

Search history

Search PN=(WO2016064557) (Results 1)

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Search [SP]: field of invention [0001] the disclosure relates to a multilayer structure, a film made therefrom and a package formed therefrom.
2: background of the invention [0002] reliable and reproducible easy open packages are generally hard to find as it such properties depend upon the sealant layer composition, sealing conditions and/or aging time. variability in these properties is particularly pronounced in packages with different package and lid compositions (e.g. rigid containers and lids, flexible containers and lids). there remains a need for multilayer structures allowing easy open sealing areas and which may be used in a variety of applications and with a wide variety of processing conditions. summary of the invention [0003] the disclosure is for a multilayer structure, a film made therefrom and a package formed therefrom.[0004] in one embodiment, the disclosure provides a multilayer structure comprising a first layer a sealant layer formed from one or more ethylene-based polymers and a cohesive delamination layer adjacent to the sealant layer and formed from a polymer blend which comprises an elastomeric propylene based polymer and a second polymer, wherein the second polymer is selected from the group consisting of high pressure low density polyethylene, high density polyethylene, ethylene acrylic acid copolymers, ethylene(meth)acrylic acid copolymers and combinations thereof.[0005] in alternative embodiments, the disclosure provides a film made from the multilayer structure, a package made therefrom and a lid formed from the multilayer structure or film. brief description of the drawings [0006] fig. 1a is a schematic illustrating two multilayer structures according to an embodiment of the invention prior to sealing[0007] fig. 1b is a schematic illustrating the two multilayer structures following sealing of the two structures[0008] fig. 1c is a schematic illustrating the sealing area following application of force to open the seal[0009] fig. 2 is a graph illustrating the peak seal strength as a function of temperature for comp. ex. 1-6 and inv. ex. 1-3[0010] fig. 3a is a schematic illustrating the equipment used to measure peak seal strength for the examples[0011] fig. 3b is a schematic illustrating the sealing bars pressing against multilayer structures to form a seal[0012] fig. 3c is a schematic illustrating the process of opening the seal to measure the seal strength.[0013] fig. 4 is a graph illustrating the peak seal force as a function of temperature for comp. ex. 8 and inv. ex. 5-8[0014] fig. 5 is a graph illustrating the peak seal force as a function of temperature for comp. ex. 9 (plus bottom films 1 and 2) and inv. ex. 9 (plus bottom films 1 and 2) [0015] fig. 6 is a graph illustrating the peak seal force as a function of temperature for comp. ex. 10 (plus bottom films 1 and 2) and inv. ex. 10 (plus bottom films 1 and 2) and[0016] fig. 7 is a graph illustrating the peak seal force as a function of temperature for inv. ex. 11-14. detailed description of the invention [0017] the disclosure provides a multilayer structure, a film made therefrom and a package formed therefrom.[0018] 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 interpolymer as defined hereinafter. trace amounts of impurities (for example, catalyst residues) may be incorporated into and/or within the polymer.[0019] the term "interpolymer," as used herein, refers to polymers prepared by the polymerization of at least two different types of monomers. the generic term interpolymer 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.[0020] the term "olefin-based polymer," as used herein, refers to a polymer that comprises a majority amount of polymerized olefin monomer, for example ethylene or propylene (based on weight of the polymer) and, optionally, may contain at least one comonomer.[0021] the term "ethylene-based polymer," as used herein, refers to a polymer that comprises a majority amount of polymerized ethylene monomer (based on weight of the polymer) and, optionally, may contain at least one comonomer.[0022] the term "ethylene/a-olefin interpolymer," as used herein, refers to an interpolymer that comprises a majority amount of polymerized ethylene monomer (based on the weight of the interpolymer) and at least one a-olefin. [0023] the term, "ethylene/a-olefin copolymer," as used herein, refers to a copolymer that comprises a majority amount of polymerized ethylene monomer (based on the weight of the copolymer), and an a-olefin, as the only two monomer types.[0024] the term "propylene-based polymer," as used herein, refers to a polymer that comprises a majority amount of polymerized propylene monomer (based on weight of the polymer) and, optionally, may comprise at least one comonomer.[0025] the term "composition," as used herein, includes a mixture of materials which comprise the composition, as well as reaction products and decomposition products formed from the materials of the composition.[0026] the terms "blend" or "polymer blend," as used herein, refers to a mixture of two or more polymers. a blend may or may not be miscible (not phase separated at the molecular level). a blend may or may not be phase separated. a blend may or may not contain one or more domain configurations, as determined from transmission electron spectroscopy, light scattering, x-ray scattering, and other methods known in the art. the blend may be effected by physically mixing the two or more polymers on the macro level (for example, melt blending resins or compounding) or the micro level (for example, simultaneous forming within the same reactor).[0027] the term "ionomer," as used herein means (or includes) polyethylene based copolymers modified with cations to provide ionic links. these copolymers are well known and described at the wiley encyclopedia of packaging technology or handbook of engineering and specialty thermoplastics, polyolefins and styrenics.[0028] the terms "cyclic olefin copolymers" and "coc," are known and described, for example, in ep-a-0 407 870, ep-a-0 485 893, ep-a-0 503 422, and de-a-40 36 264, the disclosures of which are incorporated herein by reference. [0029] the multilayer structure according to a first embodiment of the invention provides a multilayer structure comprising a first layer a sealant layer formed from one or more ethylene-based polymers and a cohesive failure layer adjacent to the sealant layer and formed from a polymer blend which comprises an elastomeric propylene based polymer and a second polymer, wherein the second polymer is selected from the group consisting of high pressure low density polyethylene, high density polyethylene, ethylene acrylic acid copolymers, ethylene(meth)acrylic acid copolymers and combinations thereof.[0030] the film according to another embodiment of the invention comprises one or more multilayer structures according to any embodiment described herein.[0031] the package according to yet another embodiment of the invention comprises one or more components formed from the multilayer structure according to any embodiment described herein.[0032] the lid for a package according to another embodiment of the invention comprises a lid formed from the multilayer structure according to any embodiment disclosed herein.[0033] in embodiments of the multilayer structure, the cohesive failure layer is adjacent to the sealant layer. as used in this context, adjacent means that the cohesive failure layer abuts the sealing layer over at least a portion of a surface of the sealing layer. the polymer blend from which the cohesive failure layer is formed may include any one or more polymer blends, each of which comprises an elastomeric propylene based polymer and a second polymer, wherein the second polymer is selected from the group consisting of high pressure low density polyethylene, high density polyethylene, ethylene acrylic acid copolymers, ethylene(meth)acrylic acid copolymers and combinations thereof. various combinations of such polymer blends are described, for example, in u.s. pat. no. 7,863,383 and pct publication wo2013101931, the disclosures of which are incorporated herein by reference. commercial polymer blends are available under the name sealution, from the dow chemical company (midland, mich., usa).[0034] in yet another embodiment, the disclosure provides a multilayer structure, film, package or lid in accordance with any embodiment described herein, except that a seal force of the multilayer structure with any olefin-based layer does not substantially increase with increasing sealing temperature. as used in this context, "substantially increase" means an increase of 50 percent with an increase of 40 degrees centigrade in sealing temperature.[0035] in yet another embodiment, the disclosure provides a multilayer structure, film, package or lid in accordance with any embodiment described herein, except that the sealing layer is made from one or more materials selected from the group consisting of ethylene-based polymers, polar ethylene based copolymers, and ionomers.[0036] in yet another embodiment, the disclosure provides a multilayer structure, film, package or lid in accordance with any embodiment des (Results 0)

Search [SP]: 1. a multilayer structure comprising: a first layer a sealant layer formed from one or more ethylene-based polymers and a cohesive failure layer adjacent to the sealant layer and formed from a polymer blend which comprises an elastomeric propylene based polymer and a second polymer, wherein the second polymer is selected from the group consisting of high pressure low density polyethylene, high density polyethylene, ethylene acrylic acid copolymers, ethylene(meth)acrylic acid copolymers and combinations thereof. 2. the multilayer structure according to claim 1, wherein the seal force does not substantially increase (will define this term in the description) with increasing sealing temperature. 3. the multilayer structure according to claim 1, wherein the sealant layer is made from one or more materials selected from the group consisting of ethylene-based polymers, polar ethylene based copolymers, and ionomers. 4. the multilayer structure according to claim 1, wherein the sealant layer has a thickness equal to or less than 50 microns. 5. the multilayer structure according to claim 1, wherein the multilayer structure has 3 or more layers. 6. the multilayer structure according to claim 1, wherein the sealant layer consists of low density polyethylene. 7. the multilayer structure according to claim 1, wherein the sealant layer is formed from 1 to 100 wt percent one or more polymers selected from lldpe, olefin-based plastomers and ionomers and, optionally, from 1 to 50 wt percent one or more materials selected from coc, hdpe and pp. 8. the multilayer structure according to claim 1, wherein the sealant layer is formed from 1 to 100 wt percent one or more polymers selected from lldpe, olefin-based plastomers and ionomers and, optionally, from 20 to 99 wt percent one or more materials selected from ldpe. 9. the multilayer structure according to claim 1 wherein the multilayer structure further comprises one or more additional layers selected from the group consisting of barrier layers and tie layers. 10. the multilayer structure according to claim 9 wherein the barrier layer is formed from one or more of polyamide, ethylene vinylalcohol and polyvinylidene chloride. 11. a first film comprising the multilayer structure according to claim 1. 12. a second film comprising the multilayer structure according to claim 1 laminated onto a substrate selected from the group consisting of monolayer and multilayer films using one or more adhesives. 13. a package comprising one or more components formed from the multilayer structure according to claim 1. 14. the package according to claim 13

wherein the package is a pouch. 15. the package according to claim 13, wherein the package is a food or beverage container. 16. a lid for a package, wherein the lid is formed from the multilayer structure according to claim 1. (Results 0)

