

PatBase - Search results 26 March 2019

Search query (9): [SP]: field[0001] the present invention relates generally to resin compositions and in some aspects, resin compositions for extrusion coating that provide high hot tack performance.introduction[0002] it is known that low density polyethylene (ldpe) made by high-pressure polymerization of ethylene with free-radical initiators as well as homogeneous or heterogeneous linear low density polyethylene (lldpe) and ultra low density polyethylene (uldppe) made by the copolymerization of ethylene and α -olefins with metallocene or ziegler coordination (transition metal) catalysts at low to medium pressures can be used, for example, to extrusion coat substrates such as paper board, paper, and/or polymeric substrates to prepare extrusion cast film for applications such as disposable diapers and food packaging and to prepare extrusion profiles such as wire and cable jacketing. however, although ldpe generally exhibits excellent extrusion processability and high extrusion drawdown rates, ldpe extrusion compositions typically lack sufficient abuse resistance and toughness for many applications. for extrusion coating and extrusion casting purposes, efforts to improve abuse properties by providing ldpe compositions having high molecular weights (i.e., having melt index, 12, less than about 2 g/10 min) are not generally effective since such compositions have too much melt strength to be successfully drawn down at high line speeds.[0003] while lldpe and uldppe extrusion compositions offer improved abuse resistance and toughness properties, and mdpe (medium density polyethylene) extrusion compositions offer improved barrier resistance (against, for example, moisture and grease permeation), these linear ethylene polymers typically exhibit unacceptably high neck-in and draw instability they also typically exhibit relatively poor extrusion processability compared to pure ldpe. one proposal commonly used in the industry is to blend ldpe with lldpe. while the addition of lldpe to ldpe provides some improvement in functionality, additional improvements would be desirable. one area of interest is improved sealant performance especially in hot tack strength for multi-layer film structures that might be used, for example, in liquid packaging. while some existing resins provide excellent sealant performance, such resins can be cost prohibitive for some applications or for some film converters.summary[0004] the present invention utilizes ethylene-based polymers that can provide desirable sealing properties (e.g., hot tack strength) when incorporated in film structures. for example, in some embodiments, resin compositions of the present invention provide desirable hot tack strength across a broad range of temperatures, with a relatively low heat seal initiation temperature, and at a not very low density.[0005] in one aspect, the present invention provides a composition comprising (a) a first linear low density polyethylene having a density of 0.900 to 0.915 grams per cubic centimeter (g/cm³) and a melt index (i₂) of 5.0 to 25 grams/10 minutes (g/10 min), wherein the linear low density polyethylene is a blend of at least two components: (i) 20-40 percent by weight of a second linear low density polyethylene, wherein the second linear low density polyethylene is a homogeneously branched ethylene/ α -olefin interpolmer having a density of 0.870-0.895 g/cm³ and a melt index of 2.0-6.0 g/10 min and (ii) 60-80 percent by weight of a third linear low density polyethylene, wherein the density of the third linear low density polyethylene is at least 0.02 g/cm³ greater than the density of the second linear low density polyethylene and wherein the melt index (i₂) of the third linear low density polyethylene is at least twice the melt index (i₂) of the second linear low density polyethylene.[0006] these and other embodiments are described in more detail in the detailed description.brief description of the drawings[0007] fig. 1 illustrates the results of hot tack testing described in the examples.detailed description[0008] unless specified otherwise herein, percentages are weight percentages (wt percent) and temperatures are in degrees centigrade [0009] the term "composition," as used herein, includes material(s) which comprise the composition, as well as reaction products and decomposition products formed from the materials of the composition.[0010] the term "comprising," and derivatives thereof, is not intended to exclude the presence of any additional component, step or procedure, whether or not the same is disclosed herein. in order to avoid any doubt, all compositions claimed herein through use of the term "comprising" may include any additional additive, adjuvant, or compound, whether polymeric or otherwise, unless stated to the contrary. in contrast, the term, "consisting essentially of" excludes from the scope of any succeeding recitation any other component, step or procedure, excepting those that are not essential to operability. the term "consisting of" excludes any component, step or procedure not specifically delineated or listed.[0011] the term "polymer," as used herein, refers to a polymeric compound prepared by polymerizing monomers, whether of the same or a different type. the generic term polymer thus embraces the term homopolymer (employed to refer to polymers prepared from only one type of monomer, with the understanding that trace amounts of impurities can be incorporated into the polymer structure), and the term interpolmer as defined hereinafter. trace amounts of impurities may be incorporated into and/or within the polymer.[0012] the term "interpolymer," as used herein, refers to a polymer prepared by the polymerization of at least two different types of monomers. the generic term interpolmer thus includes copolymers (employed to refer to polymers prepared from two different types of monomers), and polymers prepared from more than two different types of monomers. the term "polymer," as used herein, refers to a polymeric compound prepared by polymerizing monomers, whether of the same or a different type. the generic term polymer thus embraces the term "homopolymer", usually employed to refer to polymers prepared from only one type of monomer as well as "copolymer" which refers to polymers prepared from two or more different monomers.[0013] "polyethylene" shall mean polymers comprising greater than 50 percent by weight of units which have been derived from ethylene monomer. this includes polyethylene homopolymers or copolymers (meaning units derived from two or more comonomers). common forms of polyethylene known in the art include low density polyethylene (ldpe) linear low density polyethylene (lldpe) ultra low density polyethylene (uldppe) very low density polyethylene (vldpe) single site catalyzed linear low density polyethylene, including both linear and substantially linear low density resins (m-ldpe) medium density polyethylene (mdpe) and high density polyethylene (hdpe). these polyethylene materials are generally known in the art however the following descriptions may be helpful in understanding the differences between some of these different polyethylene resins.[0014] the term, "ethylene/ α -olefin interpolmer," as used herein, refers to an interpolmer that comprises, in polymerized form, a majority amount of ethylene monomer (based on the weight of the interpolmer), and at least one α -olefin.[0015] the term "ldpe" may also be referred to as "high pressure ethylene polymer" or "highly branched polyethylene" and is defined to mean that the polymer is partly or entirely homopolymerized or copolymerized in autoclave or tubular reactors at pressures above 14,500 psi (100 mpa) with the use of free-radical initiators, such as peroxides (see for example u.s. pat. no. 4,599,392, which is hereby incorporated by reference). ldpe resins typically have a density in the range of 0.916 to 0.940 g/cm³. [0016] the term "lldpe", includes both resin made using the traditional ziegler-natta catalyst systems as well as single-site catalysts such as metallocenes (sometimes referred to as "m-ldpe") and includes linear, substantially linear or heterogeneous polyethylene copolymers or homopolymers. lldpes contain less long chain branching than ldpes and includes the substantially linear ethylene polymers which are further defined in u.s. pat. no. 5,272,236, u.s. pat. no. 5,278,272, u.s. pat. no. 5,582,923 and u.s. pat. no. 5,733,155 the homogeneously branched linear ethylene polymer compositions such as those in u.s. pat. no. 3,645,992 the heterogeneously branched ethylene polymers such as those prepared according to the process disclosed in u.s. pat. no. 4,076,698 and/or blends thereof (such as those disclosed in u.s. pat. no. 3,914,342 or u.s. pat. no. 5,854,045). the lldpes can be made via gas-phase, solution-phase or slurry polymerization or any combination thereof, using any type of reactor or reactor configuration known in the art, with gas and slurry phase reactors being most preferred.[0017] the term "mdpe" refers to polyethylenes having densities from 0.926 to 0.940 g/cm³. "mdpe" is typically made using chromium or ziegler-natta catalysts or using metallocene, constrained geometry, or single site catalysts, and typically have a molecular weight distribution ("mwd") greater than 2.5.[0018] the term "hdpe" refers to polyethylenes having densities greater than about 0.940 g/cm³, which are generally prepared with ziegler-natta catalysts, chrome catalysts or even metallocene catalysts.[0019] compositions of the present invention can be provided as resins that can be used in various film structure

Results: 17**1) Family number: 1187045** (US3914342A)

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Title: ETHYLENE POLYMER BLEND AND POLYMERIZATION PROCESS FOR PREPARATION THEREOF

Abstract: A high density ethylene polymer blend having improved impact strength and environmental stress crack resistance comprises a high molecular weight, non-elastomeric ethylene/propylene copolymer having a crystallinity of at least 5 percent and an intermediate molecular weight, high density ethylene polymer. The improved ethylene polymer blend is provided by a dual zone, low pressure, Ziegler solution polymerization process wherein (1) ethylene and propylene are copolymerized at a low pressure and solution temperatures in presence of a titanium-containing catalyst in an auxiliary polymerization zone, (2) ethylene is polymerized in a primary polymerization zone at low pressure and solution temperature in the presence of a titanium-containing catalyst and (3) the resulting solutions of the reaction products of both zones are combined to form an essentially homogeneous mixture.

