

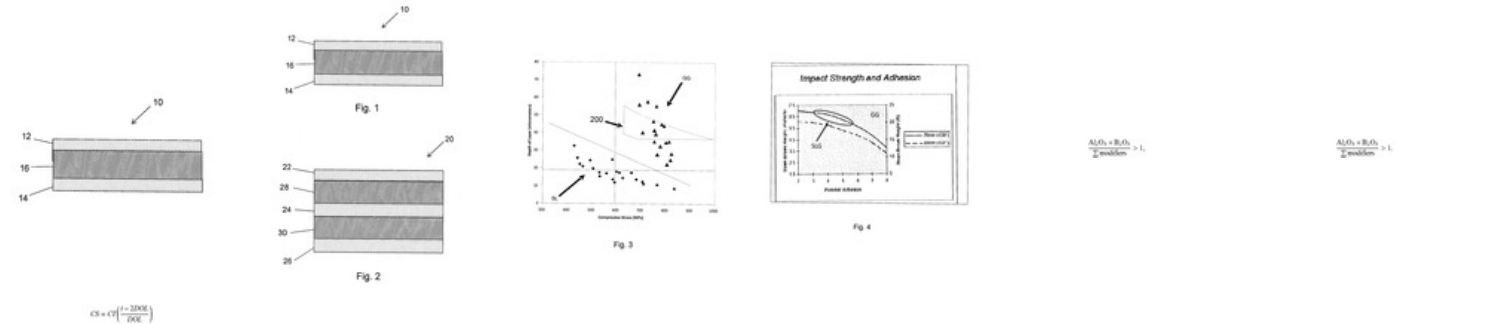
15 results for GLASS AND ALUMINOSILICATE AND BOROSILICATE AND LAYER AND (PLASTIC OR RESIN OR POLYMER) AND THICKNESS AND STRENGTH - Collection: FAMPAT

#	Title	Publication number	1st app. date	Applicant/Assignee	1st publ. date	Publ. date
1.	Hollow aluminosilicate glass microspheres and process for their production	EP1156021	2001-05-10	ASAHI GLASS*	2001-11-21	2001-11-21

Hollow **aluminosilicate glass** microspheres which are hollow **glass** microspheres having an average particle size of from 1 to 20 μm based on volume, an average particle density of from 0.20 to 1.50 g/cm^3 , a sphericity within a range of $1 \leq (\text{long axial length}/\text{short axial length}) < 1.2$ and a composition comprising from 30 to 85 mass% of SiO_2 , from 6 to 45 mass% of Al_2O_3 , from 0 to 30 mass% of an alkali metal oxide, from 0 to 30 mass% of an alkaline earth metal oxide and from 0 to 1 mass% of B_2O_3 , and which have a **strength** at 10 volume% collapse of at least 10% of the theoretical **strength** given by the formula $16.7 \times E \times (t/2a) < 2.5$, where E is the Young's modulus (unit: GPa) of the **glass** constituting the hollow **glass** microspheres, t is the **thickness** (unit: mm) of the shell of the hollow **glass** microspheres, and a is the hollow radius (unit: mm) of the hollow **glass** microspheres.