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4: background of the invention [0002] reliable and reproducible easy open packages are generally hard to find as it such properties depend upon the sealant layer composition, sealing conditions and/or aging time. variability in these properties is particularly pronounced in packages with different package and lid compositions (e.g. rigid containers and lids, flexible containers and lids). there remains a need for multilayer structures allowing easy open sealing areas and which may be used in a variety of applications and with a wide variety of processing conditions. summary of the invention [0003] the disclosure is for a multilayer structure, a film made therefrom and a package formed therefrom.[0004] in one embodiment, the disclosure provides a multilayer structure comprising a first layer a sealant layer formed from one or more ethylene-based polymers and a cohesive delamination layer adjacent to the sealant layer and formed from a polymer blend which comprises an elastomeric propylene based polymer and a second polymer, wherein the second polymer is selected from the group consisting of high pressure low density polyethylene, high density polyethylene, ethylene acrylic acid copolymers, ethylene(meth)acrylic acid copolymers and combinations thereof.[0005] in alternative embodiments, the disclosure provides a film made from the multilayer structure, a package made therefrom and a lid formed from the multilayer structure or film. brief description of the drawings [0006] fig. 1a is a schematic illustrating two multilayer structures according to an embodiment of the invention prior to sealing[0007] fig. 1b is a schematic illustrating the two multilayer structures following sealing of the two structures[0008] fig. 1c is a schematic illustrating the sealing area following application of force to open the seal[0009] fig. 2 is a graph illustrating the peak seal strength as a function of temperature for comp. ex. 1-6 and inv. ex. 1-3[0010] fig. 3a is a schematic illustrating the equipment used to measure peak seal strength for the examples[0011] fig. 3b is a schematic illustrating the sealing bars pressing against multilayer structures to form a seal[0012] fig. 3c is a schematic illustrating the process of opening the seal to measure the seal strength.[0013] fig. 4 is a graph illustrating the peak seal force as a function of temperature for comp. ex. 8 and inv. ex. 5-8[0014] fig. 5 is a graph illustrating the peak seal force as a function of temperature for comp. ex. 9 (plus bottom films 1 and 2) and inv. ex. 9 (plus bottom films 1 and 2) [0015] fig. 6 is a graph illustrating the peak seal force as a function of temperature for comp. ex. 10 (plus bottom films 1 and 2) and inv. ex. 10 (plus bottom films 1 and 2) and[0016] fig. 7 is a graph illustrating the peak seal force as a function of temperature for inv. ex. 11-14. detailed description of the invention [0017] the disclosure provides a multilayer structure, a film made therefrom and a package formed therefrom.[0018] 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 (for example, catalyst residues) may be incorporated into and/or within the polymer.[0019] the term "interpolymer," as used herein, refers to polymers prepared by the polymerization of at least two different types of monomers. the generic term interpolymer 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.[0020] the term "olefin-based polymer," as used herein, refers to a polymer that comprises a majority amount of polymerized olefin monomer, for example ethylene or propylene (based on weight of the polymer) and, optionally, may contain at least one comonomer.[0021] the term "ethylene-based polymer," as used herein, refers to a polymer that comprises a majority amount of polymerized ethylene monomer (based on weight of the polymer) and, optionally, may contain at least one comonomer.[0022] the term "ethylene/a-olefin interpolymer," as used herein, refers to an interpolymer that comprises a majority amount of polymerized ethylene monomer (based on the weight of the interpolymer) and at least one a-olefin. 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Search (7) AND IPC=(B32) (Results 17)
8:

Title: Coupled electrochromic compounds with photostable dication oxidation states

Abstract: Coupling of anodic electrochromic compounds by a covalent bond or a bridge link which provides for electronic communication between the coupled electrochromic compounds results in coupled electrochromic compounds which exhibit greater stability as well as electrochromic activity that differs from the monomeric electrochromic compounds. Extension of the absorption spectrum into the near-infrared region of the spectrum is frequently observed. The coupled electrochromic compounds are highly suitable for use in electrochromic media used to produce electrochromic devices.

Classifications:

International (IPC 8-9): B05D5/06 B05D5/12 B23K26/362 B23K26/402 B32B17/06 B32B17/10 B32B7/02 B32B7/14 B60Q1/26 B60R1/02 B60R1/04 B60R1/06 B60R1/07 B60R1/08 B60R1/12 C03C17/36 C09K9/02 C23C14/08 C23C14/18 C23C14/34 C23C14/46 C23C14/58 F16M13/02 G02B1/04 G02B1/10 G02B13/04 G02B27/00 G02B27/14 G02B5/08 G02B5/20 G02B5/26 G02B5/28 G02B7/182 G02F1/00 G02F1/01 G02F1/03 G02F1/061 G02F1/15 G02F1/153 G02F1/155 G02F1/157 G02F1/161 G02F1/163 H05K1/02 H05K3/32 (Advanced/Invention); B60R1/04 B60R1/06 B60R1/08 C23C14/08 C23C14/34 G02F1/1345 G02F1/15 G02F1/155 G02F1/157 G02F1/161 H05K1/03 (Advanced/Non-invention); B05D5/06 B32B7/02 B60R1/06 B60R1/08 B60R1/12 C23C14/46 G02B1/04 G02B27/00 G02B5/08 G02B5/20 G02B5/26 G02B5/28 G02F1/00 G02F1/01 H05K1/02 H05K3/32 (Core/Invention); H05K1/03 (Core/Non-invention); B60R (Subclass/Invention)

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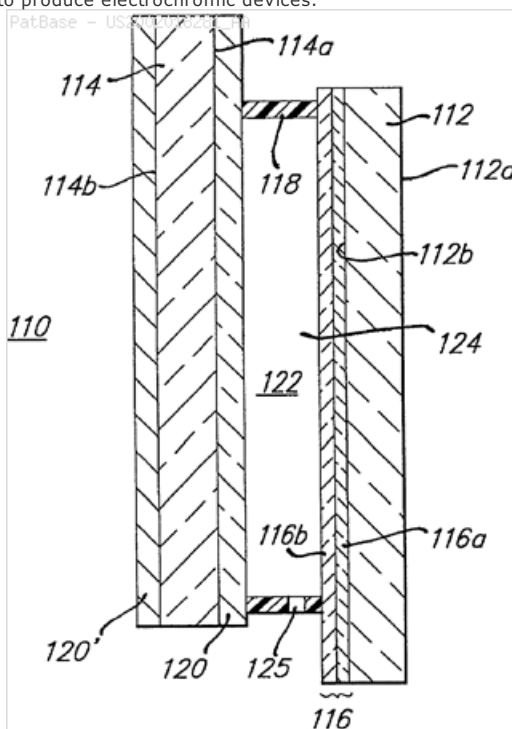
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Family:

Publication number	Publication date	Application number	Application date
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BRUCE ; PERRON LANSEN M ; OLESEN NIELS ALFRED ; LUTEN HENRT A ; POE BRUCE G ; ANDERSON JOHN S ; ARNOLD J W ; JOHN S ANDERSON ; LANSEN M PERRON ; NELSON F BRUMMEL ; MINIKEY DANNY L JR ; ROTH MARK R ; REESE SPENCER D ; LOCK NIGEL T ; POLL DAVID ; TURNER W L ; KAMOLGA D J ; SUMAN DANNY L ; LARA JUAN C ; WILLIAMS JEFFREY N ; MINIKEY JR DANNY L ; VANDERZWAAG SCOTT W ; BRUIZEMAN JEFFREY T ; YPMA KENTON J ; ZWAAG SCOTT W VANDER

Inventor(s): YPMA KENTON J HUDSONVILLE ; BUSSCHER BRADLEY L GRAND RAPIDS ; CAMMENGDA DAVID J ZEELAND ; MINIKEY DANNY L ; ANDERSON JOHN ; TONAR WILLIAM ; PERRON LANSEN ; LUTEN HENRY ; YPMA KENTON ; STRAY JOEL ; LUTEN HENRT AUS ; NEUMAN GEORGE AUS ; POE G BRUCEUS ; TONAR WILLIAM LUS ; PERRON LANSEN MUS ; NELSON BARRY ; TURNBULL ROBERT ; KLOEPPNER LEROY ; RUMSEY WAYNE ; WATSON ALAN ; TONAR WILLIAM L HOLLAND ; NEUMAN GEORGE A HOLLAND ; POLL DAVID L HOLLAND ; STRAY JOEL A HUDSONVILLE ; THOMAS F GUARR ; LEROY J KLOEPPNER ; ARNOLD JOHN ; ANDERSON JOHN SUS ; ANDERSON JOHN S HOLLAND ; POE G ; SCOTT W VANDER ZWAAG ; JOHN W CARTER ; TONAR WILLIAM L BAUER FREDERICK T ARNOLD JOHN W CA ; DOZEMAN GARY JUS ; FORGETTE JEFFREY AUS ; EATON DAVID ; GUARR THOMAS ; FOGG JEREMY A HOLLAND ; CARTER JOHN W HOLLAND ; DOZEMAN GARY ; FORGETTE JEFFREY ; FOGG JEREMY ; CARTER JOHN ; DAVID L EATON ; BRUMMEL NELSON ; CAMMENGDA DAVID ; BUSSCHER BRADLEY ; CAMMENGDA DAVID JUS ; BRUMMEL NELSON FUS ; BOSTWICK DANIEL ; BAUER FREDERICK ; BAUER FREDERICK T HOLLAND ; ARNOLD JOHN W HOLLAND

Agent(s): MACRAE AND CO; MUELLER BORE AND PARTNER PATENTANWAELTE PARTG MBB; MUELLER BORE AND PARTNER PATENTANWAELTE; BAYLISS GEOFFREY CYRIL; FINNIE PETER JOHN; MUELLER BORE AND PARTNER PATENTANWAELTE PARTG MBB; CUNDY JACK WILLIAM; UESUGI HIROSHI; OHTSUKA FUMIAKI; SUDA HIROYUKI; KUMAKURA YOSHIO; NISHIJIMA TAKAKI; PRICE HENEVELD COOPER DEWITT AND LITTON LLP GENTEX CORP; BRIAN J REES GENTEX CORP; BROMBERG AND SUNSTEIN LLP; GENTEX C O QUARLES AND BRADY LLP CORP; PRICE HENEVELD COOPER DEWITT AND LITTON LLP; SHULTZ JR JAMES E; JAMES E; QUARLES AND BRADY LLP; YAKOV; SCOTT P; PRICE HENEVELD LLP; BRADLEY D; REISING ETHINGTON PC; SUNSTEIN BRUCE D ET AL; SIDORIN YAKOV

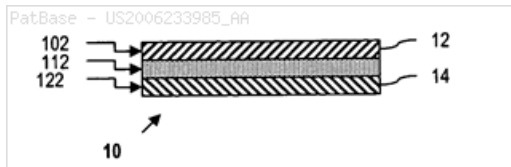
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Title: MYOGLOBIN BLOOMING AGENT CONTAINING SHRINK FILMS, PACKAGES AND METHODS FOR PACKAGING

Abstract: Heat shrinkable, oxygen barrier, packaging films, methods of packaging and packages are provided having a myoglobin blooming agent to provide, promote, enhance or maintain a desirable coloration on the surface of a myoglobin-containing meat product.

