharge unit for discharging the supplied gas that flows through the filaments, optionally together with vapors emitted by the filaments or reaction products, is arranged opposite the blowing chamber. 
30.	Molding processes and equipment for forming golf balls with deep dimples	WO03/068477	2003-08-21	CALLAWAY GOLF SPALDING SPORTS WORLDWIDE	75 %	Molding equipment and related techniques for forming a golf ball (10) are disclosed. The golf ball comprises a core (20) and a cover layer (30), wherein the cover layer provides one or more deep dimples (42) that extend through the cover layer to and/or into a layer or component underneath are disclosed. The molding equipment provides one or more selectively positionable knockout pins along the surface of the molding chamber. These pins are specially tailored such that after their retraction subsequent to molding, the resulting voids are deep dimples. The molding equipment and related processes are particularly useful when forming the various layers by reaction injection molding. 
31.	Throttle body having internally connected double pipe structure	US20050022787	2005-02-03	DENSO	75 %	A resinous throttle body has a bore wall part having a double pipe structure constructed with a bore inner pipe and a bore outer pipe that are connected with each other via an annular connecting part. The annular connecting part has axial board thickness set to be less than the minimum radial thickness of a portion of the bore inner pipe and a portion of the bore outer pipe that are located around the annular connecting part. Therefore, the annular connecting part can be formed to be in a thin-walled radially elongated plate shape. The annular connecting part has a radially cross-sectional length larger than its axial board thickness, so that rigidity and strength of the annular connecting part is decreased. Therefore, contraction of the bore outer pipe occurred in its molding process does not largely affect the bore inner pipe, so that a cylindrical-shaped inner periphery of the bore inner wall, which rotatably receives a disc-shaped throttle valve, can be restricted from being deformed. 
32.	Polyester resin, molded object thereof, and processes for producing these	EP1818352	2007-08-15	ASAHI KASEI CHEMICALS ASAHI CHEMICAL	74 %	A polyethylene terephthalate resin which is obtained by melt polymerization at a reduced pressure or in an inert gas atmosphere and has the following properties (A) to (F): (A) the intrinsic viscosity [η] is 0.4-2.5 dl/g; (B) the content of carboxy groups present at polymer ends is 30 meq/kg or lower; (C) the acetaldehyde content is 10 ppm or lower; (D) a hexafluoroisopropanol solution of the resin, when analyzed by the transmission method, has a hue which has an L value of 99 or larger and a b value of 0.4 or smaller; (E) the Mw/Mn is 1.8-2.3; and (F) the cyclic trimer content is 5 wt.% or lower. 
33.	Simultaneous forming method of throttle body and throttle valve	US20050022365	2005-02-03	DENSO	67 %	An electrically controlled throttle apparatus is constructed with a throttle body and a throttle valve that are simultaneously molded of a resinous material in the same molding dies. The throttle valve is rotatably assembled in a bore wall part of the throttle body while the throttle valve is rotated by a predetermined rotation angle theta between 45° and 135° with respect to a rotation angle 0° corresponding to its full close position. An outer circumferential periphery of the filler, which is molded to be the throttle valve in a cavity of the molding dies, is compressed by a predetermined pressure when the throttle valve and the throttle body are molded. Thus, dispersion of contraction of the throttle valve can be reduced in its molding process by adding the compression process. 

