

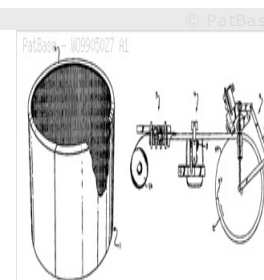
1) Family number: 11293005 (WO9905027 A1)

PACKAGING TUBE MADE OF CORRUGATED BOARD, METHOD AND APPARATUS FOR ITS MANUFACTURE

Abstract: Source: WO9905027 A1 A tube (1) for use primarily as the body of a tubular packaging container is made of packaging sheet material comprising a facing sheet and a spacer sheet, for example single faced corrugated board, and is formed with an integral intumed flange (2) to maintain its tubular shape. Apparatus for forming such a tube is also disclosed.

Probable Assignee: SCA PACKAGING LTD

Earliest Publication Date: 19990204



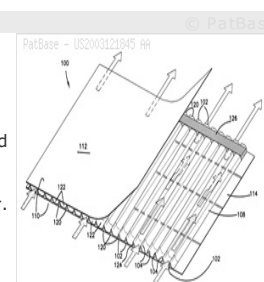
2) Family number: 10320382 (US2003121845 AA)

FLUTED FILTER MEDIA FOR AIR FILTER

Abstract: Source: US2003121845 AA Fluted filter media includes filter material having a plurality of flutes formed therein having alternating ends of adjacent flutes closed to force fluid through filter material. A first embodiment of the filter media includes tapered flutes which have the open ends of the flutes larger in cross-section than the closed flutes, wherein the upstream open flutes converge toward the downstream end and the upstream closed end flutes diverge toward the downstream end. A second embodiment includes filter media which is asymmetric formed with dissimilar upstream and downstream flute cross-sections with larger flute openings to the upstream side of the filter. A third embodiment includes filter media with an upstream edge crushed to improve flow at the upstream edge. A fourth embodiment includes filter media with the upstream sealing material recessed from the upstream edge for reducing effects from blockages at the upstream edge of the filter.

Probable Assignee: DONALDSON CO INC

Earliest Publication Date: 19971106



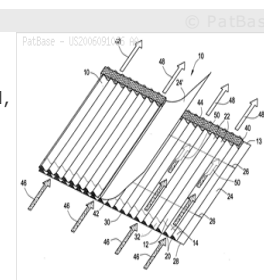
3) Family number: 32880708 (US2006091066 AA)

GATHERED FILTER MEDIA FOR AN AIR FILTER AND METHOD OF MAKING SAME

Abstract: Source: US2006091066 AA A filter media including a gathered sheet of porous filter material, is provided, together with an apparatus and method for fabricating such a gathered sheet of porous filter material. An improved filter apparatus incorporating such gathered porous filter material is also provided. By gathering the porous filter material, rather than forming convolutions through corrugating or pleating, as was done in the past, a desirable convoluted shape is achieved with little or no compression of the filter media.

Probable Assignee: BALDWIN FILTERS INC

Earliest Publication Date: 20060504



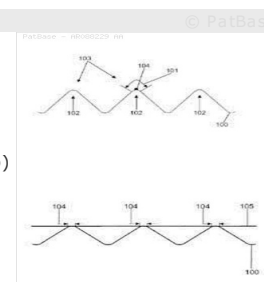
4) Family number: 56717469 (AR088229 AA)

IMPROVED METHOD AND APPARATUS FOR FORMING A CORRUGATED (MACHINE TRANSLATION)

Abstract: Source: AR088229 AA The present invention relates to a method of bonding a substantially planar sheet material to a corrugated sheet material which is porous using a continuous process, the method characterized by the steps of: a) applying a controlled amount of adhesive contact the vertex portion of corrugated sheet material; b) hold the corrugated and flat sheets respective boards to a specific pressure and for a specific period of application of pressure so that a junction is formed between them.

Probable Assignee: CORCEL IP LTD

Earliest Publication Date: 20140521



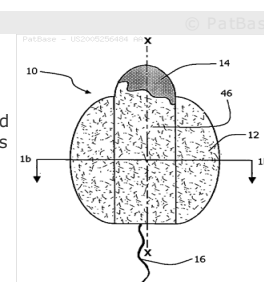
5) Family number: 32400556 (US2005256484 AA)

METHOD OF USING AN INTRAVAGINAL DEVICE WITH FLUID TRANSPORT PLATES

Abstract: Source: US2005256484 AA A method of capturing bodily fluid intravaginally providing an intravaginal device that has a fluid storage element having a longitudinal axis and is in fluid communication with at least one fluid transport element. The method involves providing at least one fluid transport element that is bendable about an axis substantially parallel to the longitudinal axis of the fluid storage element and positioned within a human vagina.

