

Search history

Search step	Result(s)	Query
13	1	12 AND 11
12	1072	(DEEP 1D DRAWABLE)/AB/CLMS/ICLM/TI/TX
11	200	10 AND 9
10	4669	((BLEND OR MIX+)/AB/CLMS/ICLM/TI/TX AND (POLYAMIDE)/TI/AB/CLMS/DESC/ODES/ICLM/TX AND (AMORPHOUS 1D POLYAMIDE)/TI/AB/CLMS/DESC/ODES/OBJ/ADB/ICLM/KEYW/TX)
9	3207	7 AND 8
8	96488	((LUPOLEN OR ((LOW 1D DENSITY) 1D POLYETHYLENE) OR LDPE)/AB/CLMS/ICLM/TI/TX AND (AFFINITY OR ((LINEAR 1D LOW-DENSITY) 1D POLYETHYLENE) OR LLDPE)/TI/AB/CLMS/DESC/ODES/ICLM/TX)
7	5483	4 AND (5 OR 6)
6	13201	(SURLYN)/AB/CLMS/ICLM/TI/TX
5	23490	(((((ETHYLENE-METHACRYLIC) 1D ACID) 1D COPOLYMER)))/AB/CLMS/ICLM/TI/TX
4	94923	2 AND 3
3	50033140	PD<20150903
2	126009	..SIMILARITY SS 1 RANKED 1
1	1	(2016WO-EP68204)/AP

10 Documents

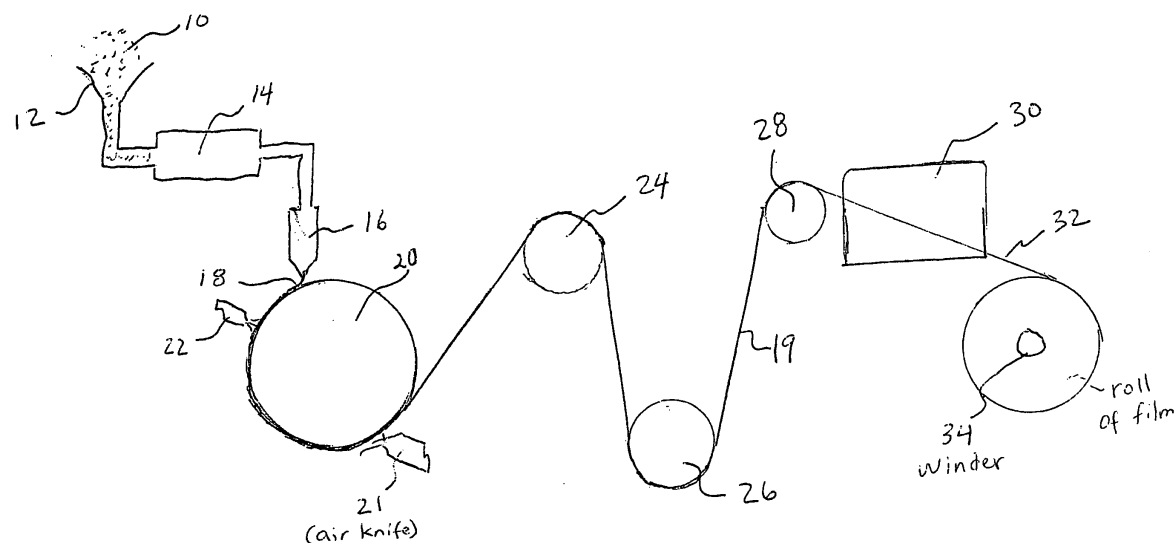
Publication numbers	Title	Current assignees
US20060210743 A1	Abuse-resistant retortable packaging film having oxygen barrier layer containing blend of amorphous polyamide and semicrystalline polyamide	SEALED AIR
WO9956951 A1	Multiple layer film with amorphous polyamide layer	SEALED AIR
WO201183707 A1	Heat-shrinkable multi-layer film for deep-draw forming, and process for production thereof	KUREHA
DE102013001263 A1	Planar composite having layers of plastic from plastics with different damping properties, having a layer comprising lldpe	SIG TECHNOLOGY
JP2010047354W A1	Multilayer stretched polyamide film	GUNZE, ...
WO200619092 A1	Stretched polyamide film	MITSUBISHI GAS CHEMICAL
US20040013862 A1	Multilayer film comprising an amorphous polymer	SEALED AIR
FI9400998 A0	Easy deep drawable multilayered film comprising polyamide with improved piercing resistance	DOW WOLFF CELLULOSICS
EP-620244 A1	Biaxially stretched film for food packaging	KUREHA
US20080182053 A1	Shrink film containing semi-crystalline polyamide, articles made therefrom, and process for making and using same	SEALED AIR