Classifications:**International (IPC 8-9):** C08F210/00 C08F210/16 C08L23/04 (Advanced/Invention);

C08F10/02 (Advanced/Non-invention);

C08F210/00 C08L23/00 (Core/Invention);

C08F10/00 (Core/Non-invention)

International (IPC 1-7): C08F1/00 C08F1/42 C08F29/00 C08F29/10 C08F29/12 C08F37/00 C08F37/18 C08L23/02 C08L23/04 C08L23/08**CPC:** Y10S525/91 C08F210/00 C08F10/02 C08F210/16 C08L23/04**European:** C08F210/00 C08F210/16 C08L23/04 M08F10/02

US: 525/191 525/240 525/53 525/910

Family:

Publication number	Publication date	Application number	Application date
BE786053 A	19730110		00000000
BE786053 A1	19730110	BE19720119675	19720710
CA977094 A1	19751028	CA19720145229	19720620
DE2233983 A1	19730125	DE19722233983	19720711
ES404782 A1	19750616	ES19720404782	19720712
FR2145650 A1	19730223	FR19720025329	19720712
FR2145650 B1	19770722	FR19720025329	19720712
GB1391804 A	19750423	GB19720032219	19720710
IT961384 A	19731210	IT19720051503	19720712
NL7209676 A	19730116	NL19720009676	19720713
NL7209676 A1	19730116	NL19720009676	19720713
US3914342 A	19751021	US19740478124	19740610

Priority:

US19710162313 19710713 US19740478124 19740610

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Inventor(s): MITCHELL JOHN HOWARD LAKE JACKSON TEX V ST A ; J H MITCHELL ; JH MITCHELL

2) Family number: 44005064 (US2009286024A)

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Title: BIAIXIALLY ORIENTED LLDPE BLENDS

Abstract: Disclosed in one aspect is a film comprising at least one core layer comprising a blend of at least 20 wt percent, by weight of the core layer, of a first linear LLDPE having a molecular weight distribution (Mw/Mn) within the range of from 1.0 to 4.0; and at least 20 wt percent, by weight of the core layer, of a second LLDPE-in a certain embodiment a short-chain branched LLDPE-having a molecular weight distribution (Mw/Mn) within the range of from 1.0 to 7.0; characterized in that the density of the second LLDPE is greater than the density of the first LLDPE by at least 0.002 grams per cubic centimetre; and/or the I2 of the second LLDPE is greater than the I2 of the first LLDPE by at least 0.5 dg/min. In certain embodiments, the first and second LLDPEs are produced by a metallocene-catalyzed reaction. In yet another embodiment, the combined molecular weight distribution (Mw/Mn) of the first and second LLDPEs is greater than 4.0.

Classifications:

International (IPC 8-9): B29C47/00 B32B1/00 B32B27/32 B32B7/02 C08J5/18 C08L23/04 C08L23/06 (Advanced/Invention); B29C47/00 B32B1/00 B32B27/32 B32B7/02 C08J5/18 C08L23/00 (Core/Invention)

CPC: Y10T428/1328 Y10T428/24992 C08L23/04 B32B27/32 C08J5/18 C08J2323/08 C08L23/0815 C08L2205/02 Y10T428/31667 B32B1/00 B32B27/08 B32B27/18 B32B27/327 B32B2250/24 B32B2270/00 B32B2307/412 B32B2307/518 B32B2307/54 B32B2307/558 B32B2307/72 B32B2307/736 B32B2439/00 B32B2519/00 B32B2553/00 B32B2581/00 C08L2205/03

European: B32B27/32 C08J5/18 C08L23/04 C08L23/08A1 M08J323/08 M08L205/02

US: 264/176.1 264/176.100S 428/218 428/218S 428/34.9 428/34.900P 428/451

Family:

Publication number	Publication date	Application number	Application date
CA2724235 AA	20101112	CA20092724235	20090318
CA2724235 C	20130108	CA20092724235	20090318
CN102066466 A	20110518	CN200980123496	20090318
CN102066466 B	20140716	CN200980123496	20090318
EP2291438 A2	20110309	EP20090747043	20090318
US2009286024 AA	20091119	US20080121920	20080516
US8080294 BB	20111220	US20080121920	20080516
WO09139957 A2	20091119	WO2009US37532	20090318
WO09139957 A3	20100715	WO2009US37532	20090318

Priority:

US20080121920 20080516 WO2009US37532 20090318

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Inventor(s): (std): LU PANG CHIA ; PANG CHIA LU

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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: ELECTRICAL DEVICES COMPRISING POLYMERIC INSULATING OR SEMICONDUCTING MEMBERS

Abstract: Disclosed are electrically conductive and semiconductive devices utilizing polymers having resistance to water treeing and good dielectric properties. The polymer comprises ethylene polymerized with at least one C3 to C20 alpha-olefin and optionally at least one C3 to C20 polyene. The polymer utilized has a density in the range of about 0.86 grams per cubic centimetre to about 0.96 grams per cubic centimetre, a melt index in the range of about 0.2 dg/min to about 100 dg/min, a molecular weight distribution in the range of about 1.5 to about 30, and a composition distribution breadth index greater than about 45 percent. For the polymer utilized, the tree rating is generally less than about 40, the power factor is in the range of about 0.0002 to about 0.0005, and the dielectric constant is in the range of about 1.8 to about 2.4.

Classifications:

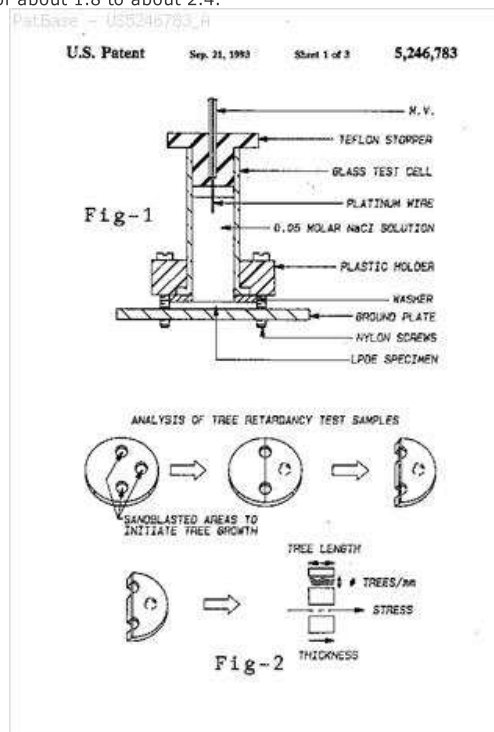
International (IPC 8-9): C08F10/02 C08F10/14 C08F210/00 C08F210/02 C08F210/12 C08F210/16 C08F4/60 C08F4/6192 C08J3/24 C08K3/04 C08L23/08 C08L23/26 H01B3/44 H01B7/28 H01B9/02 (Advanced/Invention); C08F210/00 C08J3/24 (Advanced/Non-invention); C08F10/00 C08F210/00 C08F4/00 C08J3/24 C08K3/00 C08L23/00 H01B3/44 H01B7/17 H01B9/00 (Core/Invention)

International (IPC 1-7): B05D7/20 B32B15/04 C08F10/02 C08F210/02 C08F210/12 C08F210/16 C08J3/24 C08K3/04 C08L23/08 C08L23/26 H01B3/44 H01B9/02

CPC: Y10S174/28 Y10S174/31 Y10S428/93 Y10S526/943 H01B7/2813 C08L23/0815 C08L23/083 C08L2203/202 C08L2312/00 C08L2314/06 H01B3/441 Y10T428/239 Y10T428/31692

European: C08L23/08A1 H01B3/44B H01B7/28D M08L203/202 M08L23/08A1 M08L23/08A3 M08L312/00 M08L314/06

US: 174/110R 174/DIG.28 174/DIG.31 427/117 427/388.2 427/487 427/58 428/461 428/76 428/930 526/943

**Family:**

Publication number	Publication date	Application number	Application date
AT166176 E	19980515	AT19920919228T	19920814
AU199225430 A1	19930316	AU19920025430	19920814
AU680808 B2	19970814	AU19920025430	19920814
BRPI9206370 A	19951031	BR1992PI06370	19920814
CA2115642 AA	19940214	CA19922115642	19920814
CA2115642 C	19971230	CA19922115642	19920814
DE69225483 D1	19980618	DE19926025483	19920814
DE69225483 T2	19981217	DE19926025483T	19920814
EP0598848 A1	19940601	EP19920919228	19920814
EP0598848 B1	19980513	EP19920919228	19920814
JP3648515 B2	20050518	JP19930504500T	19920814
JP6509905 T2	19941102	JP19930504500T	19920814
KR0163365 B1	19981215	KR19940070446	19940215
KR100163365 B1	19981215	KR19940700446	19940215
KR19947002305 A	19940728	KR19947000446	19920814
US5246783 A	19930921	US19910745479	19910815
US6270856 BA	20010807	US19970853638	19970509
WO9304486 A1	19930304	WO1992US06894	19920814

Priority:

US19910745479 19910815	WO1992US06894 19920814	US19930025015 19930302
US19940304039 19940909	US19950473377 19950607	US19960625451 19960329
US19970853638 19970509		

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Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD;

Designated states: AT AU BE BR CA CH DE DK ES FR GB GR IE IT JP KR LU MC NL RU SE

4) Family number: 1862267 (US4486552A)

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Title: FOG-RESISTANT OLEFIN POLYMER FILMS

Abstract: An ethylene polymer, especially a linear low density ethylene polymer, is mixed with certain antifog agents to provide a film-forming composition for making packaging films which resist fogging. The antifog agents are (1) an alkoxyated alkyl phenol along with a mixed mono-, di-, and/or triglyceride, (2) a polyoxyalkylene fatty acid ester, and (3) a combination of (2) and any part of (1). Optionally, a tackifier is added.