34.	Systems for ameliorating aqueous hydrocarbon spills	EP0973593	2000-01-26	ABTECH INDUSTRIES GILA RIVER RANCHES LIGHTAIR HOLDING	66 %	
A plurality of water- and oil-porous sacks (10) are partially filled with a number of generally tubular macroscopic bodies (300) of a polymer material that entraps oil, including preferably styrene-butadiene-styrene and ethylene propylene diene monomer. The bodies (300) can be generally cylindrical with an axial hole and a length greater than the diameter, so that when afloat in water, such as in sacks (10), the axial hole parallels to the water surface. The bodies (300) are preferably formed from granular material in a novel low-temperature extrusion process that links substantially unmelted SBS granules (380) in an EPDM matrix (390). When so formed, the bodies (300) have numerous fissures (370) extending from the surfaces, yet retain structural integrity without flaking or crumbling. Novel sack structure, sack deployment, sack retrieval, and material disposition systems, including in situ burning, are also disclosed.						
35.	Simultaneous forming method of throttle body and throttle valve	US20050022781	2005-02-03	DENSO	66 %	
An electrically controlled throttle apparatus is constructed with a throttle body and a throttle valve that are simultaneously formed in the same dies. The throttle valve is rotatably assembled in a bore wall part of the throttle body while the throttle valve is rotated by a predetermined rotation angle theta with respect to a rotation angle 0° corresponding to its full close position. Besides, a clearance is formed between the throttle body and the throttle valve around a portion in the vicinity of a throttle shaft of the throttle valve and a shaft hole of the throttle body. Furthermore, a joint is inserted between the throttle shaft and the shaft hole in the forming process thereof. Thus, the throttle body and the throttle valve can be separated by the molding dies and the joint, and the throttle body and the throttle valve can be prevented from welding to each other in a forming process thereof.						
36.	Propylene composition, process for preparing the same, polypropylene composition, and molded articles	EP0863183	1998-09-09	JNC CHISSO	65 %	
A polypropylene composition for the production of various molded articles which are excellent in moldability, mold shrinkage factor on molding, rigidity, flexibility, impact resistance, in particular low-temperature impact resistance, transparency, gloss, stress-whitening resistance, and the balance thereof, various molded articles having the above properties; a propylene composition which is suitable for a base resin for the polypropylene composition; and a process for the production thereof. The propylene composition comprises a propylene homopolymer and a propylene-ethylene copolymer, the intrinsic viscosity of the copolymer ($\bar{A}$ eta ÜRC) is in the range of 1.7 to 2.8 dl/g, the intrinsic viscosity ratio of the homopolymer to the copolymer ($\bar{A}$ eta ÜRC/$\bar{A}$ eta ÜPP) is in the range of 0.7 to 1.2 and a product $\bar{A}(WPP/WRC) \times (\bar{A}$ eta ÜRC/$\bar{A}$ eta ÜPP)Ü of the weight ratio (WPP/WRC) of the homopolymer to the copolymer and the intrinsic viscosity ratio thereof is in the range of 1.0 to 3.0.						
37.	Liquid-crystalline resin composition and insert-molded article	WO2017/110646	2017-06-29	POLYPLASTICS	65 %	
[Problem] To provide: a liquid-crystalline resin composition which is capable of giving insert-molded articles having excellent airtightness; and an insert-molded article which includes a resin member comprising the liquid-crystalline resin composition . [Solution] The above-mentioned problem is solved with a liquid-crystalline resin composition which comprises a liquid-crystalline resin, a thermoplastic resin having a glass transition temperature Tg lower than 230°C, and a platy filler having an average particle diameter of 15-100 µm and an aspect ratio of 10 or higher, wherein the content of the liquid-crystalline resin is 40-65 mass% of the whole resin composition, the content of the thermoplastic resin is 12-35 mass% of the whole resin composition, and the content of the platy filler is 10-35 mass% of the whole resin composition.						
38.	Distributed processing systems incorporating a plurality of cells which process information in response to single events	EP1336137	2003-08-20	STRATEK PLASTICS CG & G SOFTWARE PLUS ESYSTEMS IBAR JEAN PIERRE IBAR JEAN-PIERRE 3 more...	64 %	
A distributed processing system (10) includes a plurality of cells (12, 14, 16, 18, 20) where each cell processes information in response to a type of event, and cells communicate with each other according to an (asynchronous) event-reaction protocol. According to one embodiment, each cell is responsive to a single type of event and includes a plurality of scripts (12a, 14a, 16a, 18a, 20a) which are executed upon the occurrence of an event of the appropriate type. At least some scripts include directions to send information to one or more scripts in another cell. According to another embodiment, some cells communicate with other cells according to a (synchronous) streaming protocol and other cells communicate according to an (asynchronous) event-reaction protocol. The cells communicate protocol utilized by the cells enables the use of virtually any networking medium. Thus, cells may reside in the same chip or may be separated from each other by thousands of miles.						