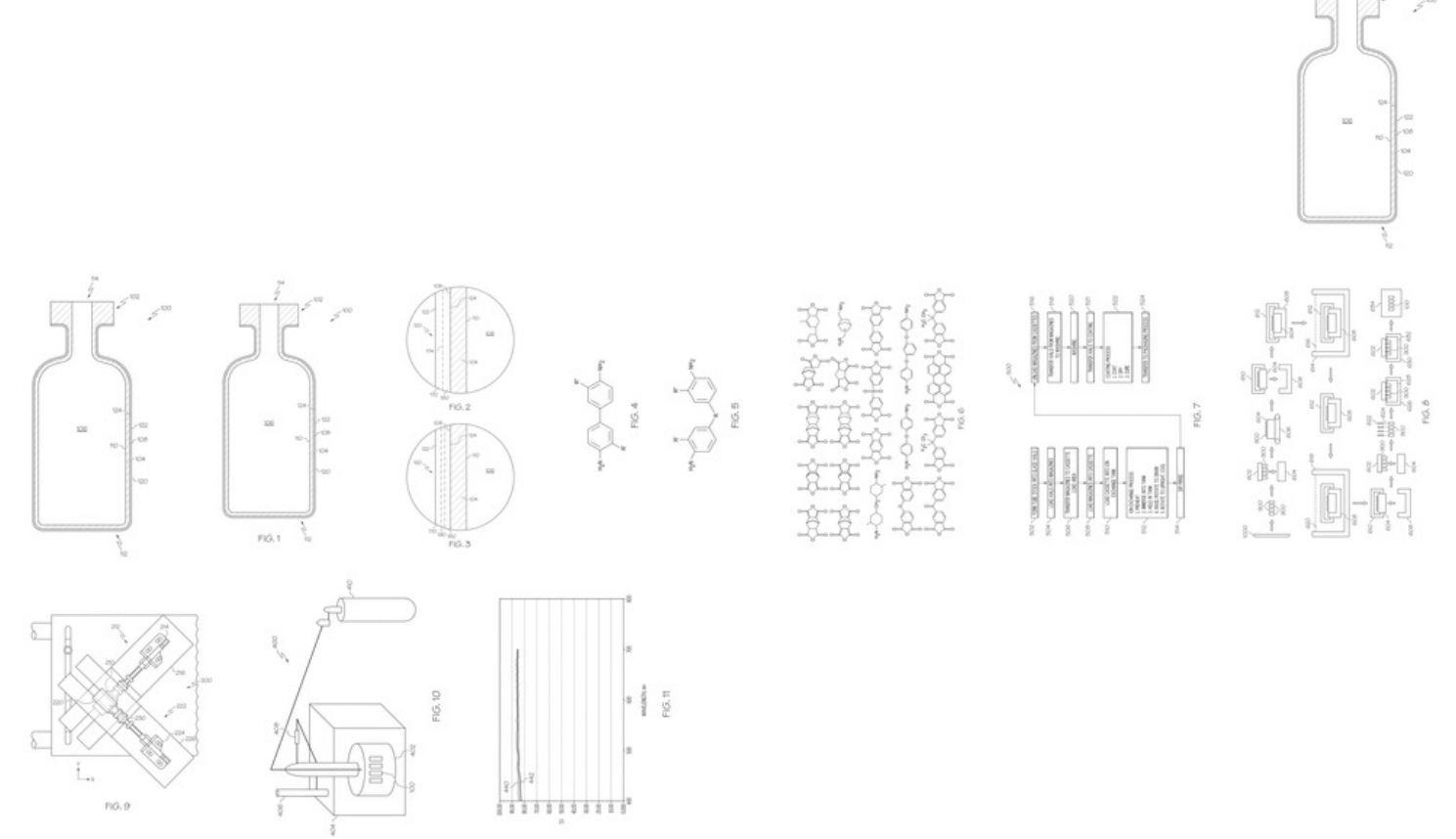
2.	Laminated glass structures having high glass to polymer interlayer adhesion	WO2013184897	2013-06-06	CORNING*	2013-12-12	2013-12-12
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A thin **glass** laminate is provided including at least one or two thin **glass** sheets with at least one **polymer** interlayer laminated therebetween. The laminate has a high level of adhesion between the two **glass** sheets and the interlayer, such that the laminate has a pummel value of at least 7, at least 8, or at least 9. The laminate also has a high penetration resistance of at least 20 feet mean break height. The **polymer** interlayers have a **thickness** ranging from about 0.5 mm to about 2.5 mm and are formed of an ionomer, poly vinyl butyral, or polycarbonate. At least one or both of the two **glass** sheets are chemically strengthened.



3.	Pharmaceutical glass coating for achieving particle reduction	US20130171456	2013-02-28	CORNING*	2013-07-04	2013-07-04
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Embodiments of the present disclosure are directed to coated **glass** articles which reduce **glass** particle formation caused by **glass** to **glass** contact in pharmaceutical **glass** filling lines.