Family 1/10 - FAMPAT - ©Questel

Title

(EP1861248)

Abuse-resistant retortable packaging film having oxygen barrier layer containing blend of **amorphous polyamide** and semicrystalline polyamide

Images**Publication data including kind & date**

US20060210743	A1	2006-09-21	US20060210743
WO2006101969	A2	2006-09-28	WO2006101969
CA2600522	A1	2006-09-28	CA2600522
AU2006227620	A1	2006-09-28	AU2006227620
WO2006101969	A3	2006-12-28	WO2006101969
IN7665/DELNP/2007	A	2007-11-02	IN2007DN07665
EP1861248	A2	2007-12-05	EP1861248
RU2007138491	A	2009-04-27	RU2007138491
BRPI0606286	A2	2009-06-09	BR200606286
NZ561362	A	2011-06-30	NZ-561362
AU2006227620	B2	2011-06-30	AU2006227620
RU2429976	C2	2011-09-27	RU2429976
CA2600522	C	2012-07-17	CA2600522

**Abstract**

(EP1861248)

A retortable multilayer packaging film has a crosslinked first outer layer which serves as a seal layer and product-contact layer, and a crosslinked O₂-barrier layer. The O₂-barrier layer comprises a blend of (i) from 50 to 95 weight percent, based on blend weight, of an **amorphous polyamide** with a glass transition temperature of from about 80°C to about 200°C, and (ii) a semi-crystalline polyamide. The semi-crystalline polyamide comprises at least one member selected from the group consisting of: (a) from 5 to 50 percent, based on blend weight, of PA-MXD,6/MXD,I; and (b) from 5 to 15 percent, based on blend weight, of a nucleated or non-nucleated polyamide having a viscosity number of 150 millimeters per gram to 185 millimeters per gram as measured in accordance with ISO Test Method 307. The invention also pertains to packaging articles made from the film, packaged products utilizing the film in the package, and a packaging process utilizing the film.