39. Method and apparatus with redundancies,WO2005/035215 2005-04-21 64 %

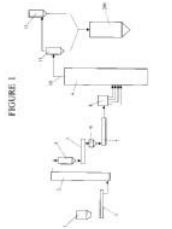
A method and device of treating an irregularly shaped article to prepare the article for painting is provided. The device includes a burner which can produce an adjustable flame tongue which can fit into crevices, openings and other irregular topographical features of an item to be painted or otherwise coated. The burner device further provides means to apply a grafting chemical on a freshly oxidized surface. Further, the invention provides means to colorize treated objects so that they may be recognized as having been treated. In another embodiment, the grafting chemicals may be enhanced with electrolytic solutions such that electrostatic methods of painting may be subsequently employed on the item. In an alternate embodiment, the burner is adapted to spray a powder inside of a generally enclosed flame, and is used in conjunction with chop guns to manufacture glass or carbon fiber preforms. In a preferred embodiment all of the main systems of the present invention are provided with redundancies that allow the continuous operation of the device. Further, the device provides means to run and modify the process either locally or by remote communication means.



40. Strengthened, light weight wallboard and method and apparatus for making the same EP1130958 2001-09-12 64 %

ADVANCED BUILDING MATERIALS
ADVANCED CONSTRUCTION MATERIALS
INNOVATIVE TECHNOLOGIES ENTERPRISES
JOSEPH S LUONGO

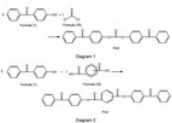
A novel wallboard composition is disclosed comprising a unique combination of synthetic binders selected for their ability to establish a strengthened permanent bond in the final dry state in combination with an expanded mineral such as Perlite which largely reduces the amount of gypsum over current gypsum wallboard formulations, thus reducing the weight while maintaining the strength of the wallboard structure. In a preferred embodiment, the lightweight, strengthened wallboard of the present invention also comprises a covering veneer that is applied to the top ply of the face paper to provide increased strength, moisture resistance, and fire retardancy, and the back paper top ply is treated to provide increased flexural strength. Additionally, this invention relates to the unique manufacturing process to produce the wallboard composition of the present invention in order to create a lightweight, strengthened, moisture resistant, and fire retardant wallboard used to cover walls and ceilings in construction applications. Still further, this invention relates to the apparatus for manufacturing the wallboard composition of the present invention, including a method and apparatus for economically converting a standard gypsum wallboard manufacturing facility into a facility for manufacturing wallboard of the present invention.



41. Processes for enhancing flame retardance and chemical resistance of polymers EP2935399 2015-10-28 64 %

SABIC GLOBAL TECHNOLOGIES
SABIC INNOVATIVE PLASTICS

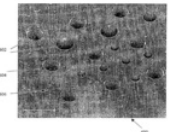
Processes for increasing the chemical resistance of a surface of a formed article are disclosed. The formed article is produced from a polymeric composition comprising a photoactive additive containing photoactive groups derived from a monofunctional benzophenone. The surface of the formed article is then exposed to ultraviolet light to cause crosslinking of the photoactive additive and produce a crosslinked surface. The crosslinking enhances the chemical resistance of the surface. Various means for controlling the depth of the crosslinking are also discussed.



42. Ceramic diesel exhaust filters EP1558362 2005-08-03 63 %

GE02 TECHNOLOGIES
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GE02 TECHNOLOGIES
HCT INVESTMENTS

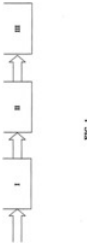
An improved, efficient, and regenerable exhaust emission filter and filter system are provided which incorporate the use of an inorganic, non-woven fiber filter element. The filter is able to capture exhaust pollutants and particulates through the interwoven nature of the filter element and due to area enhancements applied to the filter element including microscopic enhancements. The filter has an improved life and is able to combust a greater percentage of trapped particulates due to the high temperatures the filter element can withstand. The filter element if formed from a non-woven fiber block which is machined or shaped into a filter foundation. The filter element can have a multitude of coatings and catalysts applied and can be wrapped in insulation and a casing. The improved exhaust emission filter is particularly useful for diesel engine exhausts.