4. Bent, veneer-encapsulated heat-treated safety glass panels and methods of manufacture

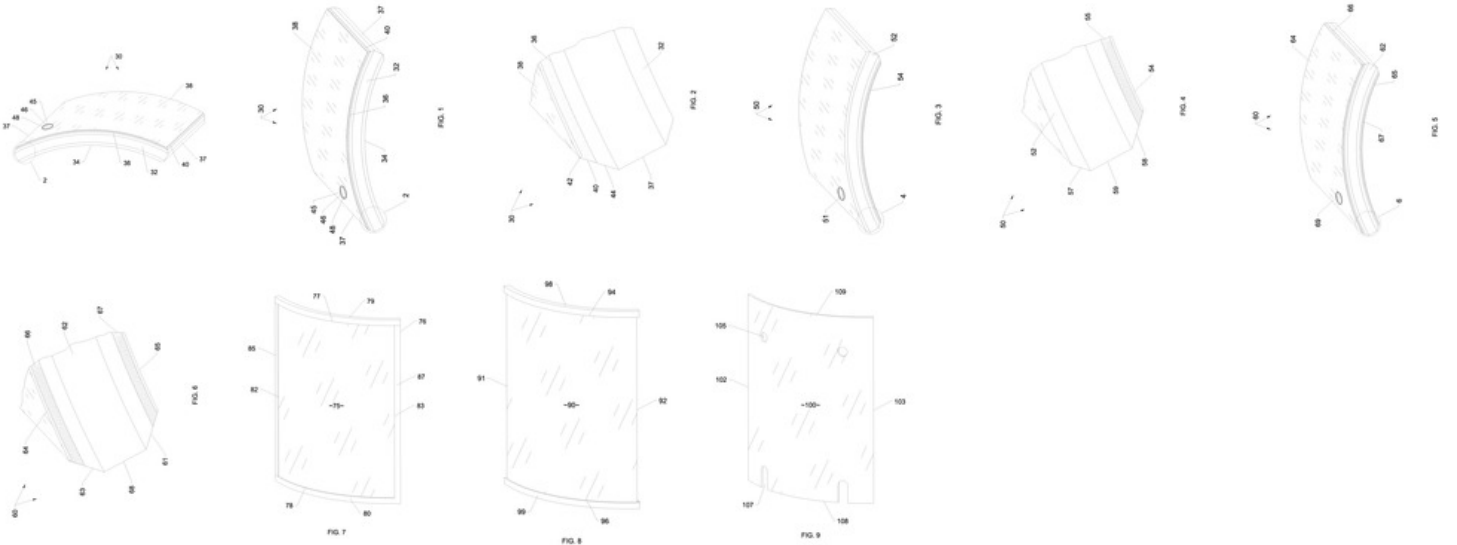
CA2931916

2016-06-01

FINE GLASS BENDING
PREC GLASS BENDING
PRECISION GLASS BENDING*

2016-12-03 2016-12-03

A laminated, bent, safety glass panel (30) for architectural or interior uses and a method of manufacturing such panels. The panel comprises a single heat-treated bent glass sheet, fully-tempered or heat-strengthened, forming a substrate (32) encapsulated by at least one thin, chemically-strengthened, glass veneer sheet (38). The veneer sheet (38), an alkali-aluminosilicate or other alkali-containing glass recipe strengthened by ion-exchange treatment, is cold-bent over a polymer interlayer (40) and permanently laminated to form a protective barrier on the heat-treated glass that dampens the explosive release of its internal residual stresses in the event of breakage thereby preventing particles dislodging and subsequent disintegration. The vulnerable perimeter (37) and perforation (45) edges of the veneer sheet (38) are equal in size or inset to the edges of the heat-treated substrate (32) with its deeper robust compressive stresses. Veneers may be laminated to both major substrate surfaces.