Classifications:

International (IPC 8-9): A23B4/00 A23B4/02 A23B4/033 A23B4/10 A23B4/14 A23B4/16 A23B4/18 A23B4/20 A23B4/24 A23L1/27 A23L1/272 A23L1/31 A23L1/311 A23L13/00 A23L13/10 A23L3/34 A23L3/3427 A23L3/3445 A23L3/358 A23L5/40 A23L5/41 B31B45/00 B32B1/02 B32B23/00 B32B23/08 B32B23/16 B32B27/00 B32B27/08 B32B27/12 B32B27/14 B32B27/16 B32B27/18 B32B27/28 B32B27/30 B32B27/32 B32B5/16 B32B7/02 B32B9/04 B65B25/02 B65B25/06 B65B31/00 B65D25/06 B65D25/14 B65D65/02 B65D65/40 B65D65/42 B65D75/36 B65D81/20 B65D81/24 B65D81/26 B65D81/28 B65D85/00 B65D85/50 B82Y30/00 C01B21/20 C08J5/00 C08J5/18 C08J7/12 F16B4/00 (Advanced/Invention); A23L3/34 A23L3/3526 A23L3/3535 B23B23/00 B32B1/02 B32B1/08 B32B23/00 B32B27/00 B32B27/28 B32B27/32 B32B7/02 B32B9/04 B65D65/40 (Advanced/Non-invention); A23B4/00 A23B4/02 A23B4/14 A23L1/27 A23L1/31 A23L3/34 A23L3/3454 B31B45/00 B32B23/00 B32B27/00 B32B27/08 B32B27/16 B32B27/18 B32B27/28 B32B27/30 B32B27/32 B32B9/04 B65B25/02 B65B31/00 B65D25/04 B65D25/14 B65D65/02 B65D65/40 B65D75/28 B65D81/20 B65D81/24 B65D81/26 B65D81/28 B65D85/00 B65D85/50 C01B21/00 C08J5/00 C08J5/18 C08J7/00 F16B4/00 (Core/Invention); A23L3/34 A23L3/3463 B32B7/02 (Core/Non-invention); B32B (Subclass/Invention)



International (IPC 1-7): A23B4/00 A23B4/10 A23B4/14 A23L1/31 B32B1/06 B32B27/00 B32B27/08 B32B3/08 B32B5/00 B32B7/00 B32B9/04 B65D65/38

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US: 206/524.3 423/385 426/129 426/129P 426/132 426/132P 426/264 426/264S 426/265 426/266 426/266P 426/410 426/415 428/138 428/323 428/323S 428/34.1 428/34.100P 428/34.100S 428/34.2 428/34.9 428/34.900P 428/34.900S 428/341 428/35.7 428/35.700P 428/35.9 428/36.9 428/537.5 428/68 428/704 442/327 523/100

Family:

Publication number	Publication date	Application number	Application date
AR060929 AA	20080723	AR2007P102083	20070515
AT525206 E	20111015	AT20070107804T	20070509
AT547241 E	20120315	AT20050732916T	20050404
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AU2007202179 AA	20071206	AU20070202179	20070515
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BRPI0509555 A	20080122	BR2005PI09555	20050404
BRPI0703666 A	20080408	BR2007PI03666	20070808
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BRPI0706344 A2	20081230	BR2007PI06344	20071019
CA2559011 AA	20060905	CA20052559011	20050404
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CA2589050 AA	20071117	CA20072589050	20070516
CA2589050 C	20130409	CA20072589050	20070516
CL2007001368 A1	20080104	CL20070001368	20070514
CN101073403 A	20071121	CN200710104135	20070516
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CN1938153 A	20070328	CN200580010562	20050404
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DE602005032893 D1	20120426	DE200560032893T	20050404
DE602007017317 D1	20111201	DE200760017317T	20070509
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DK1737651 T3	20120326	DK20050732916T	20050404
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EP1737651 A1	20070103	EP20050732916	20050404
EP1737651 A4	20090318	EP20050732916	20050404
EP1737651 B1	20120229	EP20050732916	20050404
EP1857269 A1	20071121	EP20070107804	20070509
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EP1857270 A1	20071121	EP20070107805	20070509
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EP1892093 A2	20080227	EP20070113201	20070726
EP1905584 A2	20080402	EP20070270054	20070917
EP1905584 A3	20150729	EP20070270054	20070917
EP2095942 A1	20090902	EP20090162213	20070509
ES2368765 T3	20111122	ES20070107804T	20070509

ES2379085 T3	20120420	ES20050732916T	20050404
IL178178 A0	20061231	IL20060178178	20060919
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IL183249 A0	20070920	IL20070183249	20070515
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IN00786DE2007 A	20071123	IN2007DE00786	20070409
IN05105DN2006 A	20070622	IN2006DN05105	20060904
JP2007531672 T2	20071108	JP20070506361T	20050404
JP2008007203 A2	20080117	JP20070131810	20070517
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KR101215841 B1	20121231	KR20067019893	20050404
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MX2007005669 A1	20090216	MX20070005669	20070510
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SG137766 A1	20071228	SG20070033129	20070508
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US8741402 BB	20140603	US20060506322	20060818
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Probable Assignee: BEMIS CO INC

Assignee(s): (std): BERBERT OTACILIO T ; BERBERT OTACILIO TEIXEIRA ; CURWOOD INC ; LATREILLE DOUGLAS M ; MENGEL MATTHEW L ; KERVUD INK ; MENGEL MATTHEW LEROY ; LATREILLE DOUGLAS MARK ; CURWOOD INC SOC ORGANIZADA BAJO LAS LEYES DEL ESTADO DE DELAWARE ; SIEGEL DAN G ; NELSON KEVIN P ; POCKAT GREGORY R ; SCHELL THOMAS A ; MICHAUD RYAN A ; NELSON KEVIN PHILIP ; SCHELL THOMAS ANDREW ; MICHAUD RYAN ARTHUR ; POCKAT GREGORY ROBERT

Assignee(s): CURWOOD INC OSHKOSH ; BEMIS CO INC

Inventor(s): (std): DAN G SIEGEL ; LATREILLE DOUGLAS ; LATREILLE DOUGLAS MARK ; MENGEL MATTHEW ; MENGEL MATTHEW LEROY ; BERBERT OTACILIO T ; BERBERT OTACILIO TEIXEIRA ; MICHAUD RYAN ARTHUR ; NEL SON KEVIN FILIP ; NELSON KEVIN PHILIP ; NELSON KEVIN PHILLIP ; POCKAT GREGORY R ; POCKAT GREGORY ROBERT ; SCHELL THOMAS A ; SCHELL THOMAS ANDREW ; SIEGEL DAN ; SIEGEL DAN G NELSON KEVIN P ; SIGEL DEHN DZH ; SIEGEL DAN G ; PHILIP SIEGEL DAN G NELSON KEV ; KEVIN P NELSON ; SIEGAL DAN G ; SIDZHEL DEHN G ; NELSON KEVIN P ; MICHAUD RYAN A ; MENGEL MATTHEW L ; LATREILLE DOUGLAS M

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Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; SIM AND MCBURNEY; VILLASECA; HOEGER STELLRECHT AND PARTNER PATENTANWAELTE MBB;

ACKROYD ROBERT; EDDOWES SIMON; SMAGGASGALE GILLIAN HELEN; DR SHLOMO COHEN AND CO;
BEMIS CO INC; BEMIS CO INC PATENT AND TRADEMARK DEPARTMENT; TOM J; CHRISTINE E; CEDRIC
M

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ
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US UZ VC VN YU ZA ZM ZW

Title: DISCONTINUOUSLY LAMINATED FILM

Abstract: Polymer films may be discontinuously laminated by processes such as adhesive bonding, ultrasonic bonding, embossing, ring rolling, and strainable network formation. The films may be prestretched under cold process conditions before lamination. The laminates have superior properties such as tear strength. The laminates may be incorporated into bags, such as trash bags.

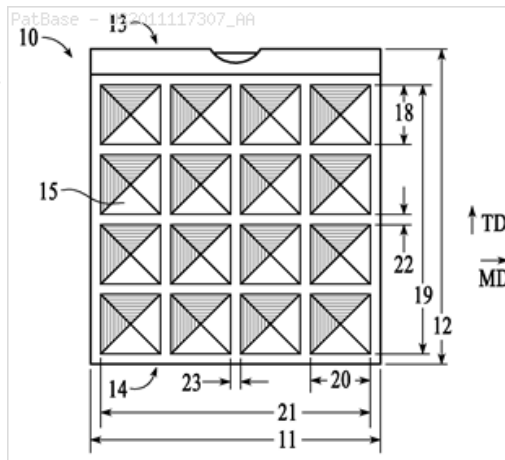
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US: 1/1 156/191 156/199 156/205 156/209 156/218 156/219 156/219S 156/227 156/227S 156/229 156/229S 156/290 156/290S 156/304.1 156/304.100S 156/73.1 156/73.100S 242/160.4 242/525 264/241 264/288.4 264/290.2 383/105 383/105P 383/109 383/109P 428/103 428/104 428/166 428/167 428/167S 428/172 428/172S 428/187 428/187S 428/198 428/198S 428/35.2 428/35.5 428/35.7 428/35.700P 428/66.6 428/66.600P 493/189 493/210 493/210S 493/211 493/217 493/217S 493/243 493/243S 493/264 493/264S



Family:

Publication number	Publication date	Application number	Application date
AU2012332451 AA	20130510	AU20120332451	20121101
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CA2905394 AA	20150910	CA20142905394	20140312
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CN204235949 U	20150401	CN201290001107U	20121101
HK1217673 A1	20170120	HK20160105824	20160523
US2011117307 AA	20110519	US20100947025	20101116
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WO11060405 A1	20110519	WO2010US56799	20101116
WO13062812 A1	20130502	WO2012US60447	20121016
WO13067193 A1	20130510	WO2012US63081	20121101
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WO13075001 A1	20130523	WO2012US65637	20121116
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US20090261673P	20091116	US20100881825	20100914	US20100947025	20101116
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Probable Assignee: GLAD PRODUCTS CO

Assignee(s): (std): BINGER SCOTT ; BINGER SCOTT W ; BORCHARDT MICHAEL G ; BROERING SHAUN T ; CISEK KEN ; GLAD PRODUCTS CO ; FRASER ROBERT W ; DORSEY ROBERT T ; MACPHERSON JACK A ; DENMON ANGELLI SUE ; HOYING DAVID ; PECK DANIEL C ; MAXWELL JASON R ; WALDRON MATTHEW W ; TURNER ROBERT H ; WOGELIUS DONALD E

Assignee(s): GLAD PRODUCTS CO1221 BROADWAYOAKLANDCA94612US ; THE GLAD PRODUCTS COMPANY

Inventor(s): (std): BROERING SHAUN T ; CISEK KEN ; CISEK KENNETH E ; DENMON ANGELLI S ; DENMON ANGELLI SUE ; DORESY ROBERT T ; DORSEY ROBERT T ; FRASER ROBERT W ; HOYING DAVID ; MACPHERSON JACK A ; MASON JASON R ; MAXWELL JASON R ; MAXWELL JASON R J R ; MICHAEL G BORCHARDT ; PECK DANIEL C ; TURNER ROBERT H ; WALDRON MATTHEW W ; WOGELIUS DONALD E ; WOGELIUS DONALD E E ; BINGER SCOTT ; BINGER SCOTT W ; BINGER SCOTT W W ; BORCHARDT MICHAEL G

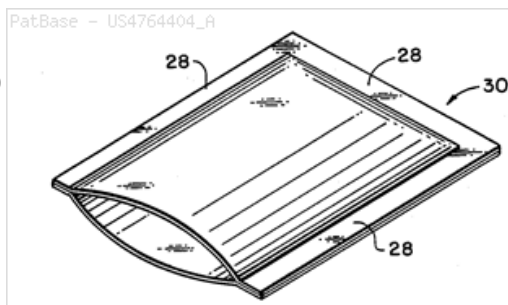
Inventor(s): BORCHARDT MICHAEL GUS

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; BORDEN LADNER GERVAIS LLP; RICHES MCKENZIE AND HERBERT LLP; THOMAS C; COLLINS ERIN ET AL; PETERSON DAVID ET AL; FEIX THOMAS C ET AL

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 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

Abstract: A polymeric composition is a blend of a first component comprising polypropylene, a **second** component comprising an **ethylene**-based copolymer, and a third component which may be an **elastomeric polymer**. The blends are useful in making single and plural **layer** sheet structures. Such a structure comprises a first **layer** (12) made from said blend and a **second layer** (14) of an abuse-resistant **polymer** such as polypropylene. Optionally, the structure includes further **layers**, e.g. a barrier **layer** to prevent or reduce gas infusion. The blend **layer** (12) can be employed as the means for making heat **seals** (28) between **layers** of the sheet structure to form a packaging pouch (30), and is able to withstand retorting conditions without becoming significantly embrittled.