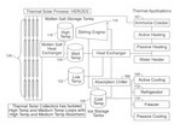
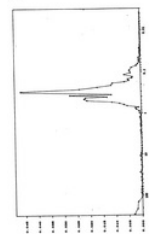
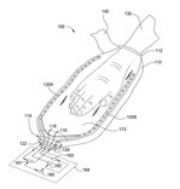


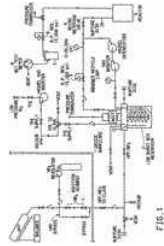
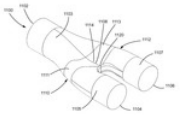
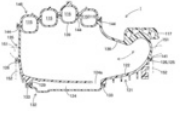
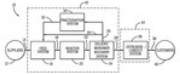
43. Method of treating solid waste EP0693979 1996-01-31 63 %

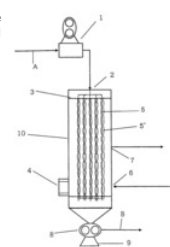
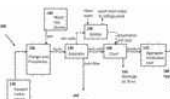
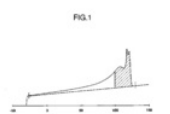
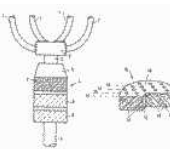
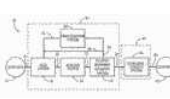
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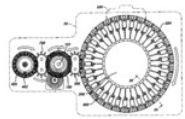
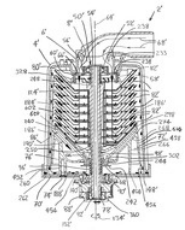
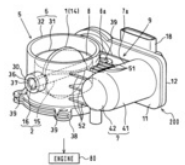
A three phase method of treating solid waste to preserve the resource value of the constituent materials. The first phase includes steps to separate ferrous metal from the waste stream, shred and grind the solid waste to generally uniform small particles, dry the waste material to remove essentially all free moisture and render the waste biologically inert, compact the dried waste material into uniform high density blocks, and encapsulate the compacted blocks; included in the second phase are steps to return the compacted blocks to uniform particles and separate the combined constituent materials on the basis of density, with primary processing utilizing a series of fluidized bed and cyclonic separator assemblies and with the secondary processing utilizing combination of vibratory conveyors, melt separation assemblies; and the third phase includes steps to further separate and refine selected recovered materials by chemical treatment.