5. Bendable glass stack assemblies, articles and methods of making the same

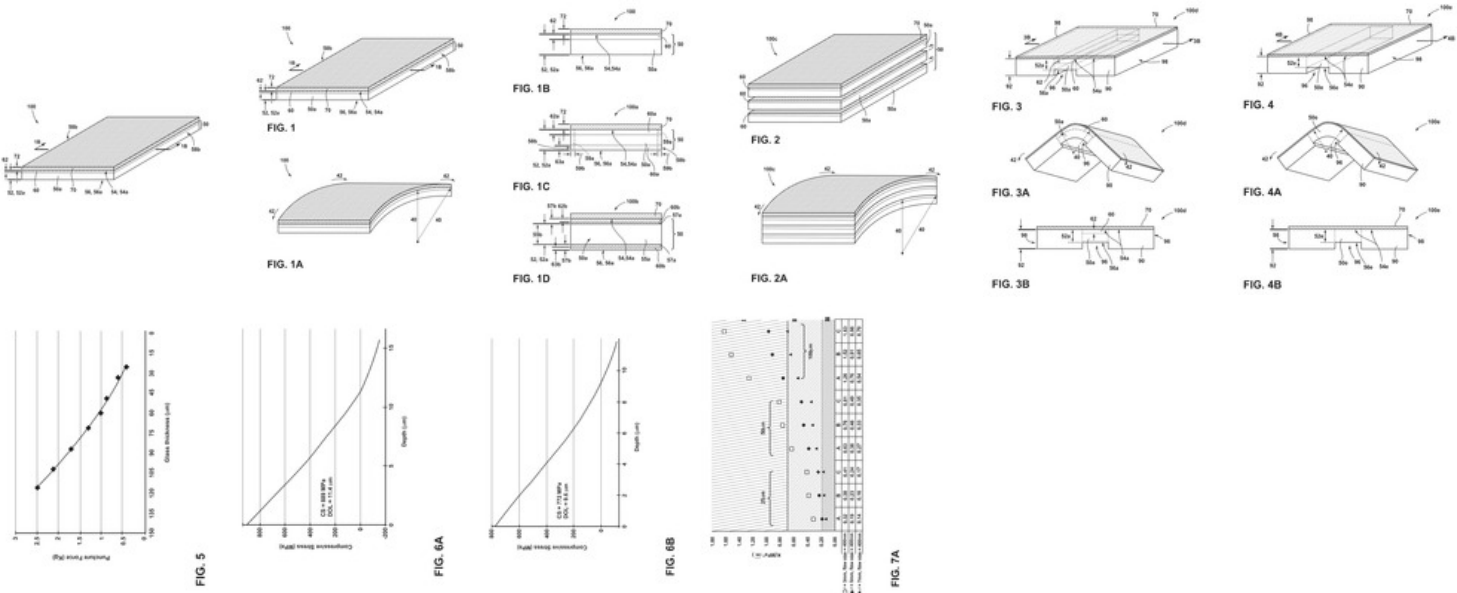
US20150210589

2015-01-21

CORNING*

2015-07-30 2015-07-30

A glass element having a thickness from 25 μ m to 125 μ m, a first primary surface, a second primary surface, and a compressive stress region extending from the first primary surface to a first depth, the region defined by a compressive stress $\bar{A}$ of at least about 100 MPa at the first primary surface. Further, the glass element has a stress profile such that when the glass element is bent to a target bend radius of from 1 mm to 20 mm, with the center of curvature on the side of the second primary surface so as to induce a bending stress $\bar{B}$ at the first primary surface, $\bar{A} + \bar{B} < 0$. Still further, the glass element has a puncture resistance of ≥ 1.5 kgf when the first primary surface of the glass element is loaded with a tungsten carbide ball having a diameter of 1.5 mm.



6.

Sheet glass laminate structure and multiple sheet glass laminate structure

WO2008032781

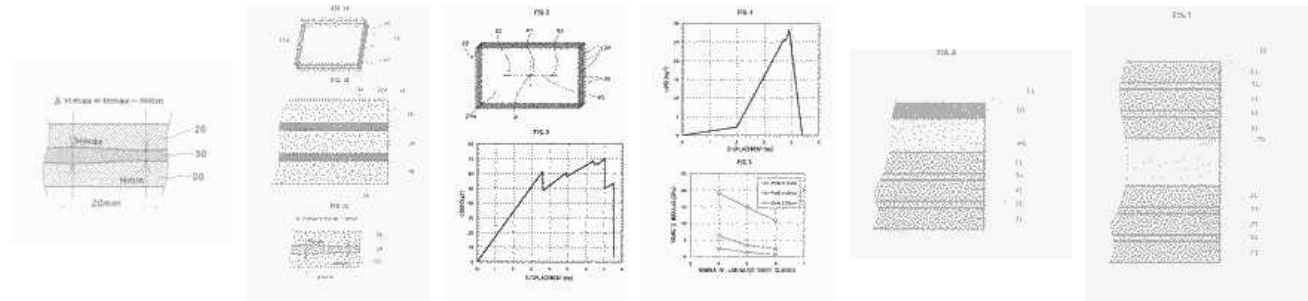
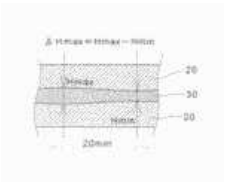
2007-09-13

NIPPON ELECTRIC GLASS*

2008-03-20

2008-03-20

A sheet **glass** laminate structure (10) is produced by laminating at least three sheet glasses (20) each having a **thickness** of less than 1 mm through an intermediate **layer** (30) between two adjacent sheet glasses. When a central portion of 20 mm in length including the middle point of a virtual line and opposite end portions respectively being 20 mm long from the opposite ends of the virtual line are set on the virtual line having a length equal to 50% of the maximum overall dimension of the translucent surface of the sheet **glass** (20) and extending in parallel with the direction of maximum overall dimension with the center of the translucent surface as its middle point, a maximum variation ΔH_{max} of the interval H between two adjacent sheet glasses opposed to each other through the intermediate **layer** in connection with the central portion and the opposite end portions satisfies a following relationship of $0\mu m$



7.