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International (IPC 1-7): A611J/00 A611J/00 A611J/00 A611J/00 A61M5/14 B29D22/00 B29D27/00 B32B1/02 B32B15/08 B32B27/00 B32B27/06 B32B27/08 B32B27/12 B32B27/28 B32B27/30 B32B27/32 B32B7/02 B32B7/10 B65D65/40 B65D75/00 B65D75/30 B65D77/30 B65D85/50 B65D85/56 C08J5/18 C08L23/08 C08L23/10 C08L23/12 C08L23/14 C08L23/16 C08L23/20 C08L25/08 C08L53/02 D29D27/00
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Publication number	Publication date	Application number	Application date
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AU198665768 A1	19870604	AU19860065768	19861127
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US5137763 A	19920811	US19890402747	19890905
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Assignee(s): (std): BAXTER TRAVENOL LAB ; KIM YONG J ; GENSKE ROGER P ; NAT CAN CORP ; BAXTER INT ; BAUER FRANK T ; AMERICAN NATIONAL CAN CO ; AMERICAN NAT CAN CO ; AMERICAN NATIONAL CA CO ; AMERICAN CAN PACKAGING INC ; BAXTER INT INC A DELAWARE CORPORATION

Assignee(s): AMERICAN CAN PACKAGING INC BAXTER TRAVENOL LABORAT ; AMERICAN CAN PACKAGING INC BAXTER TRAVENOL LABORATORIES ; AMERICAN CAN CO ; AMERICAN CAN CO A CORP OF NJ ; AMERICAN CAN CO AMERICAN LANE GREENWICH CT 06830 A ; AMERICAN CAN CO AMERICAN LANE GREENWICH CT 06830 A CORP OF NJ ; AMERICAN NATL CAN CO ; BAKUSUTAA INTERN INC ; AMERICAN NASHONARU KYAN CO ; AMERICAN CAN PACKAGING INC GREENWICH CONN US ; AMERICAN NATIONAL CAN CO A CORP OF DE ; AMERICAN NATIONAL CAN CO A DE CORP ; BAXTER INT INC ; AMERICAN NATIONAL CAN CO CHICAGO ILL US ; BAUER FRANK TEMPLETON ; BAXTER TRAVENOL LABORATORIES INC ; ELF ATOCHEM SA ; PECHINEY PLASTIC PACKAGINC INC ; PECHINEY PLASTIC PACKAGING INC ; PECHINEY EMBALLAGE FLEXIBLE EUROPE ; NATL CAN CORP ; BAXTER INT INC A DELAWARE CORP ; BAXTER INTERNATL INC ; BAXTER TRAVENOL LABORATORIES INC DEERFIELD ILL US ; INC ; BAXTER TRAVENOL LAB INC ; BAXTER INT INCORPORATED ; BEMIS CO INC ; BAXTER INT INC DEERFIELD ILLINOIS A DE CORP ; GENSKE ROGER PETER ; GEHRKE RUSSELL PAUL ; WEBSTER R DANIEL ; KIM YONG JOO ; JOHNSON RICHARD EUGENE JR ; CZUBA LEONARD F

Inventor(s): (std): AARU DANIERU UEBUSUTAA ; BAUER FRANK TEMPLETON ; BUBEL ROY A ; FURANKU TENPURUTON BAUA ; JOHNSON RICHARD EUGENE ; KIM YONG JOO ; RATSUSERU POORU JIEERUKE ; RATSUSERU POORU JIYAaku ; REONAAO EFU KUZUBA ; ROJIYAA PIITAA JIENSUKU ; WEBSTER R DANIEL ; CZUBA LEONARD F ; BAUER FRANK T ; YON JIYOO KIMU ; JOHSON RICHARD EUGENE JR ; KIM YONG JOO ; KIM YONG J ; JOHNSON RUSSELL EUGENE JR ; GEHRKE RUSSELL PAUL ; JOHNSON RICHARD EUGENE JR ; JOHNSON RICHARD E JR ; GENSKE ROGER PETER ; GENSKE ROGER P ; GEHRKE RUSSELL P ; BAUER FRANK ; RICHIAAADO YUUIIN JIYONSON JI ; JOHNSON JR RICHARD E

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Agent(s): PHILLIPS ORMONDE FITZPATRICK; MARKS AND CLERK

Designated states: AT BE CH DE ES FR GB GR IT LI LU NL SE

Title: HEAT-SHRINKABLE PACKAGING RECEPTACLE

Abstract: An individual end-sealed packaging receptacle, such as a bag, formed from a sheet of heat-shrinkable film having a first edge and an opposing **second** edge. The packaging receptacle includes a first seal bonding the first edge and **second** edge to define a tube member having a first bag wall, a **second** bag wall, first and **second** opposing lay-flat bag edges, an end and an open mouth. The packaging receptacle includes a **second** seal through the first and **second** bag walls, extending laterally across the width of both the first and **second** walls and thereby closing the end. A method of forming a individual, end-sealed, heat-shrinkable packaging receptacle is also disclosed.

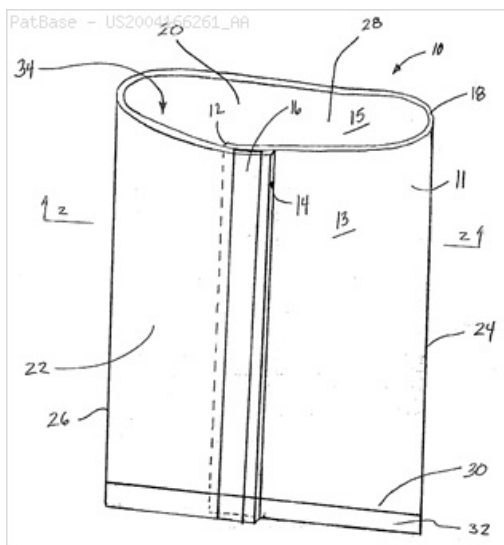
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International (IPC 1-7): B29C61/08 B29L7/00 B29L9/00 B31B1/64 B32B27/28 B32B27/32 B65B25/02 B65B25/06 B65B43/04 B65B51/10 B65B53/00 B65B53/02 B65D30/02 B65D30/08 B65D30/10 B65D30/14 B65D33/00 B65D33/16 B65D65/40 B65D71/08 B65D75/00 B65D77/10 B65D77/12 B65D81/18 F16B4/00 **CPC:** Y10T428/1328 Y10T428/1334 Y10T428/1341 Y10T428/1352 Y10T428/1379 Y10T428/1383 B65D75/002

European: B65D75/00B

US: 383/109 383/210 428/34.9 428/35.2 428/35.4 428/35.7 428/36.6 428/36.7



Family:

Publication number	Publication date	Application number	Application date
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Priority:

US20030371950 20030220 US20030645186 20030821 CA20042458136 20040219
EP20040250922 20040220 EP20090158040 20040220

Probable Assignee: BEMIS CO INC

Assignee(s): (std): BUSCHE DAVID A ; CURWOOD ; CURWOOD INC ; POCKAT GREGORY ROBERT ; SCHELL THOMAS ANDREW

Assignee(s): BEMIS CO INC ; CURWOOD INC OSHKOSH

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Inventor(s): THOMAS ANDREW SCHELL ; SCHELL THOMAS ANDREW OSHKOSH ; POCKAT GREGORY ROBERT RIPON ; BUSCHE DAVID ALAN NEENAH ; GREGORY ROBERTO POCKAT

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; SIM AND MCBURNEY; VILLASECA; VON ROHR PATENTANWAELTE PARTNERSCHAFT MBB; WP THOMPSON; EDDOWES SIMON; ACKROYD ROBERT; DE ELZABURU ALBERTO; DR SHLOMO COHEN AND

CO; RICHESON CEDRIC M; PARSONS CHRISTINE E; CEDRIC M; CHRISTINE E

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

Title: SEALANT COMPOSITION, ARTICLE INCLUDING SAME, AND METHOD OF USING SAME

Abstract: A multi-layer article which may be provided in the form of a tape comprises a conformable, compressible, melt flow-resistant core layer having first and second major surfaces, a sealant layer on the first major surface of the core layer, and optionally a bonding layer on the second major surface of the core layer. The sealant layer and the bonding layer each have a surface available for contacting a separate substrate. Various thermoset and foam core layers are disclosed as are thermosettable and thermoplastic sealant layers. The articles are useful for sealing two substrates together, particularly where one of the substrates is glass. Thus, the articles are especially adapted for sealing motor vehicle windshields to a frame. Various assemblies and methods for producing the same are also described.