44.	Method for manufacturing melamine/formaldehyde foams	EP2703074	2014-03-05	BASF BASF SCHWEIZ	63 %	Preparing melamine-formaldehyde foam, comprises (a) preparing an aqueous mixture comprising at least one melamine-formaldehyde precondensate, at least one hardener, a surfactant mixture which comprises a mixture of an anionic surfactant and a nonionic surfactant, at least one salt of an inorganic acid and/or an organic carboxylic acid, at least one blowing agent, at least one dye and/or an optical brightener, at least one further additive, and water, (b) heating and foaming the obtained mixture, (c) crosslinking and curing the formed foam, (d) drying the foam, and (e) annealing the dried foam. Preparing melamine-formaldehyde foam, comprises (a) preparing an aqueous mixture comprising (i) 100 pts. wt. at least one melamine-formaldehyde precondensate, (ii) 2-4 pts. wt. at least one hardener, (iii) 0.2-5 pts. wt. a surfactant mixture which comprises a mixture of 50-90 wt.% an anionic surfactant and 10-50 wt.% a nonionic surfactant, (iv) 0.1-5 pts. wt. at least one salt of an inorganic acid and/or an organic carboxylic acid, (v) 1-40 pts. wt. at least one blowing agent, (vi) 0-5 pts. wt. at least one dye and/or an optical brightener, (vii) 0-20 pts. wt. at least one further additive, and (viii) 25-60 pts. wt. water, (b) heating and foaming the obtained mixture using microwave radiation, (c) crosslinking and curing the formed foam using the hardener and microwave radiation, (d) drying the foam using microwave radiation, and (e) annealing the dried foam using hot air. An independent claim is also included for the melamine-formaldehyde foam obtainable by the above method. (From EP2703074 A1) $\text{CH}_2=\text{N}-(\text{CH}_2)_n-\text{N}=\text{CH}_2-(\text{CH}_2)_m-\text{N}=\text{CH}_2 \quad \text{where } n+m \geq 10, \quad 14$ 
45.	Compositions and articles for high-temperature wear use	EP2493967	2012-09-05	DU PONT DE NEMOURS	62 %	Disclosed herein are compositions and articles that are useful in environments exposed to heat, wear, and oxidizing agents, which are improved by means of specific kinds of carbon filaments. The compositions and articles comprise high-temperature polymer, high-temperature filler, and a mixture of carbon filament, wherein said mixture of carbon filament comprises multiwall axial carbon filament. 
46.	Hybrid trigeneration system based microgrid combined cooling, heat and power providing heating, cooling, electrical generation and energy storage using an integrated automation system for monitor, analysis and control	EP2920432	2015-09-23	FRIESTH KEVIN FRIESTH, KEVIN LEE	62 %	Provided is a consumer to industrial scale energy trigeneration process based microgrid combined cooling, heat and power. The present invention includes conversion, processing, extraction and/or storage systems for electrical, chemical and thermal energy. The invention provides a quintessential renewable energy ecosystem incorporating vital energy generation, thermal heating and cooling processes with integrated components installed to encompass a distributed renewable energy generation, energy storage and integrated automation system. The automation system of the invention provides the ability to view, monitor, analyze, control and interact with system components. 
47.	Process for producing catalyst bodies whose active mass is a mixed oxide	EP1912735	2008-04-23	BASF	62 %	In a process for producing catalyst mouldings whose active mass is a multi-element oxide, a finely divided precursor mixture is moulded, with the admixture of boron nitride, to produce the desired geometry, then thermally treated. 
48.	Apparatus for adjusting blood circulation	EP1972312	2008-09-24	AVACORE TECHNOLOGY AVACORE TECHNOLOGIES CAREFUSION DYNATHERM MEDICAL	62 %	A device for increasing blood flow by applying positive pressure to extremities of a mammal and/or controlling the temperature of the mammal. The device includes one or more collapsible and pliant body elements capable of expanding and flexibly applying pressurized compression forces to the extremity of the mammal by attaching one or more pressure-applying gas plenums as close to the extremity as possible. The flexible extremity device can be used independently or can be used in conjunction with thermal pads disposed to the one or more collapsible and pliant body elements. Alternatively, the one or more collapsible and pliant body elements can be manufactured into thermal pads. 