Classifications:

International (IPC 8-9): C08J5/18 C08K5/06 C08K5/10 C08K5/103 C08K5/11 C08K5/13 C08L23/00 C08L23/04 C08L71/00 C08L91/00 C09K3/18 (Advanced/Invention); C08J5/18 C08L23/00 C08L71/00 (Advanced/Non-invention); C08J5/18 C08K5/00 C08L23/00 C08L71/00 C08L91/00 C09K3/18 (Core/Invention); C08L C09K (Subclass/Invention)

International (IPC 1-7): B65D65/38 C08F C08J5/18 C08J5/22 C08K5/06 C08K5/10 C08L23/04 C08L23/08 C08L91/00 C09K3/18

CPC: C08K5/13 C08K5/103 C08L23/04 C08L23/0815 C08L71/02 C09K3/18

European: C08K5/103 C08K5/13 C08L23/04 C08L23/08A1 C09K3/18 M08L71/02

US: 523/169 524/313 524/375 524/376



Family:

Publication number	Publication date	Application number	Application date
AT31938 E	19880115	AT19840901140T	19840213
AU198426540 A1	19840910	AU19840026540	19840213
AU561479 B2	19870507	AU19840026540	19840213
BRPI8406166 A	19850312	BR1984PI06166	19840213
CA1247780 A1	19881228	CA19840447386	19840214
DE3468695 D1	19880218	DE19843468695	19840213
DK164110 B	19920511	DK19840004499	19840920
DK164110 C	19921019	DK19840004499	19840920
DK449984 A	19840920	DK19840004499	19840920
DK449984 A0	19840920	DK19840004499	19840920
EP0138881 A1	19850502	EP19840901140	19840213
EP0138881 A4	19851014	EP19840901140	19840213
EP0138881 B1	19880113	EP19840901140	19840213
ES530007 A0	19860601	ES19840530007	19840224
ES8608010 A1	19860601	ES19840530007	19840224
FI82478 B	19901130	FI19840003905	19841004
FI82478 C	19910311	FI19840003905	19841004
FI843905 A	19841004	FI19840003905	19841004
FI843905 A0	19841004	FI19840003905	19841004
FI843905 L	19841004	FI19840003905	19841004
GB2143832 A1	19850220	GB19840022835	19840213
GB2143832 B2	19860730	GB19840022835	19840213
GB8422835 A0	19841017	GB19840022835	19840213
IT1173335 A	19870624	IT19840019739	19840222
IT8419739 A0	19840222	IT19840019739	19840222
JP60500374 T2	19850322	JP19840501092T	19840213
KR19840007741 A	19841210	KR19840000946	19840227
KR840007741 A	19841210	KR19840000946	19840227
NO161126 B	19890328	NO19840004276	19841026
NO161126 C	19890705	NO19840004276	19841026
NO844276 A	19841026	NO19840004276	19841026
NZ207210 A	19870731	NZ19840207210	19840220
PH19635 A	19860604	PH19840030301	19840227

US4486552 A	19841204	US19830470116	19830228
WO8403296 A1	19840830	WO1984US00198	19840213
ZA8401387 A	19851030	ZA19840001387	19840224

Priority:

US19830470116 19830228 EP19840901140 19840213 WO1984US00198 19840213
CA19840447386 19840214

Probable Assignee: DOW CHEMICAL CO

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Inventor(s): NIEMANN DH ; DEBRA HOPPE NIEMANN

Agent(s): PHILLIPS ORMONDE FITZPATRICK; SMART AND BIGGAR

Designated states: AT AU BE BR CH DE DK FI FR GB JP LI NL NO SE

5) Family number: 145329 (US3645992A)

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Title: PROCESS FOR PREPARATION OF HOMOGENEOUS RANDOM PARTLY CRYSTALLINE COPOLYMERS OF ETHYLENE WITH OTHER ALPHA-OLEFINS

Abstract: ABSTRACT OF THE DISCLOSURE

Preparation of copolymers of ethylene and an alpha olefin having at least four carbon atoms using an inert solvent and a catalyst formed using particular ratios of an aluminum halide and a vanadium compound.

Classifications:

International (IPC 8-9): C08F210/16 (Advanced/Invention);

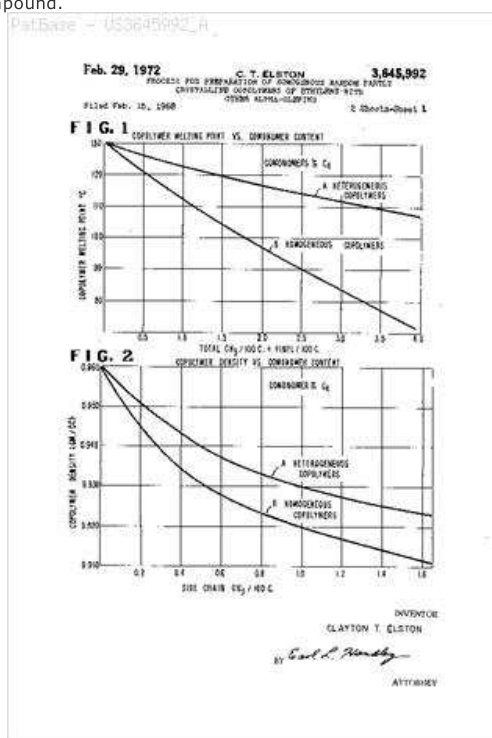
C08F210/00 (Core/Invention)

International (IPC 1-7): C08F10/02 C08F15/04 C08F210/02 C08F210/16

CPC: C08F210/16

European: C08F210/16

US: 526/169.2 526/348.2 526/348.3 526/348.6



Family:

Publication number	Publication date	Application number	Application date
CA849081 A	19700811	CA19670984213	19670302
DE1745308 A1	19710909	DE19681745308	19680301
FR1604980 A	19720626		19680304
GB1209825 A	19701021	GB19680009619	19680228
NL6802959 A	19680903	NL19680002959	19680301
US3645992 A	19720229	US19680705701	19680215

Priority:

CA19670984213 19670302

Probable Assignee: DU PONT CANADA

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Assignee(s): DU PONT OF CANADA LIMITED ; DU PONT OF CANADA LTD ; E I DU PONT DE NEMOURS AND CO ; E I DU PONT DE NEMOURS AND COMPANY ; EIDU PONT DE NEMOURS AND CO ; CLAYTON T ELSTON

Inventor(s): (std): ELSTON CLAYTON TREVOR ; TREVOR ELSTON CLAYTON ; ELSTON CLAYTON T

Inventor(s): CLAYTON T ELSTON ; CLAYTON TREVOR ELSTON

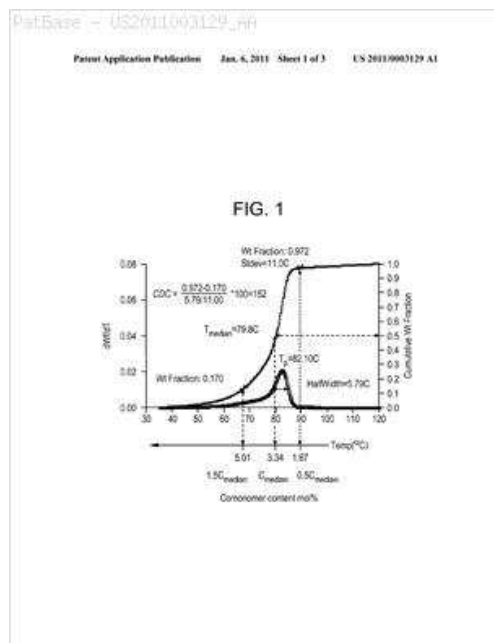
Title: STRETCH HOOD FILMS**Abstract:** A multi-layer film structure is made from a specific polyethylene copolymer comprising the inner layer and is useful as a stretch hood film structure. The polyethylene copolymer can be characterized by a Comonomer Distribution Constant greater than about 45.**Classifications:**

International (IPC 8-9): B29D22/00 B29D23/00 B32B1/08 B32B27/00 B32B27/30 B32B27/32 B32B5/00 B32B7/02 B65D65/40 C08F10/00 C08F10/02 C08F110/00 C08F110/02 C08F2/00 C08F210/02 C08F210/14 C08F210/16 C08F210/18 C08F4/52 C08F4/64 C08F4/646 C08F4/76 C08F8/00 C08J5/18 C08L101/00 C08L23/04 C08L23/06 C08L23/08 G01N30/30 G01N30/54 (Advanced/Invention); C08F10/02 C08L23/08 (Core/Invention)

CPC: C08F10/02 C08F210/16 C08J2323/08 C08L23/06 C08L2314/06 B32B1/08 Y10T428/1352 Y10T428/26 Y10T428/266 Y10T428/269 C08L23/0815 C08F10/00 C08L2205/02 Y10T428/31855 Y10T428/24942 B32B27/08 B32B27/18 B32B27/22 B32B27/302 B32B27/306 B32B27/308 B32B27/40 B32B2250/24 B32B2262/0261 B32B2262/0276 B32B2262/10 B32B2262/106 B32B2264/10 B32B2270/00 B32B2307/30 B32B2307/31 B32B2307/50 B32B2307/51 B32B2307/54 B32B2307/5825 B32B2307/71 B32B2307/712 B32B2307/72 B32B2553/00 C08F2500/05 G01N30/30 G01N30/54 C08J5/18 C08L2205/025 C08L23/04 D01F6/30

European: B32B27/32 C08F10/00 C08J5/18 C08L23/06 C08L23/08A1 M08F210/16 M08J323/08 M08L205/02 M08L23/08A1 M08L314/06

US: 264/510 428/212 428/220 428/220P 428/332 428/337 428/339 428/35.7 428/500 521/40 521/40.5 521/47 525/191 525/240 525/240P 525/55 525/55P 526/134 526/148 526/153 526/160 526/172 526/172S 526/348 526/348.4 526/348.400S 526/352 526/352S 526/65 526/67 526/68 526/70 526/72 526/77

**Family:**

Publication number	Publication date	Application number	Application date
AR081916 AA	20121031	AR2011P101692	20110517
BR112012029165 A2	20170221	BR20121129165	20110517
BR112012032006 A2	20161108	BR20121132006	20110310
CA2767071 AA	20110106	CA20102767071	20100630
CA2767071 C	20180327	CA20102767071	20100630
CN102575071 A	20120711	CN201080038998	20100630
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CN103003068 A	20130327	CN201180035203	20110517
CN103003068 B	20160120	CN201180035203	20110517
CN103168072 A	20130619	CN201180039227	20110310
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DE602010041293 D1	20170518	DE201060041293T	20100630
DE602011004487 D1	20140220	DE201160004487T	20110517
EP2449025 A2	20120509	EP20100729769	20100630
EP2449025 B1	20170405	EP20100729769	20100630
EP2571690 A1	20130327	EP20110721943	20110517
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EP2580279 A1	20130417	EP20110708669	20110310
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ES2453115 T3	20140404	ES20110721943T	20110517
ES2628196 T3	20170802	ES20100729769T	20100630
GC3218 A	20141201	GC2010P016234	20100703
IN09583CN2012 A	20140411	IN2012CN09583	20121112
IN09892CN2011 A	20130531	IN2011CN09892	20111228
IN10308CN2012 A	20140613	IN2012CN10308	20121210
JP2012532218 T2	20121213	JP20120517887T	20100630
JP2013528689 T2	20130711	JP20130515330T	20110310
JP2013532077 T2	20130815	JP20130511286T	20110517
JP2015110782 A2	20150618	JP20140262154	20141225
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JP5975987 B2	20160823	JP20130515330T	20110310
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KR20130089230 A	20130809	KR20137000801	20110310
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MX2012014835 A1	20130501	MX20120014835	20110310
MX347108 B	20170412	MX20110014011	20100630