Classifications:

International (IPC 8-9): B32B1/04 B32B27/08 B32B5/18 B60J10/02 C03C27/04 C08L63/00 C08L67/00 C09J7/02 (Advanced/Invention); B32B5/18 C08L63/00 C08L67/00 (Advanced/Non-invention); B32B1/00 B32B27/08 B32B5/18 B60J10/02 C03C27/00 C08L63/00 C08L67/00 C09J7/02 (Core/Invention)

International (IPC 1-7): B32B B32B27/08 B32B5/18 B32B7/12 B60J10/02 C03C27/04 C08K3/34 C08L63/00 C08L67/00 C09J7/02

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US: 156/278 156/280 156/307.5 156/309.6 156/312 156/313

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428/317.7 428/319.3 428/328.8 428/426 428/43 428/430 428/457

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PatBase - US2001047058_AA

Patent Application Publication Nov. 29, 2001 Sheet 1 of 3 US 2001/0047058 A1

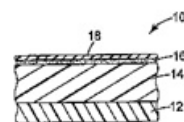


Fig. 1

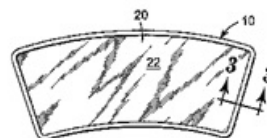


Fig. 2

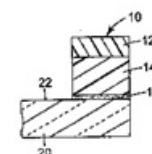


Fig. 3

Family:

Publication number	Publication date	Application number	Application date
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BRPI9813229 A	20000829	BR1998PI13229	19980828
CA2303788 AA	20000313	CA19982303788	19980828
CA2303788 C	20070807	CA19982303788	19980828
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CN1285783 A	20010228	CN19988011652	19980828
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DE69829863 T2	20060112	DE19986029863T	19980828
EP1019247 A1	20000719	EP19980942279	19980828
EP1019247 B1	20050420	EP19980942279	19980828
ES2241162 T3	20051016	ES19980942279T	19980828
JP2001518408 T2	20011016	JP20000513732T	19980828
JP4307710 B2	20090805	JP20000513732T	19980828
TH35243 A	19991006	TH19981003728	19980923
US2001047058 AA	20011129	US20010895722	20010629
US2001051260 AA	20011213	US20010896410	20010629
US6284360 BA	20010904	US19970941430	19970930
US6372827 BB	20020416	US20010895722	20010629
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WO9916618 A1	19990408	WO1998US17856	19980828

Priority:

US19970941430 19970930

WO1998US17856 19980828

US20010895722 20010629

US20010896410 20010629

Probable Assignee: 3M CO

Assignee(s): (std): 3M CO ; 3M INNOVATIVE PROPERTIES CO ; 3M INNOVATIVE PROPERTIES COMPANY ; MINNESOTA MINING AND MFG

Assignee(s): MINNESOTA MINING AND MFG CO ; MINNESOTA MINING AND MFG CO SAINT PAUL ; BOETTCHER ROBERT J ; GEORGE CLAYTON A ; JOHNSON MICHAEL A ; MINNESOTA MINING AND MANUFACTURING CO ; MINNESOTA MINING AND MANUFACTURING COMPANY

Inventor(s): (std): GEORGE A ; GEORGE C A ; GEORGE CLAYTON A ; JOHNSON A ; JOHNSON M A ; JOHNSON MICHAEL A ; BOETTCHER J ; BOETTCHER R J ; BOETTCHER ROBERT J

Inventor(s): C A GEORGE ; CA GEORGE ; CLAYTON A GEORGE ; M A JOHNSON ; MA JOHNSON ; MICHAEL A JOHNSON ; R J BOETTCHER ; RJ BOETTCHER ; ROBERT J BOETTCHER

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; SMART AND BIGGAR; NISHIYAMA MASAYA; ISHIDA TAKASHI; TSURUTA JUNICHI; HIGUCHI SOTOJI; FUKUMOTO TSUMORU

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA

GB GE GH GM GN GR GW HR HU ID IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK
ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG UZ
VN YU ZW

Title: PEELABLE/RESEALABLE PACKAGING FILM

Abstract: The present invention describes a multilayer film suitable for use in packaging applications comprising at least a polymeric first **layer** having a first surface and an opposing **second** surface wherein the polymeric first **layer** comprises a heat-sealable, water-insoluble polyester; a polymeric **second layer** having a first surface and an opposing **second** surface and comprising a pressure-sensitive adhesive, wherein the **second** surface of the polymeric **second layer** is in contact with the first surface of the polymeric first **layer** and forms a peelable/resealable bond therebetween; and a third **layer** in contact with the first surface of the polymeric **second layer**.

Classifications:

International (IPC 8-9): B29C47/06 B32B15/06 B32B15/08 B32B15/082 B32B15/09 B32B15/095 B32B15/12 B32B25/06 B32B27/06 B32B27/08 B32B27/10 B32B27/28 B32B27/30 B32B27/32 B32B27/36 B32B37/00 B32B7/04 B32B7/06 B32B7/10 B32B7/12 B65D65/40 B65D77/20 (Advanced/Invention); B32B15/06 B32B15/08 B32B15/12 B32B25/00 B32B27/08 B32B27/10 B32B27/32 B32B27/36 B32B7/04 B32B7/06 B32B7/10 B32B7/12 B65D65/40 (Core/Invention)

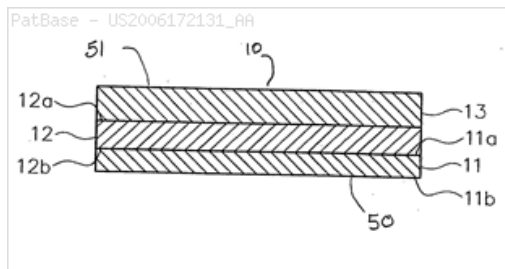
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European: B32B15/08 B32B27/08 B32B27/10 B32B27/32 B32B27/36 B32B7/06 B32B7/12 L32B250/03 L32B274/00 L32B307/310 L32B307/748 L32B439/46 L32B439/70 L32B553/00

US: 428/213 428/214 428/215 428/334 428/336 428/336P 428/339 428/346 428/347 428/349 428/349S 428/354 428/355BL 428/355EN 428/355R 428/40.1 428/41.7 428/41.8 428/41.9 428/42.2 428/42.3 428/457 428/461 428/462 428/474.7 428/476.3 428/480 428/480S 428/483 428/507 428/511 428/512 428/514 428/515 428/516 428/517 428/519 428/521 428/523 428/523S



Family:

Publication number	Publication date	Application number	Application date
AU2006200362 AA	20060817	AU20060200362	20060127
AU2006200362 BB	20100520	AU20060200362	20060127
AU2006200362 BH	20100916	AU20060200362	20060127
BRPI0600013 A	20060919	BR2006PI00013	20060105
BRPI0600013 B1	20170606	BR2006PI00013	20060105
CA2534718 AA	20060801	CA20062534718	20060131
CA2534718 C	20130723	CA20062534718	20060131
CL2006000159 A1	20061020	CL20060000159	20060125
CL47023 B	20100924	CL20060000159	20060125
DE602005042619 D1	20140306	DE200560042619T	20051126
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EP1685954 A1	20060802	EP20050025850	20051126
EP1685954 B1	20140129	EP20050025850	20051126
EP2204282 A2	20100707	EP20090175990	20051126
EP2204282 A3	20100714	EP20090175990	20051126
EP2204282 B1	20140226	EP20090175990	20051126
JP2006213053 A2	20060817	JP20060006565	20060113
JP4969853 B2	20120704	JP20060006565	20060113
NZ544148 A	20070629	NZ20050544148	20051213
US2006172131 AA	20060803	US20050048425	20050201
US7422782 BB	20080909	US20050048425	20050201

Priority:

US20050048425 20050201 EP20050025850 20051126 EP20090175990 20051126
CA20062534718 20060131

Probable Assignee: BEMIS CO INC

Assignee(s): (std): CURWOOD INC

Assignee(s): CURWOOD INC OSHKOSH ; NETT LYNN M ; MICHELS JOSEPH J ; SHERIDAN PAUL J ; HAEDT EDWARD L ; BEMIS CO INC

Inventor(s): (std): SHERIDAN PAUL J ; NETT LYNN M ; MICHELS JOSEPH J ; PAUL J SHERIDAN ; LYNN M NETT ; JOSEPH J MICHELS ; EDWARD L HAEDT ; HAEDT EDWARD L

Inventor(s): HAEDT EDWARD ; SHERIDAN PAUL J NEENAH ; MICHELS JOSEPH ; LYNN M NETT PAUL SHERIDAN ; LYNN M NETT PAUL J SHERIDAN ; HAEDT EDWARD L OSHKOSH ; NETT LYNN ; MICHELS JOSEPH J FOND DU LAC ; SHERIDAN PAUL ; NETT LYNN M COMBINED LOCKS

Agent(s): WATERMARK INTELLECTUAL PROPERTY PTY LTD; WATERMARK PATENT AND TRADE MARKS ATTORNEYS; SIM AND MCBURNEY; VILLASECA; HOEGER STELLRECHT AND PARTNER PATENTANWALTE MBB; HOEGER STELLRECHT AND PARTNER PATENTANWALTE; WOESSNER GOTTFRIED; BEMIS CO INC; HALL TOM J; TOM J

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Title: STRETCHABLE NONWOVEN WEBS BASED ON MULTI-LAYER BLOWN MICROFIBERS

Abstract: A highly conformable and deformable nonwoven web comprising melt-blown microfibers having multiple layers of a relatively low modulus material and a high modulus material.

Classifications:

International (ipc 8-9): A61F13/02 A61F5/443 A61F5/445 C09J7/02 C09J7/04 D01D5/08 D04H1/54 D04H1/56 D04H1/70 D04H13/00 D04H3/16 (Advanced/Invention);

A61F13/00 A61F13/02 A61F13/15 D04H1/56

D04H13/00 (Advanced/Non-invention);

D04H1/54 D04H1/56 D04H1/70 D04H13/00 (Core/Invention);

A61F13/00 A61F13/02 A61F13/15 (Core/Non-invention)

International (ipc 1-7): A61F13/02 A61F5/44 A61F5/445 A61F5/449 B32B27/00 B32B5/16 B32B7/12 C09J7/02 C09J7/04 D01D5/08 D04H1/00 D04H1/54 D04H1/56 D04H1/70 D04H13/00 D04H3/16

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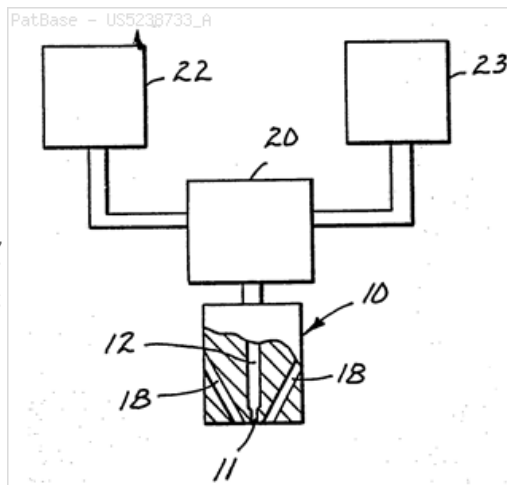
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D04H1/559

European: A61F13/02F A61F5/443 D04H1/54 D04H1/56B D04H13/00B5 K61F13/00L10B K61F13/00L19 K61F13/00L20 K61F13/00L2G1 K61F13/00L2K K61F13/00L3A3 K61F13/00L3H K61F13/00L5E4 K61F13/02F K61F13/15A11 K61F13/15J8A K61F13/15J8L K61F13/15M11H4 K61F13/49D3 K61F13/534C K61F13/537 K61F13/539A K61F13/539C K61F13/539H K61F13/53M1 K61F13/53M3D K61F13/53M4 K61F13/53M7 K61F13/84E1