Family 2/10 - FAMPAT - ©Questel

Title

Multiple layer film with amorphous polyamide layer

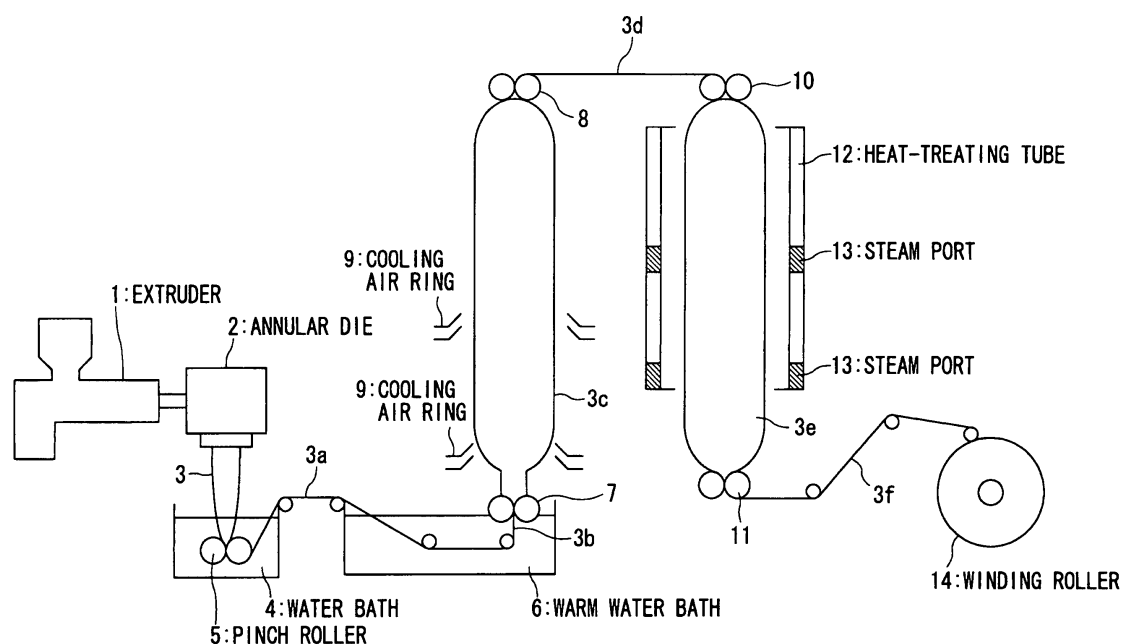
WO9956951	A1	1999-11-11	WO9956951
AU3878899	A	1999-11-23	AU9938788
US20010010846	A1	2001-08-02	US20010010846
US6500559	B2	2002-12-31	US6500559
US20030148123	A1	2003-08-07	US20030148123
US6858313	B2	2005-02-22	US6858313



A film includes a core layer (27) having an **amorphous polyamide**; two intermediate layers (26, 28), disposed on opposite surfaces of the core layer, including a semicrystalline polyamide; two adhesive layers (22, 23), each disposed on a surface of the respective intermediate layer, including a polymeric adhesive; and two outer layers (24, 25), each disposed on a surface of a respective adhesive layer, including an ethylene/alpha olefin copolymer, propylene homopolymer, or propylene/alpha olefin copolymer. The film can alternatively have a core layer including a polymeric adhesive, and two intermediate layers each having an **amorphous polyamide**. A method of packaging a product using these films, and a package, are also disclosed.

Heat-shrinkable multi-layer film for deep-draw forming, and process for production thereof

Images



Publication data including kind & date

WO2011083707	A1	2011-07-14	WO201183707
AU2010340544	A1	2012-07-26	AU2010340544
EP2521651	A1	2012-11-14	EP2521651
CN102781666	A	2012-11-14	CN102781666
JP2013516338	A	2013-05-13	JP2013516338
US20130136906	A1	2013-05-30	US20130136906
AU2010340544	B2	2013-12-05	AU2010340544
NZ601038	A	2013-12-20	NZ-601038
JP5602861	B2	2014-08-29	JP5602861
CN102781666	B	2014-10-22	CN102781666B
US9352395	B2	2016-05-31	US9352395
EP2521651	B1	2018-03-14	EP2521651