Thin laminated glass for windscreen

FR3012072

2013-10-23

SAINT GOBAIN GLASS*

2015-04-24

2015-04-24

The invention relates to laminated glazing comprising at least an outer sheet of **glass**, an inner sheet of **glass** and a **polymer** separator arranged between the two sheets of **glass**, wherein the inner sheet has a maximum **thickness** of 1.5 mm, and the outer sheet of **glass** has a different chemical composition from that of the inner sheet, the difference between the temperatures Tp1 and Tp2 being lower than 80°C, the temperature Tp1 being defined as the average between the upper annealing temperature and the softening temperature of the outer sheet of **glass**, and the temperature Tp2 being defined as the average between the upper annealing temperature and the softening temperature of the inner sheet of **glass**.

Al_2O_3	2-3%	B_2O_3	0-5%	Al_2O_3	0-5%	Al_2O_3	2-3%
						B_2O_3	10-15%

8.

Substrate for an organic electronic device

WO2013147573

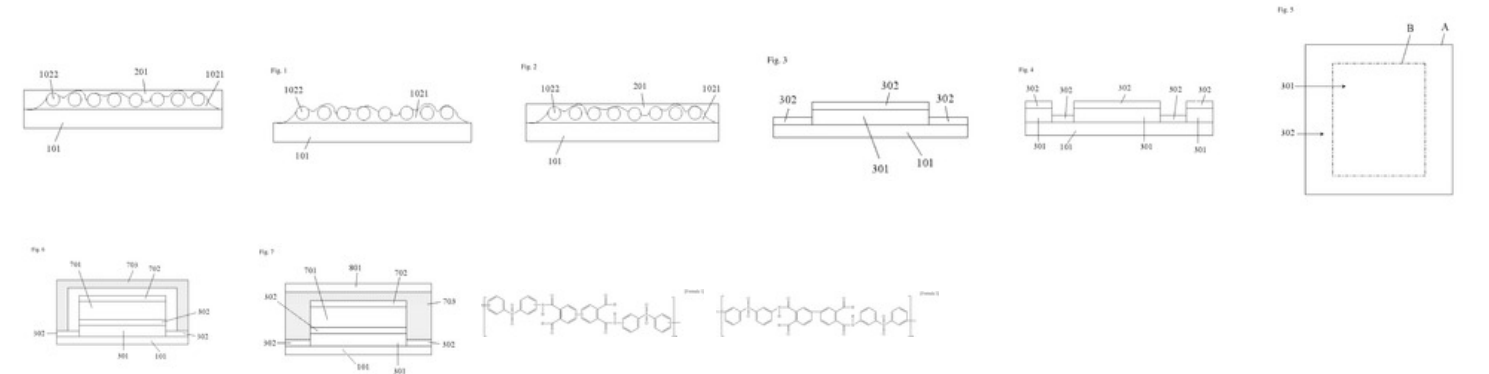
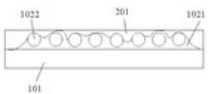
2013-04-01