US: 156/167 359/515 359/536 428/283 428/284 428/285 428/286 428/288 428/297 428/298 428/343 428/354 428/369 428/373 428/402 428/403 428/406 428/903 428/910 442/151 442/183 442/189 442/228 442/293 442/294 442/329 442/341 442/345 442/364 442/400 442/60 604/339 604/344



Family:

Publication number	Publication date	Application number	Application date
CA2114148 AA	19940124	CA19922114148	19920811
CA2114148 C	20031104	CA19922114148	19920811
CA2143021 AA	19950930	CA19952143021	19950221
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TW242655 B	19950311	TW19920106591	19920820
US5238733 A	19930824	US19910768173	19910930
US5316838 A	19940531	US19930037902	19930326
US5423783 A	19950613	US19940219216	19940329
US5629079 A	19970513	US19950374133	19950118
WO9307321 A1	19930415	WO1992US06674	19920811

Priority:

US19910768173 19910930 WO1992US06674 19920811 US19930037902 19930326
US19940219216 19940329 US19950374133 19950118 CA19952143021 19950221

Probable Assignee: 3M CO

Assignee(s): (std): MINNESOTA MINING AND MFG

Assignee(s): MINNESOTA MINING AND MFG CO ; MINNESOTA MINING AND MFG CO SAINT PAUL ; MINNESOTA MINING AND MFG CO SAINT PAUL MINN US ; PURRINGTON SCOTT M ; MEYER DANIEL E ; KRUEGER DENNIS L ; REED JOHN F ; WOOD LEIGH E ; SUSZKO PAUL R ; 3M CO ; BATTLES DONALD R ; HUANG AUDREY S ; JOSEPH EUGENE G ; MINNESOTA MINING AND MANUFACTURING COMPANY

Inventor(s): (std): BATTLES DONALD R ; BATTLES DONALD R C O MINNESOTA ; CRANDALL MICHAEL D ; HUANG AUDREY S ; HUANG AUDREY S C O MINNESOTA M ; JOSEPH EUGENE G ; JOSEPH EUGENE G C O MINNESOTA ; KRUEGER DENNIS L ; PURRINGTON SCOTT M ; PURRINGTON SCOTT M C O MINNESO ; REED JOHN F ; REED JOHN F C O MINNESOTA MINI ; SUSZKO PAUL R ; WOOD LEIGH E ; MEYER DANIEL E

Inventor(s): PAUL R SUSZKO ; LEIGH E WOOD ; DANIEL E MEYER ; DENNIS L KRUEGER ; EUGENE G JOSEPH

Agent(s): SMART AND BIGGAR

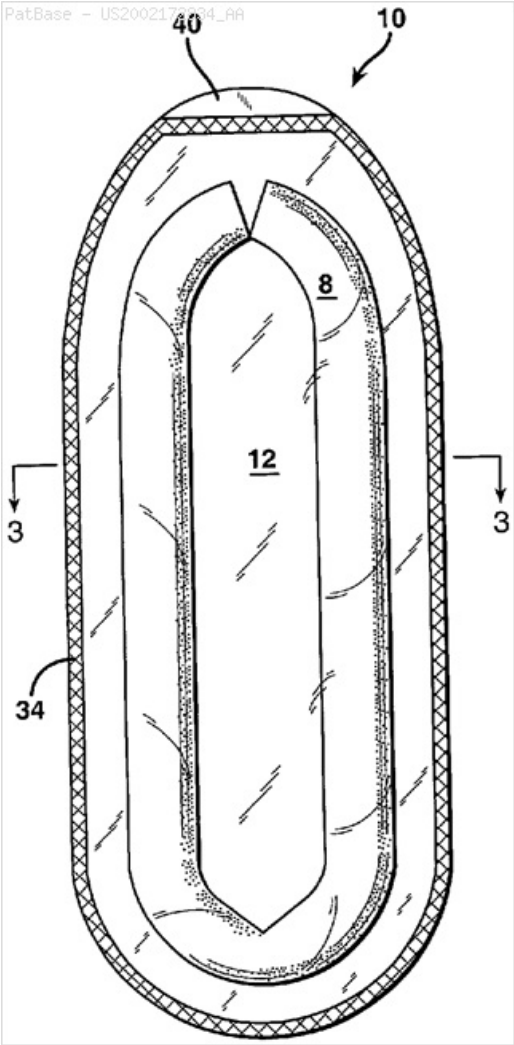
Designated states: AT BE CA CH DE DK ES FR GB GR IE IT JP KR LU MC NL SE

Title: PEELABLY SEALED PACKAGING

Abstract: A peelably sealed package includes a web having a peelable **layer** and a substrate having a surface **layer**. The peelable **layer** includes a blend of: i) from about 3 to about 15 weight parts polybutylene, ii) from about 40 to about 75 weight parts ionomer, and iii) from about 20 to about 55 weight parts **ethylene**/unsaturated ester copolymer such as a vinyl ester of aliphatic carboxylic acid or an alkyl ester of acrylic or methacrylic acid. The surface **layer** of the substrate includes a polyethylene having a density of from about 0.915 to about 0.93 g/cc, an ionomer, or a mixture of these **polymers**. The peelable **layer** of the web and the surface **layer** of the substrate are peelably sealed to each other in one or more selected areas. The peelable **layer** may form a peelable **seal** having a peel strength that is essentially equivalent regardless of whether the contact surface of the substrate is a polyethylene or an ionomer.

Classifications:

International (IPC 8-9): B32B27/08 B32B27/32
B65D75/58 (Advanced/Invention);
B32B27/08 B32B27/32 B65D75/52 (Core/Invention)
International (IPC 1-7): B32B27/08 B32B27/28 B32B27/32
B65D30/08 B65D75/58
CPC: Y10T428/14 Y10T428/2878 B65D75/5855 Y10T428/31855
Y10T428/31902 Y10T428/31909 B32B7/06 B32B2435/02
B32B2439/70 B32B27/08 B32B27/32
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428/40.1 428/500 428/513 428/515 428/515P



Family:

Publication number	Publication date	Application number	Application date
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US6630237 BB	20031007	US20010777240	20010205
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Priority:

US20010777240 20010205 WO2002US02613 20020129 WO2002US02613 20020129

Probable Assignee: CRYOVAC INC

Assignee(s): (std): CRYOVAC INC ; HAHM DIANE M ; RIVETT JANET W ; TANNY STEPHEN R

Inventor(s): (std): HAHM DIANE M ; HAHM M ; RIVETT JANET W ; RIVETT W ; TANNY R ; TANNY STEPHEN R

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW

Title: LAMINATED ARTICLES AND THEIR PRODUCTION

Abstract: A laminated article comprises a substrate having opposite major surfaces, and a **multi-layer** lamination composition comprising (i) a base **layer** and (ii) an adhesion **layer** bonded to at least one surface of the base **layer**. The adhesion **layer** (ii) comprises a **propylene** copolymer which comprises units derived from **propylene** and from about 3 to about 25 wt percent of units derived from **ethylene** and/or a C4 to C8 alpha-olefin and which has a melting temperature less than about 105 degrees centigrade and a heat of fusion less than about 75 J/g. The lamination composition is thermally laminated to the substrate such that said adhesion **layer** (ii) is bonded to at least one major surface of said substrate.

Classifications:

International (IPC 8-9): B05D1/00 B05D1/36 B32B15/085

B32B27/08 B32B27/10 B32B27/12 B32B27/32 B32B27/36 B32B3/10

B32B37/00 B32B37/04 B32B37/12 B32B38/00 B32B5/26 C08F210/06

D03D25/00 D04H13/00 (Advanced/Invention);

B32B37/18 (Advanced/Non-invention)

CPC: B32B37/04 B32B27/08 B32B27/36 B32B37/185 B32B38/0008

B32B2307/412 B32B2310/14 B32B2323/10 B32B2425/00

B32B2429/00 Y10T428/24851 Y10T156/10 Y10T156/1092

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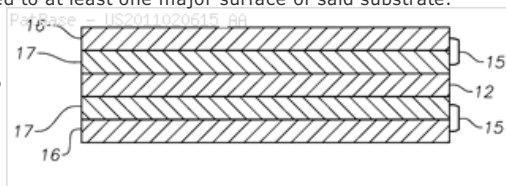
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L32B38/00B L32B425/00 L32B429/00

US: 156/272.6 156/272.600S 156/299 156/299S 156/326 156/326S 156/60 156/60S 427/209 427/209S 427/407.1

427/407.100S 428/195.1 428/195.100P 428/201 428/201P 428/219 428/219S 428/461 428/461S 428/480 428/480S 428/483

428/483S 428/513 428/513S 428/516 428/516S 428/523 428/523S 442/59 442/59S 526/348 526/348S

**Family:**

Publication number	Publication date	Application number	Application date
US2011020615 AA	20110127	US20100814224	20100611
US2011020619 AA	20110127	US20100814236	20100611
US9005739 BB	20150414	US20100814224	20100611
WO11011124 A1	20110127	WO2010US38384	20100611

Priority:

US20090227997P 20090723 US20100326934P 20100422 US20100814224 20100611

US20100814236 20100611

Probable Assignee: EXXON MOBIL CORP

Assignee(s): (std): EXXONMOBIL CHEM PATENTS INC ; VAN DEN BOSSCHE LINDA M ; VOGELAERS NANCY GEORGETTE ; VOGELAERS NANCY G

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

Inventor(s): (std): VOGELAERS NANCY G ; VOGELAERS NANCY GEORGETTE ; VAN DEN BOSSCHE LINDA M

Agent(s): EXXONMOBIL CHEMICAL COMPANY; EXXONMOBIL CHEMICAL CO; FRANK; LEANDRO; KRISTINA; LIN HSIN ET AL

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 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

Title: **MULTI-LAYERED** SEALANT

Abstract: A **multi-layered** article for establishing a **seal** between two substrates. The **multi-layered** article includes a bulk **layer** and an adhesive **layer**. The **layers** of the article are generally epoxy-containing, photo-activated materials. Upon photo-activation, the bulk **layer** and the adhesive **layer** have different curing rates. The article is suitable for adhering and sealing two substrates together. The article is particularly useful when at least one of the substrates is glass.