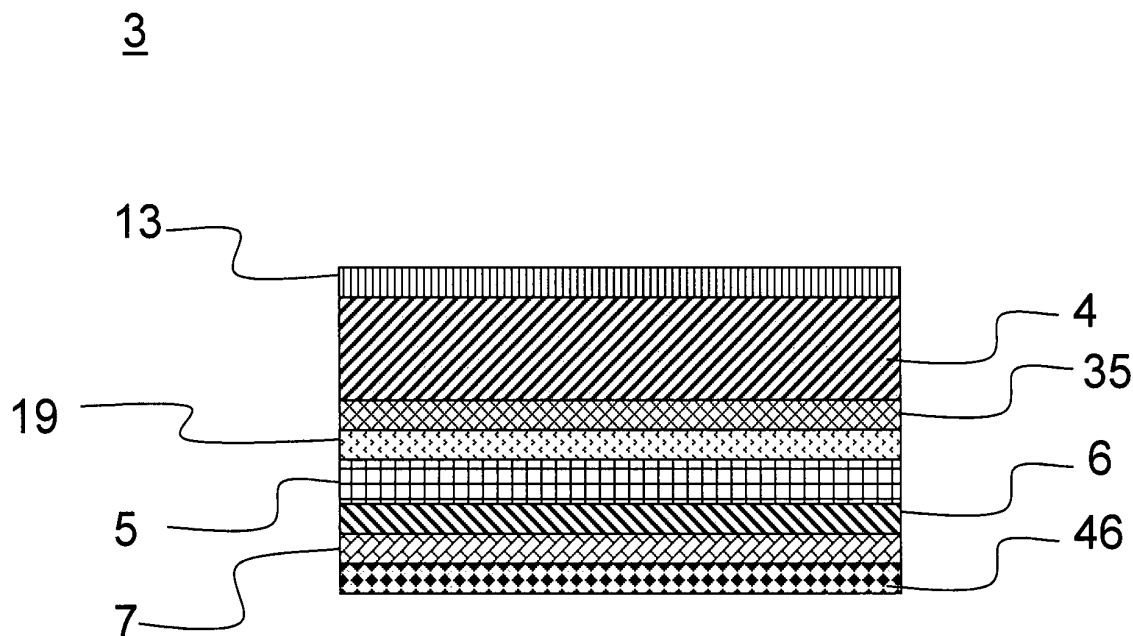


Abstract

(EP2521651)

A polyamide resin-based heat-shrinkable multilayer film having excellent heat shrinkability and strength, as well as a high degree of deep A polyamide resin-based heat-shrinkable multilayer film having excellent heat shrinkability and strength, as well as a high degree of deep drawability as represented a shorter side-basis draw ratio (D/L) in excess of 0.6 between a maximum draw depth (D) and a shorter side length (L) of a mold opening is provided. The multilayer film is characterized by including a surface layer (a) comprising a thermoplastic resin, an intermediate layer (b) comprising a polyamide resin, and a surface layer (c) comprising a sealable resin, wherein (A) the intermediate layer (b) comprises a mixture of an aliphatic polyamide having a melting point of at least 180°C, and an **amorphous** aromatic **polyamide** comprising a polycondensation product of an aliphatic diamine with isophthalic acid and terephthalic acid as main acid components, including 25-45 wt.% of the **amorphous** aromatic **polyamide**, and has a thickness exceeding 25% and at most 50 % of a total thickness of whole layers, and exhibiting: (B) tensile stresses at an elongation of 100% as measured in a tensile test at 100°C, including 3 - 22 N in at least one of a longitudinal direction (MD) and a transverse direction (TD) and an average of MD and TD values of 3-20N, and (C) a shrinkage in hot water at 90°C of 3 to 20% in each of MD and TD. The film is produced through a process of strictly controlling biaxial stretching ratios and heat-relaxation ratios.

(EP2948300)

Planar composite having layers of plastic from plastics with different damping properties, having a layer comprising **lldpe****Images****Publication data including kind & date**

DE102013001263	A1	2014-07-31	DE102013001263
WO2014114460	A1	2014-07-31	WO2014114460
AU2014210176	A1	2015-07-23	AU2014210176
BR112015017637	A1	2015-08-04	BR112015017637
VN44676	A	2015-11-25	VN--44676
EP2948300	A1	2015-12-02	EP2948300
US20150352820	A1	2015-12-10	US20150352820
MX2015009508	A	2016-03-04	MX2015009508
CN105473327	A	2016-04-06	CN105473327
IN6085/DELNP/2015	A	2016-05-27	IN2015DN06085
RU2015127669	A	2017-03-03	RU2015127669
BR112015017637	A2	2017-07-11	BR112015017637

**Abstract**

(EP2948300)

The present invention relates generally to a planar composite comprising as a layer sequence: i. a carrier layer; ii. a barrier layer; wherein the layer sequence comprises a first blend layer; wherein the first blend layer comprises an **LLDPE**; wherein the first blend layer comprises the **LLDPE** in a range of from 10 wt.% to 99.9 wt.%, based on the blend layer; and wherein the first blend layer has a damping factor difference in a range of from -0.3 to -0.6. The present invention furthermore relates to a process for the production of the planar composite, a container which surrounds an interior and comprises at least one such planar composite, and a process for the production of this container, which comprises the steps of provision of the planar composite of the abovementioned layer construction, folding, joining and optionally filling and closing of the container obtained in this way.