ELGY DISPLAY
LG CHEM
LG DISPLAY*

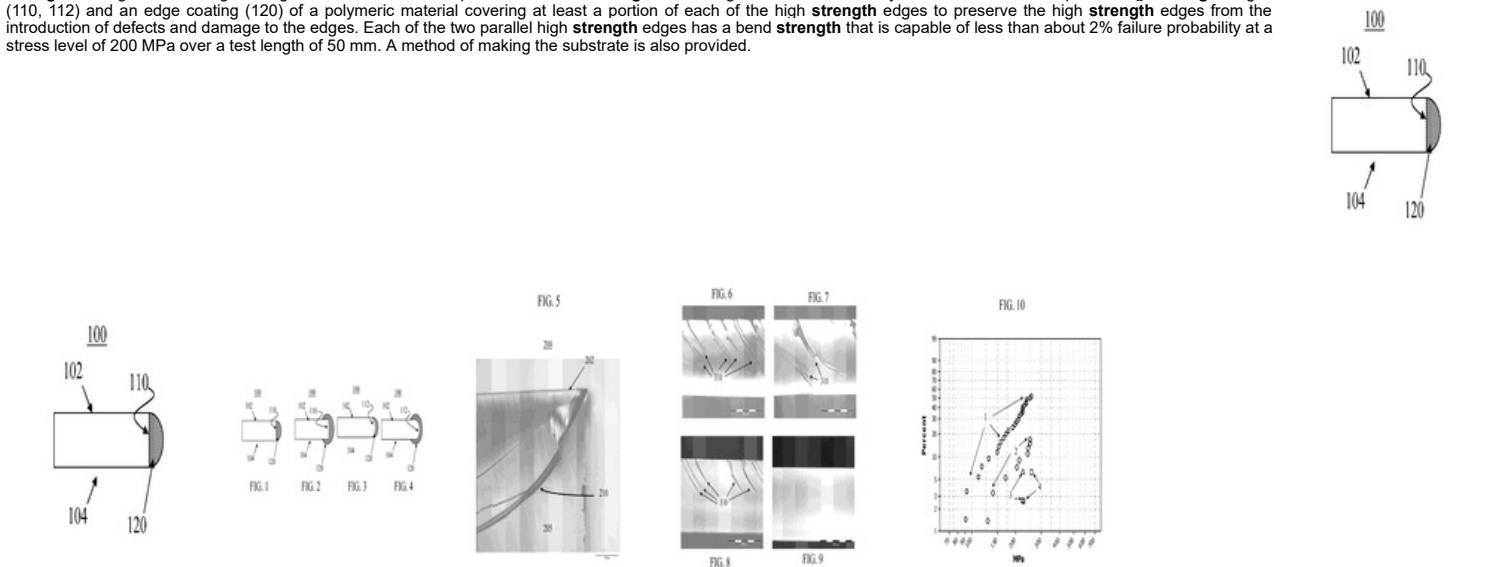
2013-10-03

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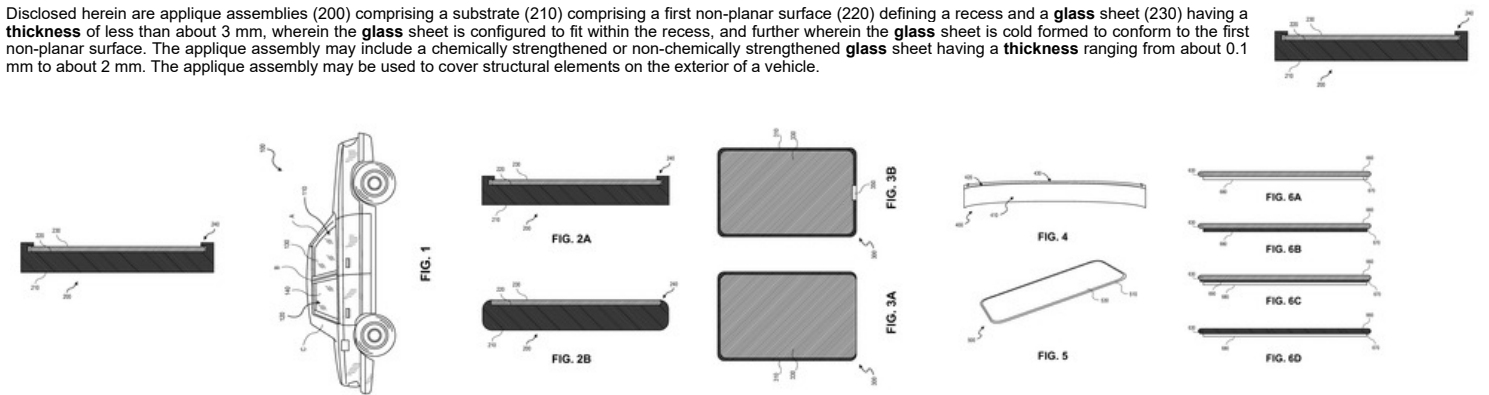
Provided are a substrate for an organic electronic device, and the like. The substrate for an organic electronic device having a functional **layer** which may improve a function such as light extraction efficiency of an organic electronic system such as organic light emitting device and stability of the device due to excellent cohesive **strength** to the substrate may be provided. An organic electronic system including the substrate and a use thereof may also be provided.