Classifications:

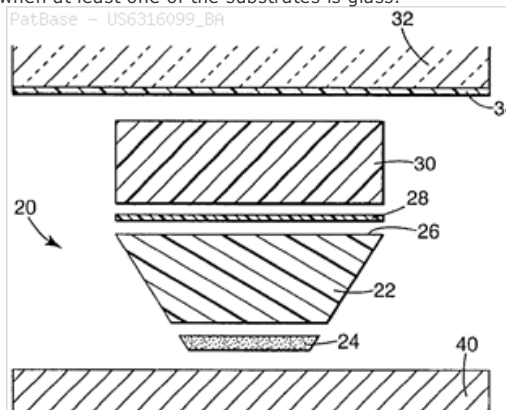
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International (IPC 1-7): B32B27/38 B32B7/10 B32B7/12 C03C27/04 C09J131/04 C09J133/00 C09J163/00 C09J163/02 C09J167/00 C09J5/00 C09J7/00 C09J7/02 C09K3/10

CPC: B32B27/38 B32B7/12 Y10T428/287 Y10T428/249976 Y10T428/249982 Y10T428/249985 Y10T428/249991 Y10T428/31511 Y10T428/31518 Y10T428/31525 Y10T428/31616 Y10T428/31678 Y10T428/31681 B32B5/18 B32B2363/00 B32B2605/08 B32B27/08 C09J163/00 C09J2201/36 C09J2201/61 C09J2463/00 C09J7/10

European: B32B27/08 B32B27/38 B32B7/12 C09J163/00 C09J7/00 M09J201/36 M09J201/610 M09J463/00

US: 428/314.4 428/317.1 428/317.7 428/319.3 428/328.8 428/355EP 428/413 428/415 428/417 428/426 428/430 428/457 428/458



Family:

Publication number	Publication date	Application number	Application date
AU199934632 A1	20010716	AU19990034632	19990331
AU199934632 A5	20010716	AU19990034632	19990331
AU209934632 A1	20010716	AU19990034632	19990331
BRPI9917240 A	20030114	BR1999PI17240	19990331
DE69919228 D1	20040909	DE19996019228	19990331
DE69919228 T2	20050804	DE19996019228T	19990331
EP1185595 A2	20020313	EP19990916278	19990331
EP1185595 B1	20040804	EP19990916278	19990331
JP2003519278 T2	20030617	JP20010550331T	19990331
KR100579671 B1	20060515	KR20017012550	19990331
KR20020034069 A	20020508	KR20017012550	19990331
US6316099 BA	20011113	US19990409520	19990930
US6740399 BA	20040525	US20000713382	20001115
WO0149797 A2	20010712	WO1999US07195	19990331
WO0149797 A3	20011220	WO1999US07195	19990331

Priority:

WO1999US07195 19990331 US19990409520 19990930 US20000713382 20001115
KR20017012550 20010929

Probable Assignee: 3M CO

Assignee(s): (std): GEORGE CLAYTON A ; JOHNSON MICHAEL A ; MINNESOTA MINING AND MFG ; MINNESOTA MINING AND MFG CO N ; 3M CO ; 3M INNOVATIVE PROPERTIES CO

Assignee(s): 3M INNOVATIVE PROPERTIES COMPANY ; MINNESOTA MINING AND MFG CO ; MINNESOTA MINING AND MANUFACTURING CO N D GES D STAATES DELAWARE ST PAUL ; MINNESOTA MINING AND MFG CO NDGESDSTAATES DELAWARE STPAUL ; MINNESOTA MINING AND MANUFACTURING COMPANY ; MINNESOTA MINING AND MFG CO N D GES D S

Inventor(s): (std): GEORGE A ; GEORGE CLAYTON A ; JOHNSON A ; JOHNSON MICHAEL A ; JOHNSON MICHAEL ALLEN ; GEORGE CLAYTON ALLEN

Inventor(s): CLAYTON ALLEN GEORGE ; CLAYTON A GEORGE ; MICHAEL A JOHNSON ; MICHAEL ALLEN JOHNSON

Agent(s): NISHIYAMA MASAYA; ISHIDA TAKASHI; TSURUTA JUNICHI; HIGUCHI SOTOJI; FUKUMOTO TSUMORU

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZA ZW

Title: LIQUID CRYSTALLINE **POLYMERS**, PROCESSES FOR THEIR MANUFACTURE, AND ARTICLES THEREOF

Abstract: Thermotropic liquid crystalline **polymers** are produced by the reaction of a polyester made from an aromatic dicarboxylic acid and a diol, one or more hydroxycarboxylic acids, a stoichiometric excess of an aromatic diol, and a carboxylic acid anhydride. Also disclosed are novel liquid crystalline **polymers** that may be produced by this process. These liquid crystalline **polymers** are useful as molding resins and shaped articles thereof are produced. In particular, the articles include films, sheets, containers and portions thereof comprising these LCPs.

Classifications:

International (IPC 8-9): B32B27/10 B32B27/36 B65D65/40
C08G63/16 C08G63/60 C08G63/78 C09K19/38 C09K19/52
D21H19/28 (Advanced/Invention);

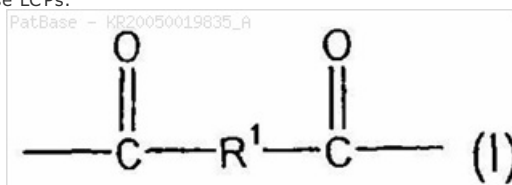
C08G63/60 C08G63/78 (Advanced/Non-invention);
C08G63/00 (Core/Invention)

International (IPC 1-7): C08G63/60 C08G63/78 C09K19/20
C09K19/32 C09K19/52

CPC: Y10T428/10 Y10T428/1303 C08G63/78 C08G63/60
C09K19/3809 Y10T428/31786

European: C08G63/60 C08G63/78 C09K19/38A2

US: 252/299.01 252/299.010S 252/299.62 252/299.620S 252/299.67 252/299.670S 428/1.1 428/1.100P 428/34.2 428/480
524/601 524/604 524/605 525/444 528/176 528/193



Family:

Publication number	Publication date	Application number	Application date
AU2003251867 AA	20040202	AU20030251867	20030711
CA2491910 AA	20050106	CA20032491910	20030711
CN1668667 A	20050914	CN20038016643	20030711
CN1668667 B	20101201	CN20038016643	20030711
DE60328023 D1	20090730	DE20036028023	20030711
EP1521793 A1	20050413	EP20030764523	20030711
EP1521793 B1	20090617	EP20030764523	20030711
JP2006511632 T2	20060406	JP20040521694T	20030711
JP4758100 B2	20110824	JP20040521694T	20030711
KR20050019835 A	20050303	KR20057000531	20030711
US2004058092 AA	20040325	US20030618319	20030711
US7105106 BB	20060912	US20030618319	20030711
WO04007590 A1	20040122	WO2003US21752	20030711

Priority:

US20020395369P 20020712 US20030618319 20030711 WO2003US21752 20030711
KR20057000531 20050111

Probable Assignee: EI DU PONT DE NEMOURS AND CO

Assignee(s): (std): DU PONT ; E I DU PONT DE NEMOURS AND CO ; EIDU PONT DE NEMOURS AND CO

Assignee(s): SAMEULS MICHAEL ROBERT ; WAGGONER MARION G ; URADNISHECK JULIUS ; SAMEULS MICHAEL ROBERT ; WAGGONER MARION GLEN ; E I DU PONT DE NEMOURS AND COMPANY ; EI DU PONT DE NEMOURS AND CO ; E I DU PONT DE NEMOUR AND CO ; E I DU PONT DE NEMOUR AND COMPANY

Inventor(s): (std): JULIUS URADNISHECK ; ROBERT SAMEULS MICHAEL ; SAMEULS MICHAEL ROBERT ; SAMEULS MICHAEL ROBERT ; URADNISHECK JULIUS ; WAGGONER MARION G ; WAGGONER MARION GLEN

Inventor(s): MICHAEL ROBERT SAMEULS ; MARION GLEN WAGGONER

Agent(s): BENNETT JONES LLP; MORF JAN STEFAN; ABE KAZUO; TANI YOSHIKAZU

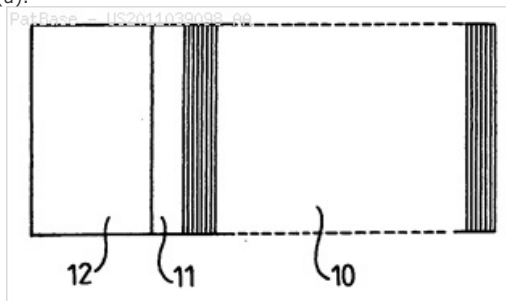
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE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

Title: GAS-BARRIER FILMS AND SHEETS

Abstract: Multi-layer, gas-barrier, either cast or solid-state oriented, heat-shrinkable, annealed or heat-set, films and sheets suitable for packaging applications which comprise a microlayer sequence (a) comprising a number n of identical repeating units (a'), each comprising the sequence A/B/C, wherein A is a layer comprising a major proportion of one or more thermoplastic (co)polyamides, B is either a layer comprising a major proportion of one or more ethylene-vinyl alcohol copolymers or a layer comprising a major proportion of a (co)polyamide characterized by an OTR of less than 100 cm³.25 micro m/m².day.bar at 23 degrees centigrade and 0 percent of RH, C is either nil or a layer comprising a major proportion of one or more thermoplastic (co)polyamides, and n stands for an integer of 3 or more, an outer layer (b) comprising one or more polymers selected from polyolefins, modified polyolefins, and thermoplastic (co)polyesters, and a tie layer between the outer layer (b) and the microlayer sequence (a).

Classifications:

International (IPC 8-9): B32B27/08 B32B27/30 B32B27/34
B65D65/40 (Advanced/Invention);
B32B27/30 B32B27/34 B65D65/40 (Core/Invention)
CPC: Y10T428/269 B32B27/34 B29C47/0021 B29C47/065
B29C47/707 B29K2077/00 B29K2995/0067 B29K2995/0069
B65D65/40 B32B7/12 B32B25/08 B32B27/08 B32B27/18 B32B27/20
B32B27/302 B32B27/306 B32B27/308 B32B27/32 B32B27/36
B32B2264/10 B32B2270/00 B32B2307/30 B32B2307/31
B32B2307/50 B32B2307/514 B32B2307/7242 B32B2307/7244
B32B2307/736 B32B2435/00 B32B2439/00 B32B2553/00
B32B2250/05 B32B2250/42
European: B32B27/30 B32B27/34 B65D65/40 L29C47/00J5
L29C47/06P L29C47/70B4 L29K77/00 L29K995/00F16B
L29K995/00F17B
US: 428/339 428/339P



Family:

Publication number	Publication date	Application number	Application date
EP2237951 A2	20101013	EP20090706768	20090129
US2011039098 AA	20110217	US20090865008	20090129
WO09095231 A2	20090806	WO2009EP00560	20090129
WO09095231 A3	20091217	WO2009EP00560	20090129

Priority:

EP20080001799 20080131 EP20090706768 20090129 WO2009EP00560 20090129

Probable Assignee: CRYOVAC INC

Assignee(s): (std): CIOCCA PAOLO ; CRYOVAC INC ; FORLONI ROBERTO ; LONGO EUGENIO ; LONGO EUGENIO SERGIO ; ROBERTO FORLONI

Inventor(s): (std): CIOCCA PAOLO ; FORLONI ROBERTO ; LONGO EUGENIO ; LONGO EUGENIO SERGIO ; ROBERTO FORLONI

Agent(s): FRAIRE CRISTINA; LAW DEPARTMENT SEALED AIR CORP; DE CARLI ELDA

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: GAS-BARRIER THERMOPLASTIC FILM AND SUBSTRATE/FILM COMPOSITE MATERIAL

Abstract: A gas-barrier multilayer film comprising at least an outer heat-sealable polyolefin layer, a core gas-barrier layer comprising one or more of EVOH and/or polyamides, and an outer bonding layer comprising one or more styrene-based polymers, characterized in that a) at least 35 percent by weight, preferably at least 38 percent by weight and even more preferably at least 40 percent by weight of the overall film is of styrene-based polymers, b) at least part of these "styrene-based polymers" are in the form of modified styrene-based polymers, and c) said modified styrene-based polymers are present in a ratio, with respect to the weight of the gas-barrier resin of the core layer, of at least 0.1:1, preferably at least 0.3:1, and even more preferably at least 0.5:1. The use of the new gas-barrier film as liner in the manufacture of a polystyrene/film composite allows to reclaim the entire scrap obtained in the overall process in the polystyrene substrate still obtaining composites with mechanical properties and packaging performances comparable to those of the original composites.