MX355375 B	20180417	MX20120014835	20110310
MY160184 A	20170228	MY20120005363	20110310
RU2012154327 A	20140627	RU20120154327	20110517
RU2013101567 A	20140720	RU20130101567	20110310
SG177432 A1	20120228	SG20110097334	20100630
TH118583 A	20121227	TH20111003930	20100630
TW201144069 A	20111216	TW20110117188	20110517
US2011003129 AA	20110106	US20100781247	20100517
US2011003940 AA	20110106	US20100814902	20100614
US2011015346 AA	20110120	US20100827222	20100630
US2012237741 AA	20120920	US20120424978	20120320
US2012277380 AA	20121101	US20120453541	20120423
US2013149519 AA	20130613	US20130759246	20130205
US2013150537 AA	20130613	US20120714622	20121214
US8173232 BB	20120508	US20100781247	20100517
US8372931 BB	20130212	US20100827222	20100630
US8389086 BB	20130305	US20120424978	20120320
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US8629214 BB	20140114	US20120453541	20120423
US8729200 BB	20140520	US20120714622	20121214
WO11002868 A2	20110106	WO2010US40575	20100630
WO11002868 A3	20110505	WO2010US40575	20100630
WO11146468 A1	20111124	WO2011US36788	20110517
WO11159376 A1	20111222	WO2011US27912	20110310

Priority:

US20090222371P	20090701	US20100781247	20100517	US20100814902	20100614
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JP20140262154	20141225				

Probable Assignee: DOW GLOBAL TECHNOLOGIES LLC

Assignee(s): (std): DEMIRORS MEHMET ; DOW GLOBAL TECHNOLOGIES INC ; HAYNE SARAH ; HERMEL DAVIDOCK THERESA ; DOW GLOBAL TECHNOLOGIES LLC ; HAYNE SARAH M ; DOW GLOBAL TECH LLC ; DOW GLOBAL TECH LLC STAR ; JIN YI ; RUIZ JOSE E ; PATEL RAJEN M ; HERMEL DAVIDOCK THERESA J ; MANDARE PRASHANT ; KARJALA TERESA ; TICE COLLEEN ; KARDOS LORI ; KARJALA TERESA P ; KARDOS LORI L ; TICE COLLEEN M ; BENSASON SELIM ; BUNKER GREGORY ; CONG RONGJUAN

Assignee(s): DCOMCO INC ; DOW CHEMICAL CO ; DOW EUROPE GMBH ; DOW GLOBAL TECHNOLOGIES LLC MIDLAND

Inventor(s): (std): BENSASON SELIM ; BUNKER GREGORY ; CONG RONGJUAN ; DEMIRORS MEHMET ; GREGORY BUNKER ; HAYNE SARAH M ; HERMEL DAVID DOCK THERESA ; HERMEL DAVIDOCK THERESA J ; JOSE E RUIZ ; KARDOS LORI ; KARDOS LORI L ; KARJALA TERESA ; KARJALA TERESA P ; MANDARE PRASHANT ; JIN YI ; MEHMET DEMIRORS ; PATEL RAJEN M ; THERESA HERMEL DAVID DOCK ; THERESA HERMEL DAVIDOCK ; THERESA J HERMEL DAVIDOCK ; TICE COLLEEN ; TICE COLLEEN M ; YI JIN ; TERESA KARJALA ; SELIM BENASASON ; RANJEN M PATEL ; LORI KARDOS ; HERMEL DAVIDOCK THERESA ; HAYNE SARAH ; COLLEEN TICE ; PRASHANT MANDARE ; RONGJUAN CONG ; RUIZ JOSE E ; SARAH HAYNE ; SARAH M HAYNE

Inventor(s): SELIM BENSASON ; RUIZ JOSE E SUGAR LAND ; RAJEN M PATEL ; PATEL RAJEN M LAKE JACKSON ; JIN YI LAKE JACKSON ; MANDARE PRASHANT PEARLAND ; HERMEL DAVIDOCK THERESA J RANDOLPH ; HAYNE SARAH M HOUSTON ; DEMIRORS MEHMET PEARLAND ; BUNKER GREGORY LAKE JACKSON

Agent(s): SMART AND BIGGAR; MURGITROYD AND CO; BOEHM BRIGITTE; BOULT WADE TENNANT; HAYES ADRIAN CHETWYND; BOULT WADE TENNANT LLP; DE ELZABURU ALBERTO; SAUD M A SHAWWAF LAW OFFICE; KOBAYASHI HIROSHI; OHMORI NORIO; THE DOW CHEMICAL COMPANY; DOW CHEMICAL CO; STEPHEN P KRUPP DOW CHEMICAL CO; KRUPP STEPHEN; ASHBURG RAY

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

7) Family number: 15033419 (US5008204A)

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Title: METHOD FOR DETERMINING THE COMPOSITIONAL DISTRIBUTION OF A CRYSTALLINE COPOLYMER

Abstract: A method for fractionating crystalline copolymers to determine solubility distribution as a function of temperature. Fractionation is conducted by passing a solvent through a column containing the crystallized copolymer at an increasing temperature from 6 DEG C. to about 120 DEG C. The polymer solution exiting the column is analyzed by infrared spectroscopy or NMR to determine the composition distribution of the copolymer.

Classifications:

International (IPC 8-9): B01D9/00 G01N25/00 G01N25/14 G01N30/02

G01N31/02 G01N33/44 (Advanced/Invention);
G01N25/14 G01N30/00 (Advanced/Non-invention);
B01D9/00 G01N25/00 (Core/Invention);
G01N25/00 G01N30/00 (Core/Non-invention)

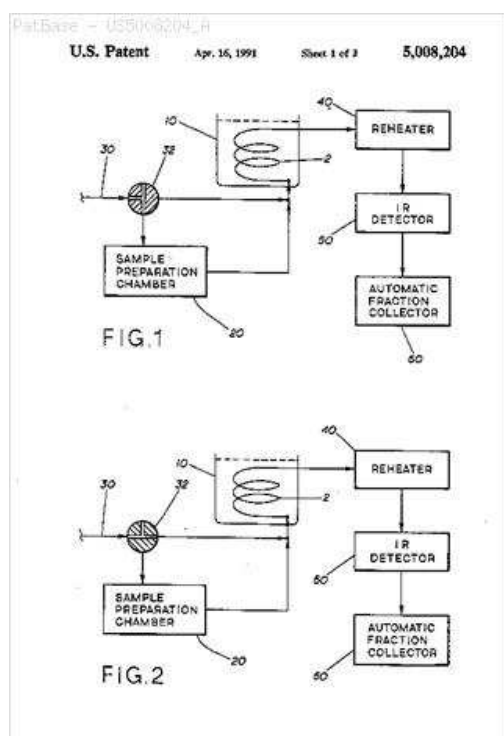
International (IPC 1-7): B01D9/00 G01N25/00 G01N25/14 G01N30/02

G01N31/02 G01N33/44

CPC: B01D9/004 B01D9/0063 B01D9/0013 G01N25/147 G01N2030/008

European: B01D9/00B4 S01N25/14D S01N30/00C2

US: 210/656 210/774 436/161 436/85 73/53 73/53.01 73/61.1C 73/64.54



Family:

Publication number	Publication date	Application number	Application date
CA1335072 A1	19950404	CA19890589676	19890131
DE68920166 D1	19950209	DE19896020166	19890202
DE68920166 T2	19950511	DE19896020166T	19890202
EP0327368 A2	19890809	EP19890301018	19890202
EP0327368 A3	19910306	EP19890301018	19890202
EP0327368 B1	19941228	EP19890301018	19890202
JP2193049 A2	19900730	JP19890020978	19890201
JP2684082 B2	19971203	JP19890020978	19890201
US5008204 A	19910416	US19880151350	19880202

Priority:

US19880151350 19880202 CA19890589676 19890131

Probable Assignee: EXXON MOBIL CORP

Assignee(s): (std): EXXON CHEMICAL PATENTS INC ; EXXON MOBIL CORP

Assignee(s): STEHLING FERDINAND CHRISTIAN ; EXXON CHEMICAL PATENTS INC FLORHAM PARK N J US ; EXXON CHEM PATENTS INC

Inventor(s): (std): STEHLING FERDINAND C ; STEHLING FERDINAND CHRISTIAN ; FUADEINANDO KURISUCHIYAN SUTE ; FUADEINANDO KURISUCHAN SUTEIR

Inventor(s): FUADEINANDO KURISUCHIYAN SUTEIRINGU ; STEHLING FERDINAND CHRISTIAN BAYTOWN TEXAS 77522 U ; STEHLING FERDINAND CHRISTIAN BAYTOWN TEXAS... ; STEHLING FERDINAND CHRISTIAN BAYTOWN TEXAS 77522 US

Agent(s): BORDEN LADNER GERVAIS LLP

Designated states: BE DE FR GB IT NL

8) Family number: 27198452 (US4076698A)

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Title: Hydrocarbon interpolymer compositions

Abstract: Interpolymers composed of ethylene and higher olefinic hydrocarbons having 5 to 18 carbon atoms per molecule. Said interpolymers being useful as molding, pipes and wire coatings.