Family 5/10 - FAMPAT - ©Questel

Title

(EP2340934)

Multilayer stretched polyamide film

Images

[Math. 1]

$$\text{Graft rate (wt \%)} = 100 \times \frac{\frac{C \times 98}{3}}{\frac{A \times 148}{4} + \frac{B \times 72}{4} + \frac{C \times 98}{3}} \quad (1)$$

Publication data including kind & date

JPWO2010047354	A1	2010-04-29	JP2010047354W				
WO2010047354	A1	2010-04-29	WO201047354				
EP2340934	A1	2011-07-06	EP2340934				
US20110200770	A1	2011-08-18	US20110200770				
CN102196910	A	2011-09-21	CN102196910				
EP2340934	A4	2012-02-01	EP2340934				
EP2340934	B1	2013-03-06	EP2340934				
JP5468010	B2	2014-02-07	JP5468010				
CN102196910	B	2014-11-12	CN102196910B				
US8999466	B2	2015-04-07	US8999466				

Abstract

(EP2340934)

An object of the present invention is to provide a multilayer stretched polyamide-based film having excellent bending resistance, thermal dimensional stability and aroma retention, whose lamination strength is measureable when a sealing layer is laminated thereon. Specifically, the invention provides a multilayer stretched polyamide-based film obtained by biaxially stretching a multilayer laminate including three layers consisting of a polyester layer (Layer A), an adhesive layer (Layer B), and a polyamide layer (Layer C), wherein Layer A contains a crystalline polyester, Layer B contains a modified polyester-based elastomer, Layer C contains an aliphatic polyamide, and Layer C has a thickness of 5 μm or more, and wherein a sealing layer is to be laminated on Layer C by a lamination method, after biaxially stretching the multilayer laminate.

Family 6/10 - FAMPAT - ©Questel

Title

(EP1792933)

Stretched polyamide film

Images

$$\text{Relative Viscosity} = t/t_0$$

Publication data including kind & date

WO2006019092	A1	2006-02-23	WO200619092				
CA2577707	A1	2006-02-23	CA2577707				
JP2006083375	A	2006-03-30	JP2006083375				
KR20070051276	A	2007-05-17	KR20070051276				
EP1792933	A1	2007-06-06	EP1792933				
CN101006121	A	2007-07-25	CN101006121				
EP1792933	A4	2008-12-17	EP1792933				

US20090023002	A1	2009-01-22	US20090023002
JP4770324	B2	2011-07-01	JP4770324
EP1792933	B1	2012-12-05	EP1792933
KR101229154	B1	2013-02-01	KR101229154

**Abstract**

(EP1792933)