Classifications:

International (IPC 8-9): B29B17/00 B32B27/08

C08J11/06 (Advanced/Invention);

B29B17/00 B32B27/08 C08J11/00 (Core/Invention)

International (IPC 1-7): B29B17/00 B29B17/00 B32B27/08

B65D1/00 C08J11/06

CPC: Y10T428/1376 C08J11/06 B29B17/0005 B29B17/0042

B29K2025/00 B29L2007/008 B29L2009/00 B29L2031/712 B32B27/08

Y02W30/62 Y02W30/701 Y02W30/801 Y02P20/582

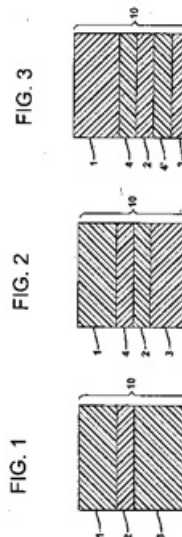
European: B29B17/00B B29B17/00D4 B32B27/08 C08J11/06

L29K25/00 L29L31/712 L29L7/00G L29L9/00

US: 428/36.5 428/36.500P

PatBase - US2004126524_AA

Patent Application Publication Jul. 1, 2004 Sheet 1 of 4 US 2004/0126524 A1



Family:

Publication number	Publication date	Application number	Application date
AT309091 E	20051115	AT20020016607T	20020725
DE60207232 D1	20051215	DE20026007232	20020725
DE60207232 T2	20060720	DE20026007232T	20020725
EP1384576 A1	20040128	EP20020016607	20020725
EP1384576 B1	20051109	EP20020016607	20020725
ES2252364 T3	20060516	ES20020016607T	20020725
US2004126524 AA	20040701	US20030625184	20030723

Priority:

EP20020016607 20020725

Probable Assignee: CRYOVAC INC

Assignee(s): (std): CRYOVAC INC

Inventor(s): (std): BIANCA SERENA DELLA ; DELLA BIANCA SERENA ; LONGO EUGENIO ; LONGO EUGENIO SERGIO

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

Title: PROCESS FOR EXTRUSION COATING AND LAMINATING ORIENTED POLYPROPYLENE FILM, TIE-LAYER COMPOSITIONS FOR SUCH A PROCESS AND MULTI-LAYER FILMS WITH LAYERS BONDED BY SUCH TIE-LAYERS

Abstract: The invention relates to a process for extrusion lamination or extrusion coating on a continuous line comprising: a) supplying an OPP substrate layer; b) extruding a composition comprising a propylene based elastomer as a tie-layer extruded in molten form onto the surface of the OPP substrate without the interposition of a primer applied from a primer diluent mixture and c) laminating or coating a further layer a to provide an adhesive strength between the substrate layer and the further layer of at least 0.4 N/15 mm, preferably at least 1 N/15 mm. Especially useful are tie-layer compositions which composition contain from 2 to 98 wt percent of a propylene-based elastomer and from 5 to 70 wt percent of a free radical produced low density ethylene based polymer, preferably an LDPE or an interpolymers of ethylene and a copolymerizable ester and/or acid group containing monomer, optionally at least partly neutralized.

Classifications:

International (IPC 8-9): B32B27/32 C08L23/14

C09J123/14 (Advanced/Invention);

C08L23/06 C08L23/08 (Advanced/Non-invention);

B32B27/32 C08L23/00 C09J123/00 (Core/Invention)

CPC: B32B7/10 B32B15/06 B32B25/06 B32B25/08 B32B25/14

B32B2270/00 B32B2307/31 B32B2307/514 B32B2307/704

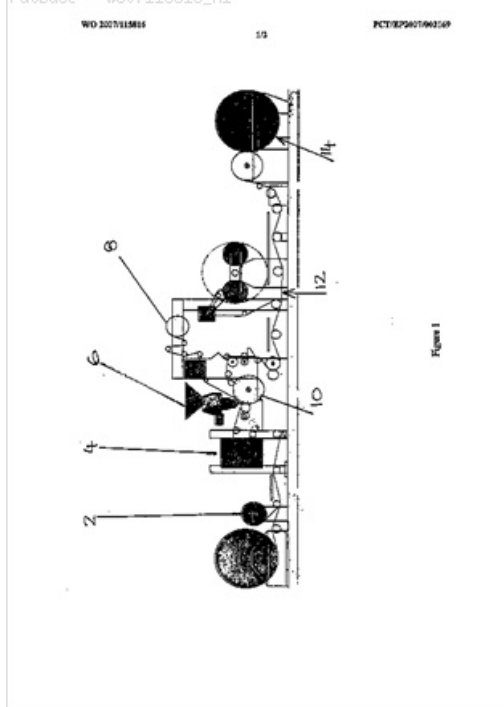
B32B27/32 C08L23/06 C08L23/0869 C08L23/14 C09J123/14

C08L2666/06

European: B32B27/32 C08L23/14 C09J123/14 M08L23/06

M08L23/08C3

PatBase - WO07115816_A1



Family:

Publication number	Publication date	Application number	Application date
GB200607280 A0	20060517	GB20060007280	20060411
WO07115816 A1	20071018	WO2007EP03169	20070410

Priority:

GB20060007280 20060411

Probable Assignee: EXXON MOBIL CORP

Assignee(s): (std): EXXON MOBIL CORP ; EXXONMOBIL CHEM PATENTS INC ; GALLEZ VINCENT B ; VAN DEN BOSSCHE LINDA ; VOGELAERS NANCY

Assignee(s): EXXONMOBIL CHEMICAL PATENTS INC ; EXXONMOBILE CHEMICAL PATENTS INC

Inventor(s): (std): GALLEZ VINCENT B ; VAN DEN BOSSCHE LINDA ; VOGELAERS NANCY

Designated states: AE AG AL AM 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 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 LK LR LS LT LU LV LY MA MC MD 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 SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: MULTILAYER STRUCTURES COMPRISING A MICROLAYER SEQUENCE

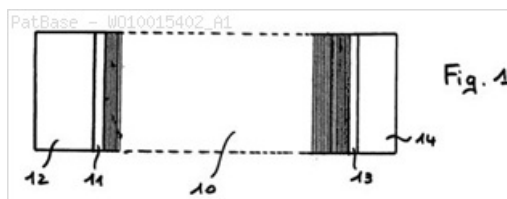
Abstract: Multi-layer cast structures particularly suitable for thermoforming applications comprise a coextruded polypropylene-containing microlayer sequence (a) of at least 16 microlayers, made of a number n of identical repeating units (a'), that in addition to a polypropylene microlayer (A) preferably comprise also a polyolefin microlayer (B) having a composition other than that of (A). In a preferred embodiment the microlayer sequence (a) is coextruded with an outer heat-sealable layer (b) and an outer abuse-resistant layer (c), preferably comprising a (co)polyamide or/and a (co)polyester.

Classifications:

International (IPC 8-9): B32B27/32 B65D65/40 (Advanced/Invention); B32B27/32 B65D65/40 (Core/Invention)

CPC: B32B5/18 B32B7/12 B32B27/18 B32B27/22 B32B27/302 B32B27/34 B32B27/36 B32B2250/40 B32B2266/0264 B32B2270/00 B32B2307/21 B32B2307/31 B32B2307/516 B32B2307/518 B32B2307/54 B32B2307/558 B32B2307/702 B32B2307/72 B32B2307/7242 B32B2439/00 B32B2439/70 B32B27/32 B29C47/0021 B29C47/065 B29C47/707 B29C51/02 B29K2023/12 B29K2995/0067 B29K2995/0069 B32B2307/514 Y02P70/279

European: B32B27/32 L29C47/00J5 L29C47/06P L29C47/70B4 L29C51/02 L29K23/12 L29K995/00F16B L29K995/00F17B

**Family:**

Publication number	Publication date	Application number	Application date
WO10015402 A1	20100211	WO2009EP05695	20090806

Priority:

EP20080014096 20080807

Probable Assignee: CRYOVAC INC

Assignee(s): (std): CRYOVAC INC ; FORLONI ROBERTO

Inventor(s): (std): FORLONI ROBERTO

Agent(s): ELDA DE CARLI

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 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 TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: PEELABLE SEAL LAYER

Abstract: The present invention is related to a heat-sealable multilayer film comprising: - a support layer comprising at least one polymeric layer; - a peelable seal layer of polymer blend, said blend comprising: - 50 to 80 percent by weight of an ethylene polymer; - 10 to 40 percent by weight of a styrene polymer; and - 5 to 30 percent by weight of a styrene-butadiene block copolymer, characterized in that the average of the elastic or storage compliance at a frequency of 10 rad/s (J'10) and the elastic or storage compliance at a frequency of 100 rad/s (J'100) is at least 10-5 Pa-1, preferably at least 12 10-6 Pa-1, measured at a temperature of 160 degrees centigrade on a dynamic plate/plate rheometer.

Classifications:

International (IPC 8-9): A61J1/00 B32B27/08 B32B27/30 B32B27/32 B32B27/34 B32B27/36 B32B7/06 (Advanced/Invention)

CPC: B32B27/08 A61J1/00 B32B7/06 B32B27/302 B32B27/304 B32B27/306 B32B27/32 B32B27/34 B32B27/36 B32B27/365 B32B2270/00 B32B2307/31 B32B2307/40 B32B2307/412 B32B2307/51 B32B2307/732 B32B2307/748 B32B2439/80

Family:

Publication number	Publication date	Application number	Application date
WO18095657 A1	20180531	WO2017EP76416	20171017

Priority:

EP20160200529 20161124

Probable Assignee: AMCOR FLEXIBLES TRANSPAC BVBA

Assignee(s): (std): AMCOR FLEXIBLES TRANSPAC BVBA

Inventor(s): (std): MALFAIT TONY ; VERLODT INGEBORG

Agent(s): ASSOCIATION OF REPRESENTATIVES PRONOVEM

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 DJ 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 JO JP KE KG KH KM KN KP KR KW KZ LA LC 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