Classifications:

International (IPC 8-9): C08F210/16 (Advanced/Invention)

International (IPC 1-7): A24F13/24 C08F10/00 C08F210/14 C08F210/16

CPC: C08F210/16

European: C08F210/16 M08F210/16

US: 260/88.2F 526/348.2 526/348.3 526/348.4 526/348.5 526/348.6

Family:

Publication number	Publication date	Application number	Application date
US4076698 A	19780228	US19570632416	19570104
US4076698 B1	19930427	US19570632416	19570104
USB632416 I	19760309	US19570632416D	19570104

Priority:

US19560568707 19560301

Probable Assignee: DU PONT**Assignee(s):** (std): DU PONT**Assignee(s):** E I DU PONT DE NEMOURS AND COMPANY**Inventor(s):** (std): ANDERSON ARTHUR WILLIAM ; STAMATOFF GELU STOEFF ; GELU S STAMATOFF ; ARTHUR W ANDERSON**9) Family number: 31768630** (US5844045A)

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Title: Ethylene interpolymerizations

Abstract: Processes for polymerizing ethylene/ alpha -olefin interpolymer compositions are disclosed. The interpolymer compositions have a controlled composition and a controlled molecular weight distribution. The processes utilize a highly-efficient homogeneous catalyst composition in at least one reactor to produce a first interpolymer having a narrow composition distribution and a narrow molecular weight distribution, and a highly-efficient heterogeneous Ziegler catalyst in at least one other reactor. The reactors can be operated sequentially or separately, depending upon the desired product. The novel compositions have good optical properties (e.g., clarity and haze) and good physical properties (e.g., modulus, yield strength, toughness and tear). Useful products which can be formed from these compositions include film, molded articles and fiber.

Classifications:**International (IPC 8-9):** C08F10/02 C08F2/44 C08F210/16 C08F297/08 C08F4/64 C08F4/642 C08F4/652 C08L23/00

C08L23/08 (Advanced/Invention);

C08F110/02 C08F4/659 C08F4/6592 (Advanced/Non-invention);

C08F2/44 C08F4/00 (Core/Invention)

International (IPC 1-7): C08F210/16 C08F4/635 C08F4/74 C08L23/06**CPC:** C08F4/65908 C08F4/65912 C08F4/6592 C08F10/02 C08F110/02 C08F210/16 C08F297/08 C08L23/0815 C08L2205/02

C08L2308/00 C08L2314/02 C08L2314/04 C08L2314/06

European: C08F10/02 C08F210/16 C08F297/08 C08L23/08A1 M08F110/02 M08F210/16 M08F4/6592 M08F4/659D M08F4/659K

M08L205/02 M08L23/08A1 M08L308/00 M08L314/02 M08L314/04 M08L314/06

US: 525/240**Family:**

Publication number	Publication date	Application number	Application date
 FI114988 B1	20050215	FI19950003626	19950728
 US5844045 A	19981201	US19960747419	19961112

Priority:

US19930010958 19930129

WO1994US01052 19940128

US19950510527 19950802

US19960747419 19961112

Probable Assignee: DOW CHEMICAL CO**Assignee(s):** (std): DOW CHEMICAL CO ; DOW GLOBAL TECHNOLOGIES INC**Assignee(s):** THE DOW CHEMICAL COMPANY**Inventor(s):** (std): CARDWELL ROBERT S ; KOLTHAMMER BRIAN W S**Inventor(s):** KOLTHAMMER BRIAN WS**10) Family number: 31768636** (US5747594A)

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Title: POLYOLEFIN COMPOSITIONS EXHIBITING HEAT RESISTIVITY, LOW HEXANE-EXTRACTIVES AND CONTROLLED MODULUS

Abstract: The subject invention provides a polymer mixture having high heat resistivity, low hexane extractive and controllably lower or higher modulus. The mixture is comprised of at least one first substantially linear ethylene polymer, Component (A), and at least one second ethylene polymer which is a homogeneously branched polymer, heterogeneously branched linear polymer or a non-short chain branched linear polymer. When fabricated into film, the mixture is characterized by a heat seal initiation temperature which is substantially lower than its Vicat softening point as well as a high ultimate hot tack strength. When fabricated as a molded article, the mixture is characterized by high microwave warp distortion while maintaining a lower modulus. The polymer mixture is particularly well-suited for use in multilayer film structures as a sealant layer for such applications as cook-in packages, hot-fill packages, and barrier shrink films. In molding applications, the mixture is well-suited as freezer-to-microwave food storage containers and lids which maintain good flexibility at low temperature to allow easy openability of such containers.

Classifications:**International (IPC 8-9):** B29C47/00 B32B27/32 B65D1/00 B65D65/40

B65D81/34 C08F210/08 C08J5/18 C08L23/04 C08L23/06 C08L23/08

C09J123/08 (Advanced/Invention);

B29K23/00 B29L9/00 C08F110/02 C08F210/16 C08L23/16 (Advanced/Non-

invention);

B29C47/00 B32B27/32 B65D1/00 B65D65/40 B65D81/34 C08F210/00

C08J5/18 C08L23/00 C09J123/00 (Core/Invention);

C08F110/00 (Core/Non-invention)

International (IPC 1-7): C08L23/16**CPC:** B32B27/32 B32B27/322 C08F110/02 C08F210/16 C08J5/18

C08J2323/04 C08J2323/08 C08L23/0815 C08L2205/02 C08L2314/06

C09J123/0815 Y10T428/1334 Y10T428/1352 Y10T428/1393

Y10T428/1397 Y10T428/24992 Y10T428/2826 Y10T428/31913 C08L23/06

C08F2420/02 C08L2666/06 C08F4/65908 C08F4/65912 B29C48/022

B29C48/08 B29C48/10

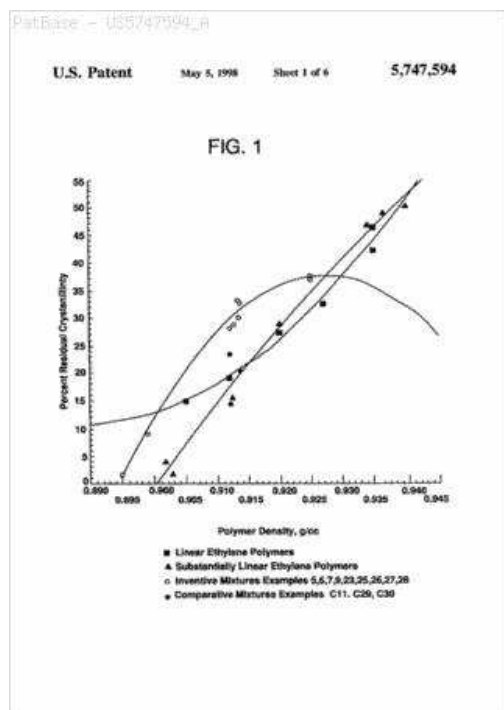
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C08L23/06+B2 C08L23/08A1 C08L23/08A1+B2 C09J123/08A1

C09J123/08A1+B2 M08F110/02 M08F210/16 M08J323/04 M08J323/08

M08L205/02 M08L23/06 M08L23/08A1 M08L23/16B M08L314/06

US: 428/516 525/240



Family:

Publication number	Publication date	Application number	Application date
US5747594 A	19980505	US19970788981	19970127

Priority:

US19940327156 19941021 US19970788981 19970127

Probable Assignee: DOW CHEMICAL CO

Assignee(s): (std): DOW CHEMICAL CO

Assignee(s): THE DOW CHEMICAL COMPANY

Inventor(s): (std): DEGROOT JACQUELYN A ; HAZLITT LONNIE G ; JAIN PRADEEP ; KARANDE SEEMA V ; MERGENHAGEN LAURA K ; MOLDOVAN DAN G ; STEWART KENNETH B ; WHITEMAN NICOLE F

11) Family number: 31768644 (US5582923A)

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Title: EXTRUSION COMPOSITIONS HAVING HIGH DRAWDOWN AND SUBSTANTIALLY REDUCED NECK-IN

Abstract: An ethylene polymer extrusion composition having high draw down and substantially reduced neck-in, a process for making such a composition and a process of using such a composition to prepare extrusion coatings, extrusion profiles and extrusion cast films are disclosed. The ethylene polymer extrusion composition is made of 75-95 weight percent of at least one ethylene alpha -olefin interpolymers and 5-25 weight percent of at least one high pressure ethylene polymer characterized as having high melt strength and a broad, bimodal molecular weight distribution. In profiles, coatings or films, the composition can be used as sealant, adhesive or abuse resistance layers.

Classifications:

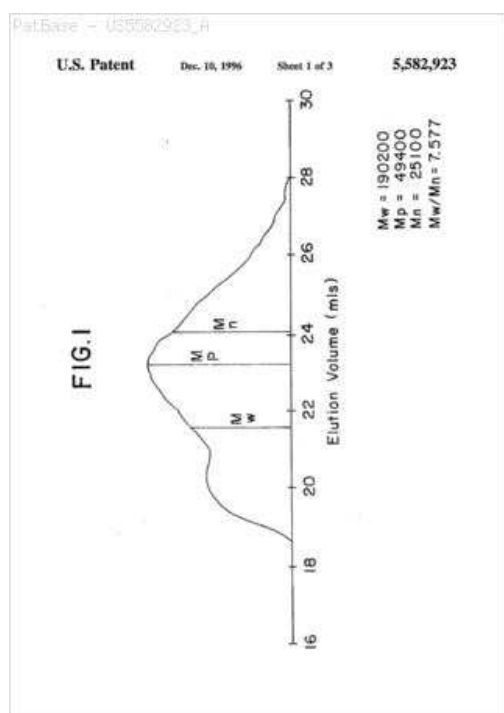
International (IPC 8-9): B29C47/00 B29C47/02 B32B27/08 B32B27/32 B32B37/15 C08F10/00 C08F10/02 C08F210/16 C08G83/00 C08J5/18 C08L23/04 C08L23/08 C08L23/16 (Advanced/Invention); C08F110/00 C08F110/02 C08F4/659 C08F4/6592 C08L23/02 C08L23/06 (Advanced/Non-invention)