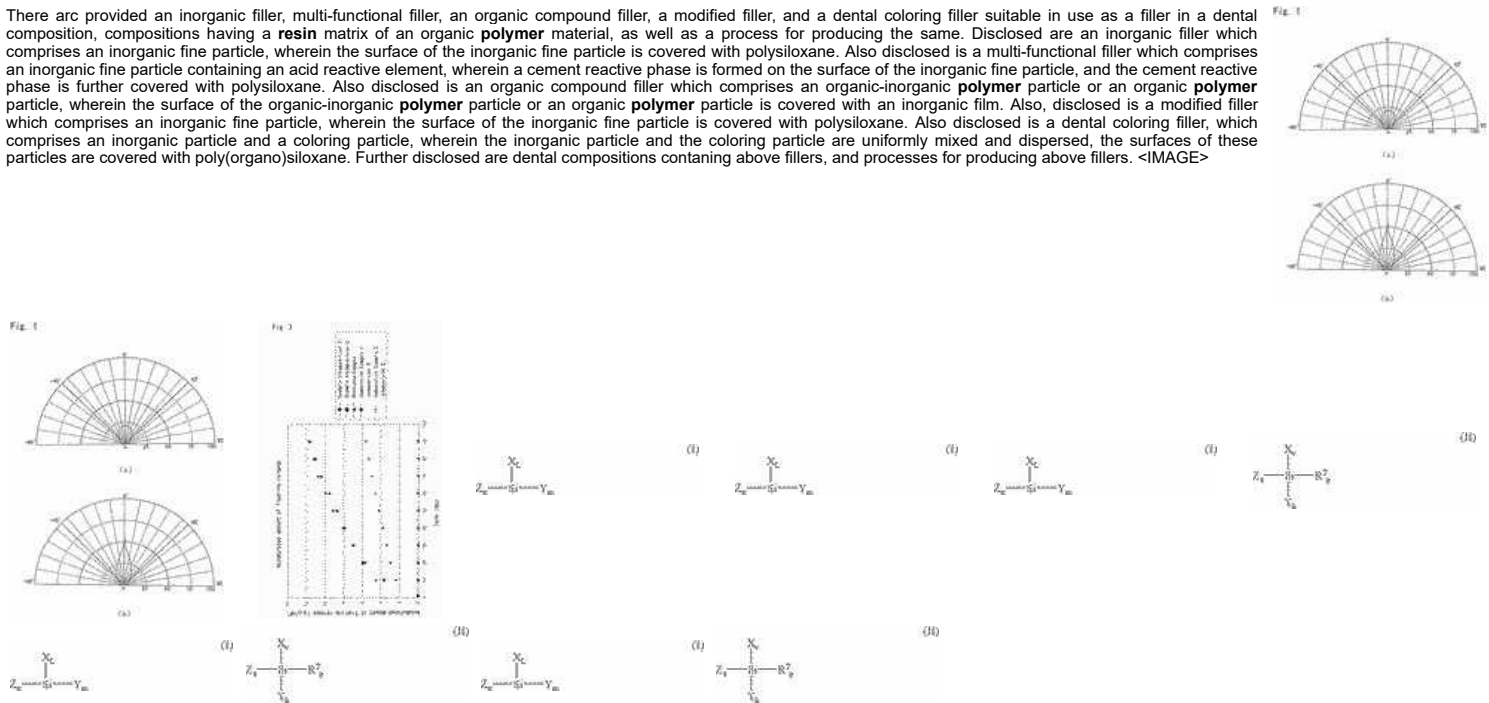
A substrate (100) comprising a sheet of either a **glass**, a **glass ceramic**, or a ceramic and having increased edge **strength**. A polymeric edge coating (120) prevents creation of **strength** limiting defects along the edges of the substrate and protects the bend **strength** of the edges. The substrate may also have at least two parallel high **strength** edges (110, 112) and an edge coating (120) of a polymeric material covering at least a portion of each of the high **strength** edges to preserve the high **strength** edges from the introduction of defects and damage to the edges. Each of the two parallel high **strength** edges has a bend **strength** that is capable of less than about 2% failure probability at a stress level of 200 MPa over a test length of 50 mm. A method of making the substrate is also provided.