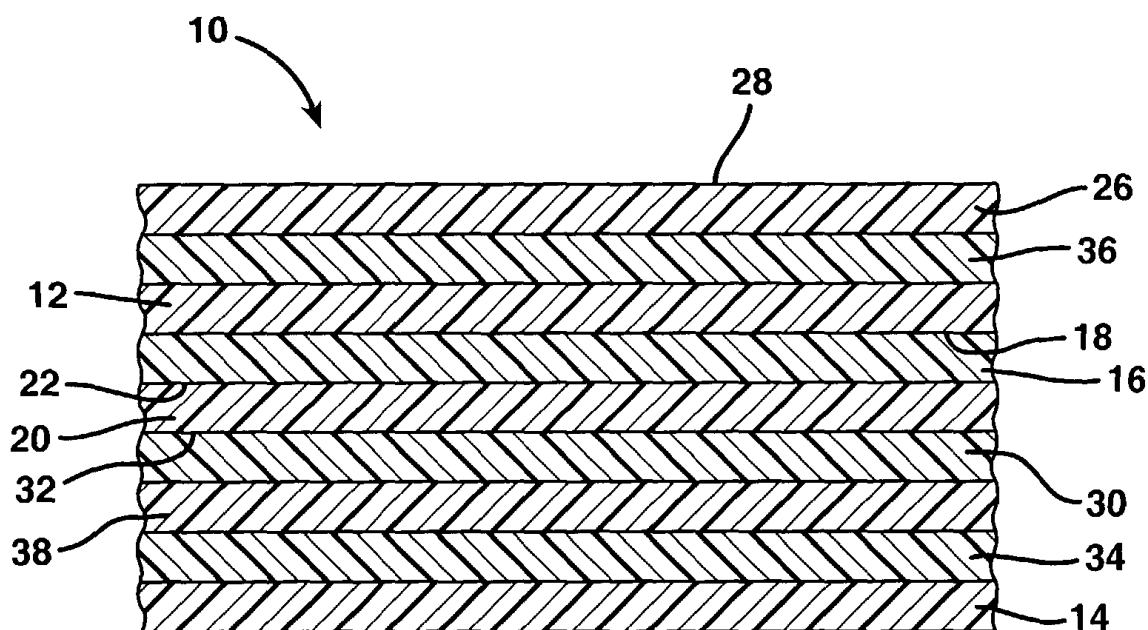
A stretched film made of a resin mixture of a polyamide resin X with an amorous polyamide resin Y and/or an ionomer resin Z. The polyamide resin X includes a diamine constitutional unit containing 70 mol % or more of m-xylylene diamine unit and a dicarboxylic acid constitutional unit containing 70 mol % or more of C 6 -C 12 $\pm$,É-aliphatic dicarboxylic acid unit. A film produced by melt-extruding the resin mixture can be stretched in a high ratio exceeding 4 times in at least one direction of MD and TD. The highly stretched film produced by the stretching in a ratio exceeding 4 times exhibits good gas-barrier properties and transparency.

Family 7/10 - FAMPAT - ©Questel

Title

(EP1525092)

Multilayer film comprising an amorphous polymer

Images**FIG. 1****Publication data including kind & date**

US20040013862	A1	2004-01-22	US20040013862
WO2004009353	A2	2004-01-29	WO200409353
CA2493387	A1	2004-01-29	CA2493387
AU2003261184	A1	2004-02-09	AU2003261184
WO2004009353	A3	2004-04-08	WO200409353
EP1525092	A2	2005-04-27	EP1525092
US6984442	B2	2006-01-10	US6984442
NZ537506	A	2006-01-27	NZ-537506
EP1525092	B1	2007-05-23	EP1525092
AT362841	T	2007-06-15	ATE362841



[DE60313974](#)

D1 2007-07-05 DE60313974

[CA2493387](#)

C 2008-04-22 CA2493387

**Abstract**

(EP1525092)