International (IPC 1-7): B32B27/32 C08J5/00 C08L23/04

CPC: C08J5/18 B29K2023/06 B29K2023/0641 B29K2023/083 B29K2995/0022 B32B27/08 B32B27/32 B32B27/322 B32B37/153 C08F4/65908 C08F4/65912 C08F4/6592 C08F10/00 C08F10/02 C08F110/00 C08F110/02 C08F210/16 C08G83/003 C08J2303/08 C08J2323/04 C08J2323/08 C08L23/02 C08L23/04 C08L23/06 C08L23/0815 C08L23/16 C08L2205/02 C08L2314/06 Y10T428/31913 Y10T428/31935 Y10T428/31938 B29C48/00 B29C48/022 B29C48/06 B29C48/15

European: B29C47/00B B29C47/02 B32B27/08 B32B27/32 B32B27/32A B32B31/30 B32B37/15B C08F10/00 C08F10/02 C08F210/16 C08G83/00D1 C08J5/18 C08L23/04 C08L23/08A1 C08L23/16 L29C47/00 L29K23/06 L29K23/06B7 L29K23/08B L29K995/00E3 M08F10/02 M08F110/00 M08F110/02 M08F210/16 M08F4/6592 M08F4/659D M08F4/659K M08J303/08 M08J323/04 M08J323/08 M08L205/02 M08L23/02 M08L23/06 M08L23/08A1 M08L23/16B M08L314/06

US: 264/171.23 264/176.1 428/516 428/522 428/523 525/190 525/221 525/222 525/227 525/240



Family:

Publication number	Publication date	Application number	Application date
US5582923 A	19961210	US19940344262	19941123

Priority:

US19910776130 19911015	US19920939281 19920902	US19930055063 19930428
US19930084054 19930629	US19940327156 19941021	US19940344262 19941123

Probable Assignee: DOW CHEMICAL CO

Assignee(s): (std): DOW CHEMICAL CO

Assignee(s): THE DOW CHEMICAL COMPANY

Inventor(s): (std): BAKER SHARON L ; JAIN PRADEEP ; KALE LAWRENCE T ; KELLEY DAVID C ; MCKINNEY OSBORNE K ; PARIKH DEEPAK R

12) Family number: 31768650 (US5272236A)

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Title: ELASTIC SUBSTANTIALLY LINEAR OLEFIN POLYMERS

Abstract: Substantially linear olefin polymers having a melt flow ratio, $I_{10}/I_{2, >}=5.63$, a molecular weight distribution, M_w/M_n , defined by the equation: $M_w/M_n \leq (I_{10}/I_2) - 4.63$, and a critical shear stress at onset of gross melt fracture of greater than about 4×10^6 dyne/cm² and their method of manufacture are disclosed. The substantially linear olefin polymers preferably have at least about 0.01 long chain branches/1000 carbons and a molecular weight distribution from about 1.5 to about 2.5. The new polymers have improved processability over conventional olefin polymers and are useful in producing fabricated articles such as fibers, films, and molded parts.

Classifications:

International (IPC 8-9): B29C47/00 B29C47/02 B32B27/08 B32B27/32 C08F10/00 C08F10/02 C08F2/02 C08F210/00 C08F210/02 C08F210/16 C08F4/00 C08G83/00 C08J5/18 C08L23/04 C08L23/08 C08L23/16 C09D123/06 (Advanced/Invention); C08F110/00 C08F110/02 C08F4/659 C08F4/6592 C08L23/02 C08L23/06 (Advanced/Non-invention); B29C47/00 B29C47/02 B32B27/08 B32B27/32 C08F10/00 C08F2/02 C08F210/00 C08G83/00 C08J5/18 C08L23/00 C09D123/00 (Core/Invention); C08F110/00 C08F4/00 (Core/Non-invention)

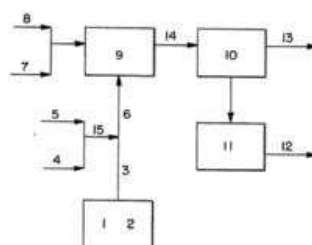
International (IPC 1-7): C08F210/08 C08F210/14

CPC: Y10S526/943 B29C65/8207 C08G83/003 B29C65/8223 B29C66/71 B29K2995/0022 B32B27/08 B32B27/322 C08F4/65908 C08F10/00 C08F10/02 C08F110/00 C08F110/02 C08F210/00 C08F210/16 C08J5/18 C08J2303/08 C08J2323/08 C08L23/02 C08L23/04 C08L23/06 C08L23/0815 C08L23/16 C08L2205/02 C08L2314/06 B29C48/00 B29C48/022 B29C48/10 B29C48/15

European: B29C47/00B B29C47/02 B32B27/08 B32B27/32A C08F10/00 C08F10/02 C08F210/00 C08F210/02 C08F210/16 C08G83/00D1 C08J5/18 C08L23/04 C08L23/08A1 C08L23/16 L29C47/00 L29C65/82B4 L29C66/71 L29K995/00E3 M08F10/02 M08F110/00 M08F110/02 M08F210/16 M08F4/659D M08J303/08 M08J323/08 M08L205/02 M08L23/02 M08L23/06 M08L23/08A1 M08L314/06

US: 502/152 526/127 526/160 526/170 526/348.2 526/348.4 526/348.5 526/348.6 526/943

FIG. 1



Family:

Publication number	Publication date	Application number	Application date
US5272236 A	19931221	US19910776130	19911015

Priority:

US19910776130 19911015 CN19931005687 19930414

Probable Assignee: DOW CHEMICAL CO

Assignee(s): (std): DOW CHEMICAL CO

Assignee(s): THE DOW CHEMICAL COMPANY

Inventor(s): (std): CHUM PAK WING S ; KNIGHT GEORGE W ; LAI SHIH YAW ; STEVENS JAMES C ; WILSON JOHN R

13) Family number: 63993685 (US2018079897A)

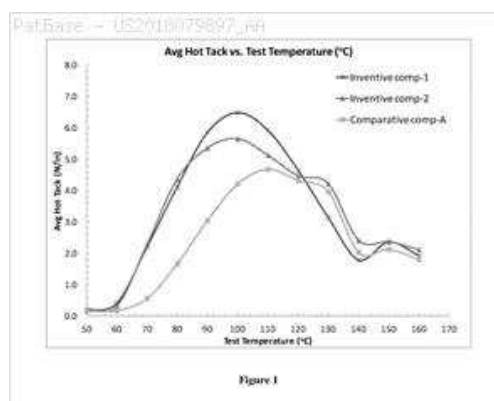
Title: RESIN COMPOSITIONS FOR EXTRUSION COATING

Abstract: Polyethylene-based compositions are provided that can be used, for example, in the formation of film layers. In one aspect, a composition comprises (a) a first linear low density polyethylene having a density of 0.900 to 0.915 g/cm³ and a melt index (I₂) of 5.0 to 25 g/10 min, wherein the linear low density polyethylene is a blend of at least two components: (i) 20-40 percent by weight of a second linear low density polyethylene, wherein the second linear low density polyethylene is a homogeneously branched ethylene/a-olefin interpolmer having a density of 0.870-0.895 g/cm³ and a melt index (I₂) of 2.0-6.0 g/10 min; and (ii) 60-80 percent by weight of a third linear low density polyethylene, wherein the density of the third linear low density polyethylene is at least 0.02 g/cm³ greater than the density of the second linear low density polyethylene and wherein the melt index (I₂) of the third linear low density polyethylene is at least twice the melt index (I₂) of the second linear low density polyethylene.

Classifications:

International (IPC 8-9): C08F210/02 C08L23/06
C08L23/08 (Advanced/Invention)

CPC: C08L23/06 C08L2207/066 C08L23/0815 C08L2203/16
C08L2205/025



Family:

Publication number	Publication date	Application number	Application date
AR104537 AA	20170726	AR2016P101291	20160506

BR112017023796 A2	20180717	BR20171123796	20160426
CN107636060 A	20180126	CN201680025541	20160426
CO20170011814 A2	20180209	CO20170011814	20171121
EP3294806 A1	20180321	EP20160721580	20160426
ID201806326 A	20180629	ID2017PID08448	20160426
IN201717041530 A	20180126	IN201717041530	20171120
JP2018514632 T2	20180607	JP20170558525T	20160426
MX2017014115 A1	20180316	MX20170014115	20160426
US2018079897 AA	20180322	US20160564149	20160426
WO16182727 A1	20161117	WO2016US29344	20160426

Priority:

US20150160867P 20150513 US20160564149 20160426 WO2016US29344 20160426

Probable Assignee: DOW GLOBAL TECHNOLOGIES LLC

Assignee(s): (std): DOW GLOBAL TECH LLC ; DOW GLOBAL TECHNOLOGIES INC ; DOW GLOBAL TECHNOLOGIES LLC

Inventor(s): (std): DEMIRORS MEHMET ; DEMRORS MEHMET ; GINGER DOUGLAS S ; DOUGLAS S GINGER ; JIAN WANG ; GNGER DOUGLAS S ; WANG JIAN ; MEHMET DEMIRORS ; WANG JAN

Agent(s): ANDRES RINCON USCATEGUI; BOULT WADE TENNANT; MAROLITA SETIATI; KOBAYASHI HIROSHI; KATAYAMA EIJI; OHMORI NORIO; LINK J JASON

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

14) Family number: 10725732 (US5733155A)

© PatBase

Title: Female contact

Abstract: The object of the present invention is to provide a female contact in which plastic deformation of a spring contact member is prevented. A front wall 30 which faces in the direction of engagement is formed by being bent from a front end of an upper wall 16 of a female contact 10. An insertion opening 32 into which the male contact 40 is inserted is formed in front wall 30. Furthermore, a guide plate 34 is provided to guide the male contact 40 into engagement with spring contact member 28 and to protect member 28 from being deformed.