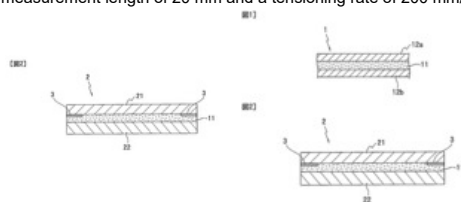


Disclosed herein are applique assemblies (200) comprising a substrate (210) comprising a first non-planar surface (220) defining a recess and a **glass** sheet (230) having a **thickness** of less than about 3 mm, wherein the **glass** sheet is configured to fit within the recess, and further wherein the **glass** sheet is cold formed to conform to the first non-planar surface. The applique assembly may include a chemically strengthened or non-chemically strengthened **glass** sheet having a **thickness** ranging from about 0.1 mm to about 2 mm. The applique assembly may be used to cover structural elements on the exterior of a vehicle.

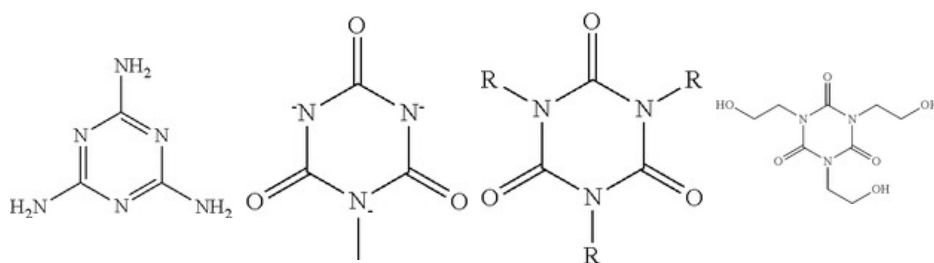


There are provided an inorganic filler, multi-functional filler, an organic compound filler, a modified filler, and a dental coloring filler suitable in use as a filler in a dental composition, compositions having a **resin** matrix of an organic **polymer** material, as well as a process for producing the same. Disclosed are an inorganic filler which comprises an inorganic fine particle, wherein the surface of the inorganic fine particle is covered with polysiloxane. Also disclosed is a multi-functional filler which comprises an inorganic fine particle containing an acid reactive element, wherein a cement reactive phase is formed on the surface of the inorganic fine particle, and the cement reactive phase is further covered with polysiloxane. Also disclosed is an organic compound filler which comprises an organic-inorganic **polymer** particle or an organic **polymer** particle, wherein the surface of the organic-inorganic **polymer** particle or an organic **polymer** particle is covered with an inorganic film. Also, disclosed is a modified filler which comprises an inorganic fine particle, wherein the surface of the inorganic fine particle is covered with polysiloxane. Also disclosed is a dental coloring filler, which comprises an inorganic particle and a coloring particle, wherein the inorganic particle and the coloring particle are uniformly mixed and dispersed, the surfaces of these particles are covered with poly(organo)siloxane. Further disclosed are dental compositions containing above fillers, and processes for producing above fillers. <IMAGE>



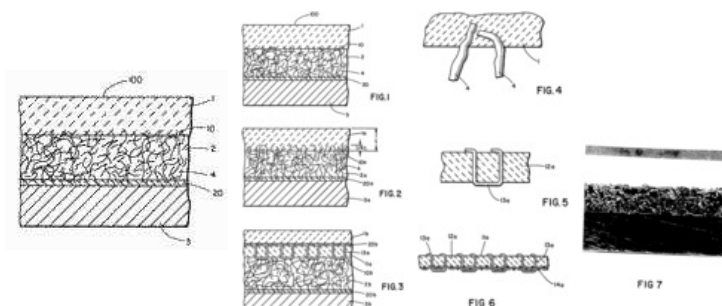


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1978-02-21	1978-02-21
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A cross-sectional view of a multi-layered material structure 100. The structure consists of several layers: a top layer 101 with diagonal hatching, a middle layer 102 with a wavy, irregular texture, and a bottom layer 103 with diagonal hatching. A label 100 points to the entire assembly.



A composite article has an article surface and may comprise a plurality of fibers (20) at least partially embedded in a matrix (18). Each fiber may have at least one base surface (22) and a pair of side surfaces (28). The side surfaces may be oriented in non-perpendicular relation to the base surface. The fibers may be positioned in side-by-side relation to one another such that the side surfaces of each fiber are oriented substantially parallel to the side surfaces of the immediately adjacent fibers.