Probable Assignee: JOHNSON AND JOHNSON CONSUMER INC

Earliest Publication Date: 20051117



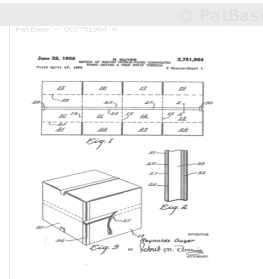
6) Family number: 21679450 (US2751964 A)

METHOD OF MAKING DOUBLE-FACED CORRUGATED BOARD HAVING A TEAR STRIP THEREIN

Abstract: Source: US2751964 A (Claim 1) 1. A method of manufacturing double-faced corrugated board having a tear strip, therein for use in container manufacturing comprising continuously advancing two moving webs of material which are to form liners, continuously advancing a web of material which is to form the corrugated web, continuously corrugating said last-mentioned web along lines which extend transversely of the web to provide transverse flutes, continuously applying glue to all of the flutes on both sides of the corrugated web, continuously applying said liners to opposite sides of the corrugated web, and including the further steps of slitting one of the moving liners on spaced longitudinally extending lines just prior to its being applied to the corrugated web to form longitudinal sections which are continuous, and maintaining said sections in their original relationship to each other prior to their being applied to the corrugated web.

Probable Assignee: WALDORF PAPER PROD CO

Earliest Publication Date: 19560626



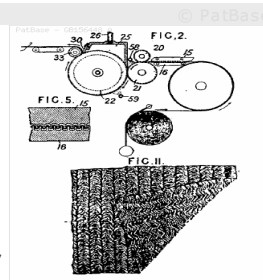
7) Family number: 18318740 (GB156448 A)

IMPROVEMENTS IN CRIMPLED PAPER AND LIKE FABRIC

Abstract: Source: GB156448 A 156,448. Otaka Fabric Co., and Lorenz, W. A. April 22, 1920. Corrugated and crinkled paper corrugating and crinkling apparatus.-Paper is corrugated longitudinally and crimped laterally to the form shown in Fig. 11. The corrugations may be produced by the passage of the paper between formers 15, 16, Figs. 2 and 5, from which it passes between corrugated rolls 20, 21 to a cylinder 22 correspondingly corrugated. The paper may be treated dry, or may be steamed, or water-sprinkling pipes 58, 59 may be provided for both sides of the paper. Preferably the moistened paper is dried by heating the cylinder 22. A doctor blade 30 with a waved edge to correspond with the corrugations in the paper and in the cylinder 22 obstructs and strips the paper and thereby laterally crimps it. The cylinder 22 has a vacuum chest 25 and pipe 26 acting in conjunction with it, is power-revolved and may communicate rotation to the roll 21. The blade 30 and the vacuum chest 25 fit the cylinder closely enough to maintain a partial vacuum which facilitates the change of direction of the paper web. A roll 33 which may be constructed of rubber or the like and with grooves to match the web corrugations assists in forcing the paper against the doctor blade. The front face of the blade may be plain or may be bevelled off at its lower edge. Specification 1610/71 is referred to.

Probable Assignee: WILLIAM ALBERT LORENZ

Earliest Publication Date: 19210113



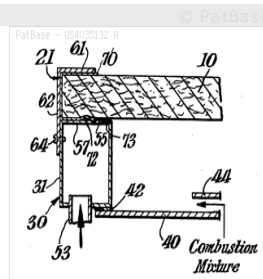
8) Family number: 30492812 (US4035132 A)

GAS-FIRED RADIANT HEATER

Abstract: Source: US4035132 A Radiant heater having supported porous refractory panel through which combustion mixture passes and on the surface of which mixture burns as it emerges, has a narrow stream of incombustible relatively cold gas like air pumped through the panel adjacent the support to act as a barrier seal and minimize the leakage of combustible gas around the margin of the panel, and the consequent burning of such leaking gas, which burning can damage the marginal support and cause flashback. Panel can have edges held on tubular frame sealed to a back plate to provide a simpler heater construction with combustion mixture plenum defined by back plate and frame, and with cold gas supply to the tubular passageways in frame.

Probable Assignee: SMITH T M

Earliest Publication Date: 19770712



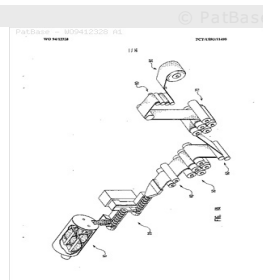
9) Family number: 33376308 (WO9412328 A1)

HIGHLY INORGANICALLY FILLED COMPOSITIONS

Abstract: Source: WO9412328 A1 Compositions, methods, and apparatus for manufacturing sheets having a highly inorganically filled matrix prepared by mixing together an organic polymer binder, water, one or more inorganic aggregate materials, fibers, and optional admixtures in the correct proportions in order to form a sheet which has the desired performance criteria. The inorganically filled mixtures are formed into sheets by first extruding the mixtures (40) and then passing the extruded materials between a set of rollers (50). The rolled sheets are dried in an accelerated manner to form a substantially hardened sheet, such as by heated rollers and/or a drying chamber. The inorganically filled sheets may have properties substantially similar to sheets presently made from traditional materials like paper, paperboard, polystyrene, plastic or metal. Such sheets can be rolled, pressed, scored, perforated, folded, and glued. They have particular utility in the mass production of articles, such as food and beverage containers, and packaging materials.