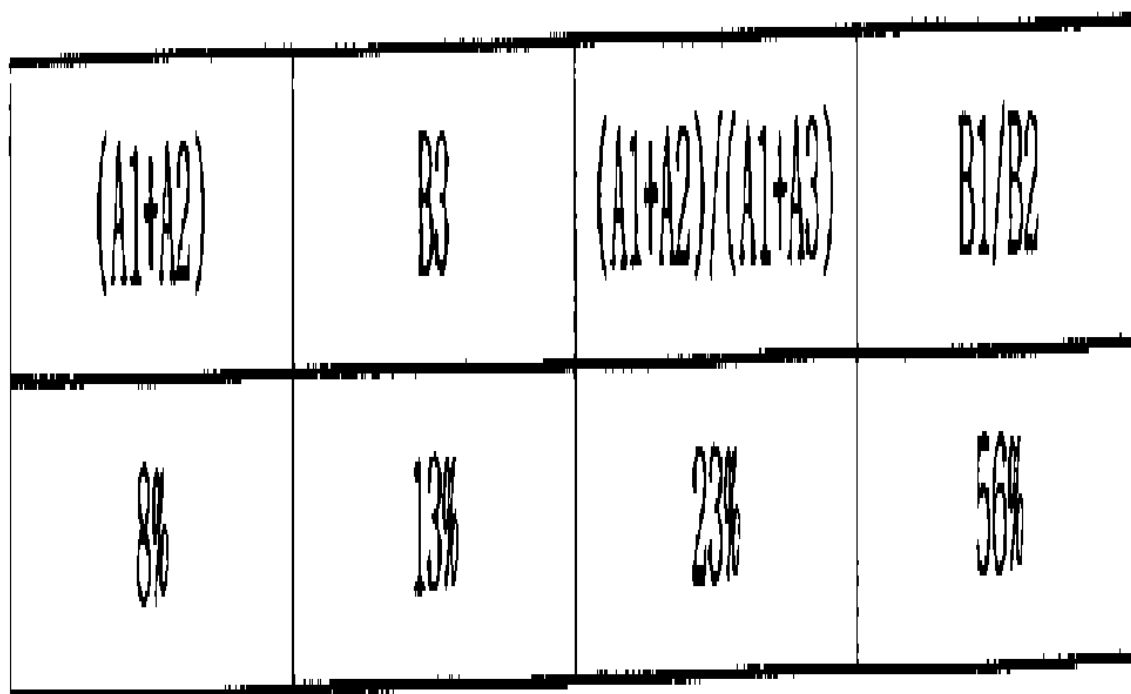
A multilayer film includes a first layer comprising an amorphous polymer that exhibits a glass transition temperature, and a second layer forming an exterior layer of the multilayer film and comprising a sealant material capable of forming a heat-seal, the sealant material comprising a polymer that exhibits a melting point. The glass transition temperature of the amorphous polymer is greater than the melting point of the sealant material by at least about 45 degrees centigrade.

Family 8/10 - FAMPAT - ©Questel

Title

(EP-613774)

Easy deep drawable multilayered film comprising polyamide with improved piercing resistance

Images**Publication data including kind & date**[FI940998](#)

A0 1994-03-02 FI9400998

[FI940998](#)

A 1994-09-05 FI9400998

[EP0613774](#)

A1 1994-09-07 EP-613774

[DE4306716](#)

A1 1994-09-08 DE4306716

[JPH06286084](#)

A 1994-10-11 JP06286084

[KR19940021253](#)

A 1994-10-17 KR19940021253

[EP0613774](#)

B1 1997-05-02 EP-613774

[AT152397](#)

T 1997-05-15 ATE152397

[DE59402572](#)

D1 1997-06-05 DE59402572

[ES2100587](#)

T3 1997-06-16 ES2100587

[DK0613774](#)

T3 1997-11-03 DK-613774T

[KR100304329](#)

B1 2001-11-22 KR100304329



FI112186

B 2003-11-14 FI-112186

Abstract

(EP-613774)

The invention relates to a multilayer, readily thermoformable film, having the sequence arrangement ABCD, in particular for packaging objects with sharp edges, where - the sequence A comprises at least one copolyamide based on caprolactam and/or a mixture of an aliphatic polyamide with copolyamide based on caprolactam, and/or **amorphous polyamide**, - the sequence B contains at least one layer of olefinic (co)polymers, - the sequence C contains at least one layer of copolyamide based on caprolactam and/or a mixture of an aliphatic polyamide with a copolyamide based on caprolactam, and/or an aromatic polyamide, and the C:A thickness ratio is from 1.5 to 4, - the sequence D contains at least one layer of olefinic (co)polymers which, as outer layer, comprises a heat-sealable material, and the thicknesses are in the D:B ratio of from 3 to 10, preferably from 4 to 7.