49.	Amorphous tetrafluoroethylene-hexafluoropropylene copolymers	EP0808335	1997-11-26	CHEMOURS DU PONT DE NEMOURS	62 %	
Disclosed herein are novel amorphous tetrafluoroethylene-hexafluoropropylene (TFE-HFP) dipolymers, and other copolymers containing TFE, HFP and a third monomer, many of which are more random than previous amorphous TFE-HFP copolymers, as well as a novel high productivity continuous process for making these polymers. The polymers are particularly useful in the form of coatings, films and encapsulants.						
50.	Slurry distributor, system, and method for using same	EP2911844	2015-09-02	UNITED STATES GYPSUM (USG) COMPANY UNITED STATES GYPSUM US DEPARTMENT OF HEALTH & HUMAN SERVICES	62 %	
A slurry distributor includes a feed conduit and a distribution conduit in fluid communication therewith. The feed conduit includes an entry segment with a feed inlet and a feed entry outlet in fluid communication therewith and extending along a first feed flow axis. The feed conduit includes a shaped duct having a bulb portion in fluid communication with the feed entry outlet. The feed conduit includes a transition segment in fluid communication with the bulb portion and extending along a second feed flow axis in non-parallel relationship with the first feed flow axis. The bulb portion has an area of expansion with a cross-sectional flow area that is greater than a cross-sectional flow area of an adjacent area upstream from the area of expansion. The shaped duct has a convex interior surface in confronting relationship with the feed entry outlet of the entry segment.						
51.	Resin intake manifold	US20040200450	2004-10-14	AISAN INDUSTRY	62 %	
A resin intake manifold is provided with two separated bodies manufactured by connecting protrusions of weld portions of the separated bodies to each other in accordance with a vibration welding, and a cover wall in which one of the weld portions is arranged in an inner side or an outer side of the protrusion with leaving space with the protrusion. The protrusions of the weld portions are respectively provided with parallel protrusion portions extending in parallel to a vibrating direction of the vibration welding, and a cover wall arranged at a position in an orthogonal direction to the vibrating direction in the parallel protrusion portions is provided with an extension portion extending to the separated body in the other side welded to the separated body provided with the cover wall, in such a manner as to prevent a burr generated at a time of welding the parallel protrusion portion from getting over the cover wall arranged at the position in the orthogonal to the vibrating direction in the parallel protrusion portion. A recess groove receiving the extension portion is arranged in a side of the other side separated body.						
52.	Compressible liquid diluent in polyolefin polymerization	EP2531534	2012-12-12	CHEVRON PHILLIPS CHEMICAL SHEVRON FILLIPS KEMIKAL KOMPANI	 61 %	
Embodiments of the present application provide a method for manufacturing a polyolefin and a system for implementing the method. The method comprises combining a catalyst with a diluent mixture containing a diluent and an olefin monomer in a polymerization reactor. The diluent may comprise propane, butane, or isobutane, or a combination thereof. The polymerization reactor is operated at a pressure above a critical pressure of the diluent, but below the critical temperature of the diluent.						
53.	Optical film with increased gain at non-normal angles of incidence	EP0883823	1998-12-16	3M ALLEN, RICHARD C. FREIER, DAVID G. KOTZ, ARTHUR L. NEVITT, TIMOTHY J. 1 more...	61 %	
An optical film is provided which exhibits increased gain at non-normal angles of incidence and which comprises a disperse phase of polymeric particles disposed within a continuous birefringent matrix. The film is oriented, typically by stretching, in one or more directions. The size and shape of the disperse phase particles, the volume fraction of the disperse phase, the film thickness, and the amount of orientation are chosen to attain a desired degree of diffuse reflection and total transmission of electromagnetic radiation of a desired wavelength in the resulting film.						

54.	Polytrimethylene terephthalate resin	EP1491569	2004-12-29	ASAHI CHEMICAL INDUSTRY ASAHI KASEI ASAHI KASEI CHEMICALS ASAKHI KASEI KABUSIKI KAJSJA	61 %	
55.	Methods of sequestering co2	US20100132556	2010-06-03	ARELAC CALERA	61 %	Methods of sequestering carbon dioxide (CO2) are provided. Aspects of the methods include precipitating a storage stable carbon dioxide sequestering product from an alkaline-earth-metal-containing water and then disposing of the product, e.g., by placing the product in a disposal location or using the product as a component of a manufactured composition. Also provided are systems for practicing methods of the invention. 
56.	Shrink films and method for making films having maximum heat shrink	EP0882087	1998-12-09	DOW CHEMICAL	61 %	This invention relates to a method for preparing orienting polyolefin wherein stretching or orientation conditions are defined to maximize the unrestrained shrink response of the film. The invention also relates to a shrink film structure as well as to a shrink film structure made by the novel method wherein in each case the shrink film comprises as the shrink control layer at least one homogeneously branched ethylene interpolmer having a polymer density of less than 0.91 g/cc. The method has commercial and developmental benefits and the film structures can be employed in such uses as industrial collating of paper goods and barrier meat packaging. 
57.	Gas exhaust system	EP1002187	2000-05-24	DEUTSCHE ZENTRUM FUER LUFT & RAUMFAHRT FORD GLOBAL TECHNOLOGIES	43 %	(EP1002188) The inventive gas exhaust system, intended for an internal combustion engine, has an exhaust manifold (12) in which the flue gas directed from the combustion chamber via connectors (10) is supplied to a feed pipe (14). In order to install a catalyst (30) as close as possible to the exhaust manifold (12) and use the high temperatures of the flue gas to achieve more rapidly the temperature required for the catalyst to function (30), the flue gas rate must be homogenized in time and geometry. To that end, the invention provides a smoothing chamber between the exhaust manifold (12) and the catalyst (30). As the diameter (D) of the smoothing chamber is larger than that (d) of the feed pipe, the cross section area available for the exhaust gas stream has such sudden changes at the smoothing chamber (18) entry (17) that said stream enters in free-expanding jet (18) the smoothing chamber (16), resulting in the gas rate being homogenized in time and geometry. It may also be considered to install a filter (38) corresponding to the mixture features (40, 42) to get a better homogenization of the gas supplied to the catalyst as well as a protection against the deposits contained in flue gas and combustion residue. 
58.	Method for deinventory of polymerization reactor	EP2331252	2011-06-15	CHEVRON PHILLIPS CHEMICAL	42 %	A flash chamber sized to receive the effluent discharged from a polyolefin reactor during normal operation of the reactor and during a reactor dump, advantageously eliminating a reactor dump tank or alternate flash tank from the equipment outlay of a polyolefin manufacturing process. The flash chamber is sized to hold at least the polyolefin solids discharged from the reactor. A condenser fluidically coupled to an overhead portion of the flash chamber is sized to condense the flow rate of vaporized hydrocarbon (e.g., diluent, monomer, etc.) discharged overhead from the flash chamber during normal operation and during the reactor dump. 
59.	Energy efficient polyolefin production process	EP1791875	2007-06-06	CHEVRON PHILLIPS CHEMICAL	42 %	A manufacturing process for producing polyolefin, having a feed system, a reactor system including a polymerization reactor, a diluent/monomer recovery system, a fractionation system, and an extrusion/loadout system having an extruder. The manufacturing process is configured to consume less than about 445 kilowatt-hours of electricity per metric ton of polyolefin produced. 