Classifications:

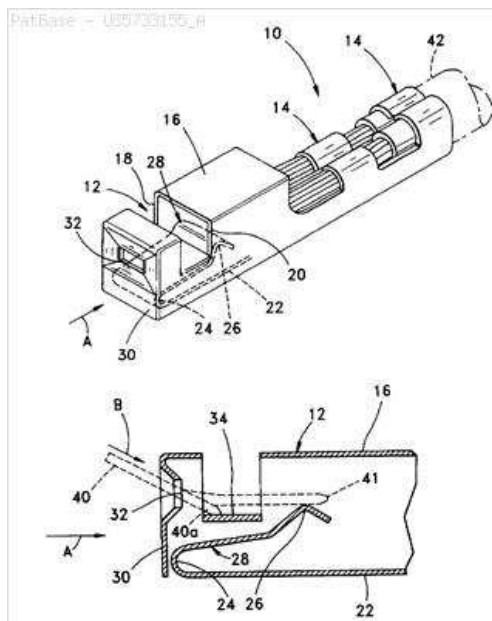
International (IPC 8-9): H01R13/11 H01R13/115 (Advanced/Invention);
H01R13/11 H01R13/115 (Core/Invention)

International (IPC 1-7): H01R13/11

CPC: H01R13/113

European: H01R13/115E H01R13/11E

US: 439/852



Family:

Publication number	Publication date	Application number	Application date
DE19626804 A1	19970130	DE19961026804	19960703
JP3258534 B2	20020218	JP19950193794	19950728
JP9045401 A2	19970214	JP19950193794	19950728
US5733155 A	19980331	US19960659611	19960606

Priority:

JP19950193794 19950728

Probable Assignee: AMP JAPAN

Assignee(s): (std): AMP JAPAN ; WHITAKER CORP

Assignee(s): WHITAKER CORP WILMINGTON DEL US ; AMP JAPAN LTD ; AMP LTD

Inventor(s): (std): SAGAWA TETSUYA

Inventor(s): SAGAWA TETSUYA YAMATO KANAGAWA JP

Agent(s): YAMADA MASAKI; KOSUGI YOSHIO

15) Family number: 34574739 (US4599392A)

© PatBase

Title: Interpolymers of ethylene and unsaturated carboxylic acids

Abstract: Homogeneous, random interpolymers of ethylene and lesser amounts by weight of olefinically-unsaturated comonomers are prepared in a substantially constant environment, substantially steady-state reaction mixture, in a well-stirred autoclave reactor, in continuous single-phase operation, using elevated synthesis conditions wherein the temperature and pressure are elevated to an amount high enough to approach, reach, or surpass the molecular weight distribution boundary.

Classifications:

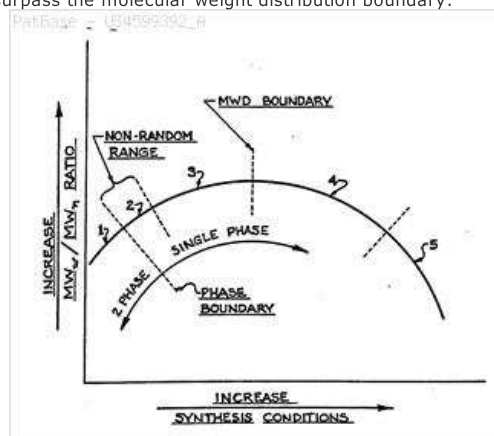
International (IPC 8-9): B29C47/00 C08F10/00 C08F2/00 C08F2/02 C08F20/04 C08F210/00 C08F210/02 C08F210/16 C08F220/04 C08F220/06 C08F4/28 C08J5/18 (Advanced/Invention); B29C47/00 B29K23/00 B29L7/00 C08F10/00 C08F2/00 C08F2/02 C08F210/00 C08J5/18 (Advanced/Non-invention); B29C47/00 C08F10/00 C08F2/00 C08F2/02 C08F20/00 C08F210/00 C08F220/00 C08F4/00 C08J5/18 (Core/Invention)

International (IPC 1-7): B29C47/00 B29K23/00 B29L7/00 C08F120/06 C08F2/00 C08F2/02 C08F20/04 C08F20/06 C08F210/02 C08F220/06 C08F220/06 C08F4/28 C08J5/18

CPC: C08F210/02

European: C08F210/02

US: 526/318.6 526/329 526/331



Family:

Publication number	Publication date	Application number	Application date
AU198430656 A1	19850104	AU19840030656	19840612
AU557828 B2	19870108	AU19840030656	19840612
CA1273745 A1	19900904	CA19840456439	19840613
DE0146620 T1	19880519	DE19840902562T	19840612
DE3486025 D1	19930211	DE19843486025	19840612
DE3486025 T2	19930429	DE19843486025T	19840612
DE3486025 T3	20070412	DE19843486025T	19840612
EP0146620 A1	19850703	EP19840902562	19840612
EP0146620 A4	19850926	EP19840902562	19840612
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EP0146620 B2	20060405	EP19840902562	19840612
EP0318058 A2	19890531	EP19880120911	19840612
EP0318058 A3	19910515	EP19880120911	19840612
JP2026073 C3	19960226	JP19840502507	19840612
JP2103115 A2	19900416	JP19890096563	19890418
JP2136088 C3	19980501	JP19900069877	19900322
JP3015923 B4	19910304	JP19840502507	19840612
JP3170510 A2	19910724	JP19900069877	19900322
JP5310846 A2	19931122	JP19920241126	19920728
JP60501563 T2	19850919	JP19840502507T	19840612
JP7012636 B4	19950215	JP19890096563	19890418
JP7086129 B4	19950920	JP19900069877	19900322
JP8000847 B4	19960110	JP19920241126	19920728
US4599392 A	19860708	US19830504032	19830613
WO8404926 A1	19841220	WO1984US00914	19840612

Priority:

US19830504032 19830613 EP19840902562P 19840612 JP19840502507 19840612
EP19880120911 19840612 EP19880120911 19840612 WO1984US00914 19840612
CA19840456439 19840613

Probable Assignee: DIAMOND TECHNOLOGY PARTNERSHIP CO

Assignee(s): (std): DOW CHEMICAL CO

Assignee(s): THE DOW CHEMICAL CO ; THE DOW CHEMICAL COMPANY ; DOW CHEMICAL CO THE ; DOW CHEMICAL COMPANY THE ; THE DOW CHEMICAL CO MIDLAND MICH US ; EVERS DYK DAVID A ; FLORES DAVID P ; MCKINNEY OSBORNE K ; CHEMTECH ROYALTY ASSOCIATES LP ; DIAMOND TECHNOLOGY PARTNERSHIP CO ; DOW CHEM CO ; DOW CHEM CO THE

Inventor(s): (std): DABITSUDO EI EBAASUDAIKU ; DABITSUDO PII FUROASU ; EBAASUDAIKU DABITSUDO EI ; EVERS DYK A ; EVERS DYK DAVID A ; FLORES DAVID P ; FLORES P ; FUAOSU DABITSUDO PII ; FUROASU DABITSUDO PII ; MATSUKINEE OSUBOON KEI ; MCKINNEY K ; MCKINNEY O K EVERS DYK D A FLOR ; MCKINNEY OSBORNE K ; OSUBOON KEI MATSUKINEE

Inventor(s): MCKINNEY O K EVERS DYK D A FLORES D P ; MCKINNEY OK EVERS DYK DA FLORES DP

Agent(s): PHILLIPS ORMONDE FITZPATRICK; SMART AND BIGGAR

Designated states: AU BE DE FR GB JP NL SE

Title: ELASTIC SUBSTANTIALLY LINEAR OLEFIN POLYMERS

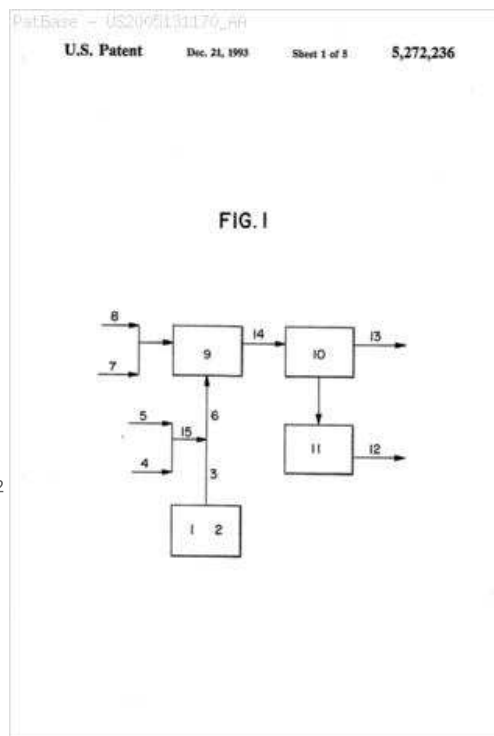
Abstract: Substantially linear olefin polymers having a melt flow ratio, I_{10}/I_2 , greater than or equal to 5.63, a molecular weight distribution, M_w/M_n , defined by the equation: M_w/M_n less than or equal to $(I_{10}/I_2)-4.63$, and a critical shear stress at onset of gross melt fracture of greater than about 4×10^6 dyne/cm² and their method of manufacture are disclosed. The substantially linear olefin polymers preferably have at least about 0.01 long chain branches/1000 carbons and a molecular weight distribution from about 1.5 to about 2.5. The new polymers have improved processability over conventional olefin polymers and are useful in producing fabricated articles such as fibers, films, and molded parts.