Family 9/10 - FAMPAT - ©Questel

Title

(EP-620244)

Biaxially stretched film for food packaging

Publication data including kind & date

EP0620244	A1	1994-10-19	EP-620244
JPH06297660	A	1994-10-25	JP06297660
EP0620244	B1	1999-06-30	EP-620244
DE69419276	D1	1999-08-05	DE69419276
DE69419276	T2	1999-12-02	DE69419276

**Abstract**

(EP-620244)

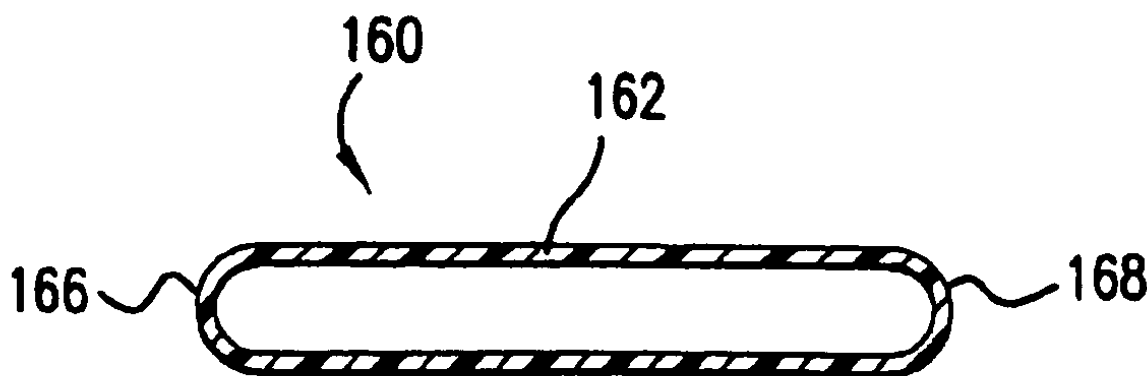
The disclosure describes a biaxially stretched food packaging film having at least one layer composed of a polyamide-based mixed resin containing 20 to 70 wt% of an aliphatic polyamide, 5 to 35 wt% of an **amorphous polyamide**, 5 to 45 wt% of a xylilene-based polyamide and 5 to 50 wt% of a polyamide-modified ionomer, and having a haze of not more than 10%, an oxygen permeability at 30 and 100% RH of not more than 200 cm³/m².day.atm and a modulus at 1% elongation of 1.97 x 10² to 19.7 x 10² MPa.

Family 10/10 - FAMPAT - ©Questel

Title

(EP2117839)

Shrink film containing semi-crystalline polyamide, articles made therefrom, and process for making and using same

Images**Publication data including kind & date**

US20080182053	A1	2008-07-31	US20080182053
WO2008094524	A1	2008-08-07	WO200894524



AU2008211213	A1	2008-08-07	AU2008211213				
EP2117839	A1	2009-11-18	EP2117839				
US7687123	B2	2010-03-30	US7687123				
AU2008211213	B2	2013-09-05	AU2008211213				
EP2117839	B1	2015-10-14	EP2117839				
ES2553560	T3	2015-12-10	ES2553560				

Abstract

(EP2117839)

A multilayer, heat-shrinkable film has a semi-crystalline polyamide content of at least 35%, based on total film volume, a total free shrink at 185°F of at least 35 percent, and an FTIR Transmission Absorbance A1199/A1170 ratio of up to 1.65. A multilayer film has a polyolefin and/or ionomer resin heat-seal layer and a second layer having a semi-crystalline polyamide content of at least 50% based on layer weight, a total semi-crystalline polyamide content of at least 35 volume percent based on total film volume, a total free shrink at 185°F of at least 35 percent, with the film exhibiting: % Transparency = 5.33 (% Haze) - 31.5. A process for making a heat-shrinkable annular film containing semi-crystalline polyamide comprises extruding an annular extrudate downward from an annular die, followed by very rapidly quenching the extrudate by applying a quenching liquid to the extrudate and cascading the quenching liquid down the extrudate for at least 2 inches, reheating the extrudate to an orientation temperature, and orienting the extrudate at least 2X while the extrudate is in the solid state. Various films are suited to for use in patch bags, retortable packaging article, ovenable packaging article, and process utilizing same.