60.	Modified release dosage forms	EP1429737	2004-06-23	JOHNSON & JOHNSON CONSUMER JOHNSON & JOHNSON MACNEIL PPS MCNEIL OMJ IRELAND	42 %	
A dosage form comprises: (a) at least one active ingredient; (b) a core; and (c) a shell which surrounds the core, wherein the shell is substantially free of pores having a diameter of 0.5-5.0 microns, and the shell comprises a first shell portion and a second shell portion which are compositionally different and the dosage form provides a modified release profile of the active ingredient upon contacting of the dosage form with a liquid medium. In another embodiment, the dosage form comprises: (a) at least one active ingredient; (b) a core comprising first and second core portions; and (c) a shell which surrounds the core, wherein the shell comprises first and second shell portions such that the first shell portion resides upon the first core portion and the second shell portion resides upon the second core portion, and at least one of the first or second shell portions or first or second shell portions provides a modified release profile of the active ingredient upon contacting of the dosage form with a liquid medium.						
61.	Gas cleaning separator	EP2451583	2012-05-16	ALFA LAVAL	41 %	
The present invention relates to a separator and more specifically, but not exclusively, to a centrifugal separator for the cleaning of a gaseous fluid. A centrifugal separator (2') is provided as comprising a housing (4') defining an inner space, and a rotor assembly (78',84',86') for imparting a rotary motion onto a mixture of substances to be separated. The rotor assembly (78',84',86') is located in said inner space and is rotatable about an axis (64') relative to the housing (4'). The rotor assembly comprises an inlet (600) for receiving said mixture of substances, an outlet (604) from which said substances are ejected from the rotor assembly during use, and a flow path (602) for providing fluid communication between the inlet (600) and outlet (604), wherein the outlet (604) is positioned more radially outward from said axis (64') than the inlet (600).						
62.	Throttle control apparatus having plate-shaped inner connecting member	US20050022786	2005-02-03	DENSO	40 %	
A throttle body of an electrically controlled throttle apparatus is constructed with a bore wall part, a motor housing part receiving a heavy component such as a motor and a connecting member that connects the bore wall part and the motor housing part with each other. The bore wall part has a cylindrical inner periphery for rotatably receiving a circular-shaped throttle valve. The connecting member is constructed with plural plate-shaped ribs. Thus, the connecting member can be rigid without becoming a thick member. Therefore, the connecting member can be restricted from contracting in its molding process, so that circularity of the cylindrical inner periphery of the bore wall part can be maintained. Thus, the cylindrical inner periphery of the bore wall part can rotatably receive the circular-shaped throttle valve without arising interference against each other, and airtightness of the throttle valve can be maintained, when the throttle valve is in the full close position.						