Classifications:

International (IPC 8-9): B29C47/00 B29C47/02 B32B27/08 B32B27/32 C08F10/00 C08F10/02 C08F110/00 C08F110/02 C08F2/02 C08F210/00 C08F210/02 C08F210/16 C08F210/18 C08F238/02 C08F4/00 C08F4/42 C08F4/60 C08F4/605 C08F4/622 C08F4/64 C08F4/642 C08F4/643 C08F4/656 C08F4/6592 C08G83/00 C08J5/00 C08J5/18 C08J9/06 C08L23/00 C08L23/02 C08L23/04 C08L23/06 C08L23/08 C08L23/16 C09D123/06 D01F6/04 D01F8/06 D04H1/42 D21H19/20 (Advanced/Invention); C08F10/00 C08F110/00 C08F110/02 C08F4/602 C08F4/659 C08F4/6592 C08L23/02 C08L23/06 (Advanced/Non-invention); B29C47/00 B29C47/02 B32B27/08 B32B27/32 C08F10/00 C08F2/02 C08F210/00 C08G83/00 C08J5/18 C08L23/00 C09D123/00 (Core/Invention); C08F110/00 C08F4/00 (Core/Non-invention)

International (IPC 1-7): B29D7/01 C08F10/00 C08F10/02 C08F10/04 C08F2/02 C08F210/02 C08F210/14 C08F4/00 C08F4/602 C08F4/605 C08F4/622 C08F4/64 C08F4/642 C08F4/656 C08F4/76 C08F46/42 C08J5/00 C08J5/18 C08L23/00 C08L23/02 C08L23/04 C08L23/06 C08L51/00 C09D123/06 D01F6/04 D01F8/06 D04H1/42 D21H19/20
CPC: Y10S526/943 B29C65/8207 B29C65/8223 B29C66/71 C08F210/00 C08G83/003 B29K2995/0022 B32B27/08 B32B27/32 C08F4/65908 C08F4/65912 C08F4/6592 C08F10/00 C08F10/02 C08F110/00 C08F110/02 C08F210/16 C08J5/18 C08J2303/08 C08J2323/08 C08L23/02 C08L23/04 C08L23/06 C08L23/0815 C08L23/16 C08L2205/02 C08L2314/06 Y10T428/2913 Y10T442/30 Y10T442/60 B29C48/00 B29C48/022 B29C48/03 B29C48/15 B29C48/10 B29C48/05 B29C48/08
European: B29C47/00B B29C47/02 B32B27/08 B32B27/32A C08F10/00 C08F10/02 C08F110/02 C08F210/00 C08F210/02 C08F210/16 C08G83/00D1 C08J5/18 C08L23/04 C08L23/08A1 C08L23/16 L29C47/00 L29C65/82B4 L29C66/71 L29K995/00E3 M08F10/02 M08F110/00 M08F110/02 M08F210/16 M08F4/6592 M08F4/659D M08F4/659K M08J303/08 M08J323/08 M08L205/02 M08L23/02 M08L23/06 M08L23/08A1 M08L314/06

US: 526/126 526/126P 526/170 526/170S 526/348 526/348.1 526/348.2 526/348.3 526/348.4 526/348.5 526/348.6 526/348.7 526/348S 526/901 526/901S 526/943

**Family:**

Publication number	Publication date	Application number	Application date
CA2120766 AA	19940407	CA19922120766	19921015
CA2120766 C	20080708	CA19922120766	19921015
CN1078214 C	20020123	CN19931005687	19930414
CN1093716 A	19941019	CN19931005687	19930414
DE69220077 D1	19970703	DE19926020077	19921015
DE69220077 T2	19971120	DE19926020077T	19921015
DE69228265 D1	19990304	DE19926028265	19921015
DE69228265 T2	19990602	DE19926028265T	19921015
DE9219090 U1	19971106	DE19920019090U	19921015
DE9219173 U1	19990506	DE19920019173U	19921015
EP0608369 A1	19940803	EP19920922757	19921015
EP0608369 B1	19970528	EP19920922757	19921015
ES2103976 T3	19971001	ES19920922757T	19921015
ES2127030 T3	19990401	ES19970200460T	19921015
FI112663 B	20031231	FI19940001727	19940414
FI20030362 A	20030311	FI20030000362	20030311
FI941727 A	19940531	FI19940001727	19940414
FI941727 A0	19940414	FI19940001727	19940414
JP2963199 B2	19991012	JP19920507805T	19921015
JP7500622 T2	19950119	JP19920507805T	19921015
KR100262024 B1	20000715	KR19940701216	19940414
KR100263803 B1	20000816	KR19990710981	19991125
KR19940702889 A	19940917	KR19940701216	19940414
TW448186 B	20010801	TW19930104864	19930412
US2005131170 AA	20050616	US20050048575	20050201
US5278272 A	19940111	US19920939281	19920902
WO9308221 A2	19930429	WO1992US08812	19921015
WO9308221 A3	19930805	WO1992US08812	19921015

Priority:

US19910006130	19911015	US19910776130	19911015	US19920939281	19920902
WO1992US08812	19921015	US19930044426	19930407	CN19931005687	19930414
KR19940701216	19940414	US19950370051	19950109	US19950433784	19950503

US19960606633 19960226 US19960730766 19961016 US19970925827 19970905
US20010884261 20010619 US20020270212 20021011 US20030727970 20031204
US20050048575 20050201

Probable Assignee: DOW CHEMICAL CO

Assignee(s): (std): DOW CHEMICAL CO ; STEVENS JAMES C ; THE DOW CHEMICAL COMPANY

Assignee(s): THE DOW CHEMICAL CO MIDLAND MICH US ; THE DOW CHEMICAL CO ; LAI SHIH YAW ; WILSON JOHN R ; KNIGHT GEORGE W ; KNIGHT GEORGES W ; CHUM PAK WING S ; CHUM PAK WING STEVE ; DAU CHEM CO ZA

Inventor(s): (std): CHUM PAK WING S ; KNIGHT GEORGE W ; LAI S Y ; SHIH YAW LAI ; WILSON J R ; WILSON JOHN R ; WILSON JOHN ; UIRUSON JON AARU ; SUCHIIBUNSU JEIMUZU SHII ; STEVENS JAMES ; RAI SHI YAU ; NAITO JOOJI DABURYUU ; LAI SHIH YAW ; KNIGHT GEORGES ; CHUM PAK WINGSTEVE ; CHUM PAK WING STEVE ; STEVENS JAMES C ; STEVECHUM PARK WING ; LAI SHI YAW ; KNIGHT GEORGES W ; KNIGHT G W

Inventor(s): KNIGHT GEORGE ; CHUM PAK WING ; JOHN R WILSON ; GEORGE W KNIGHT ; LAI SHIH YAW SUGAR LAND TX 77479 US ; LAI SHIH YAW SUGAR LAND TEXAS 77479 US ; S Y LAI ; DOW CHEMICAL CO ; G W KNIGHT ; GW KNIGHT ; J R WILSON ; JR WILSON

Agent(s): SMART AND BIGGAR ; WHYTE HIRSCHBOECK DUDEK SC

Designated states: AT BE CA CH DE DK ES FI FR GB GR IE IT JP KR LU MC NL SE US

17) Family number: 11354881 (US5693488A)

© PatBase

Title: Transmembrane tyrosine phosphatase, nucleic acids encoding the same, and methods of use thereof

Abstract: The present invention relates to regulation and control of cellular processes by transmembrane protein tyrosine phosphatases, and to ligands that agonize or antagonize tyrosine phosphorylation mediated by such tyrosine phosphatases. This invention further relates to diagnosis and therapy based on the activity of such ligands. In particular, the invention provides a novel transmembrane protein tyrosine phosphatase- lambda (PTP lambda), nucleic acids encoding the same, antibodies to the PTP lambda, and methods for identifying ligands to the PTP lambda of the invention. A specific Example describes the isolation and characterization of the first chicken transmembrane PTP, called ChPTP lambda. It has a unique extracellular domain containing a Ser/Thr/Pro-rich region, spectrin-like repeats, a fibronectin III domain, and an alternatively spliced N-terminus. The expression of ChPTP lambda in various tissues and cells was also examined. ChPTP lambda was shown to have a tyrosine-specific phosphatase activity, and the basic characteristics of this enzyme were studied.

Classifications:

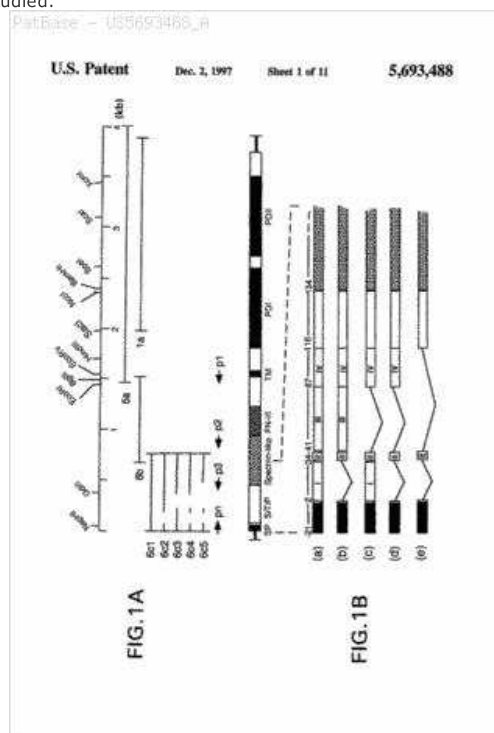
International (IPC 8-9): C12N9/16 (Advanced/Invention); A61K38/00 A61K48/00 (Advanced/Non-invention)

International (IPC 1-7): C07K14/00 C07K14/705 C12N15/09 C12N9/16

CPC: C12N9/16 A61K38/00 A61K48/00

European: C12N9/16 K61K38/00 K61K48/00 M12N203/00 M12N203/02 M12N207/00 M12N215/00

US: 435/196 435/240.2 435/252.3 435/320.1 435/325 435/348 435/365 435/69.1 435/691 530/300 530/326 536/23.2 536/232 536/24.3 536/243



Family:

Publication number	Publication date	Application number	Application date
US5693488 A	19971202	US19940241853	19940512
US5854045 A	19981229	US19970850917	19970502

Priority:

US19940241853 19940512 US19970850917 19970502

Probable Assignee: ROCKEFELLER UNIV

Assignee(s): (std): UNIV ROCKEFELLER

Assignee(s): NATIONAL INST ; NATIONAL INSTITUTES OF HEALTH ; ROCKEFELLER UNIV ; THE ROCKEFELLER UNIVERSITY

Inventor(s): (std): FANG KATHY S ; HANAFUSA HIDESABURO