Probable Assignee: KHASHOGGI E IND

Earliest Publication Date: 19940609



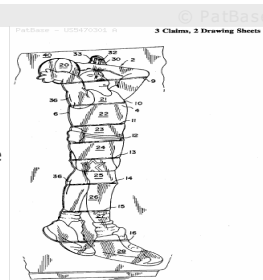
10) Family number: 12262652 (US5470301 A)

FOLDABLE LIFE SIZE POSTER AND METHOD FOR MAKING THE SAME

Abstract: Source: US5470301 A A method for fabricating a high quality life size poster of an action figure including the steps of forming a life size multi color pre-print on a web like sheet and forming a corrugated substrate including the web like sheet and having a longitudinal axis and first and second surfaces. The web like sheet is laminated or glued to a crimped portion of the substrate. A laminated figure is then die cut or otherwise formed into the silhouette of a human action figure, dinosaur or other animate or inanimate object. A plurality of fold lines transverse of the longitudinal axis are formed in the corrugated substrate which includes the web like material so that the laminated figure can be folded along the fold lines to form a compact bundle for shipping and storage and unfolded for display in its extended format.

Probable Assignee: BRUNT II WILLIAM F

Earliest Publication Date: 19951128



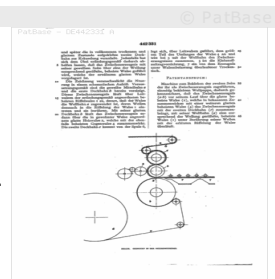
11) Family number: 19482900 (DE442331 A)

MACHINE TO GLUE THE SECOND PAGE OF YOUR INTERMEDIATE PRODUCT SUPPLIED UNILATERALLY PASTED WELLPAPPE (MACHINE TRANSLATION)

Abstract: Source: DE442331 A (claim 1) PATENT CLAIM: machine for sticking to the second page of her as an intermediate product supplied, unilaterally pasted corrugated cardboard, characterized, that the intermediate product (ab) before his run over the smooth be heated roller (2), which At sammenwirken into familiar with another.

Probable Assignee: CARTONNAGENINDUSTRIE AG

Earliest Publication Date: 19270324



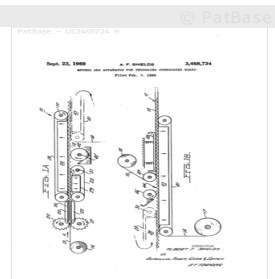
12) Family number: 882686 (US3468734 A)

METHOD AND APPARATUS FOR PRODUCING CORRUGATED BOARD

Abstract: Source: US3468734 A ABSTRACT OF THE DISCLOSURE
Double face board is produced with a plaited corrugated layer by longitudinally compressing the plaited medium and thereafter longitudinally drawing out the folds by utilizing a suction conveyor to accurately control flute height and pitch while an underfed liner is applied. This forms single face board which is moved by another conveyor past a station where the second liner is applied from above.

Probable Assignee: S AND S CORRUGATED PAPER MACH

Earliest Publication Date: 19690923



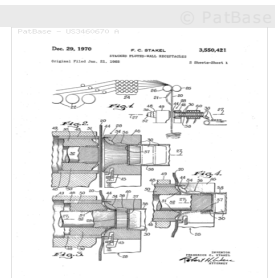
13) Family number: 935241 (US3460670 A)

STACKED FLUTED-WALL RECEPTACLES

Abstract: Source: US3460670 A ABSTRACT OF THE DISCLOSURE
Nested stacks of concave fluted wall cup-shaped receptacles such as baking cups, candy cups and the like, die formed from stacked layers of non-adherent sheet material, incorporating at least one layer, and optionally having each alternate layer, formed of metallic foil, providing a stiff, moisture-resisting assembly tending to avoid the flattening sagging encountered with nested fluted paper cups, and processes for producing these nested stacked receptacles.

Probable Assignee: FLUTED PAPER PRODUCTS CO INC A CT CORP

Earliest Publication Date: 19690812



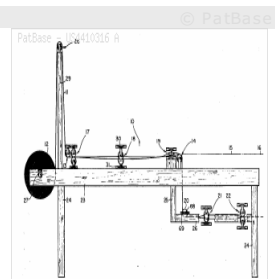
14) Family number: 3862668 (US4410316 A)

METHOD FOR PRODUCTION OF CORRUGATED PAPER

Abstract: Source: US4410316 A A method for the production of corrugated paper comprising the steps of feeding a continuous sheet of paper over a first arcuate roller, making several folds in the paper along lines of radius of the first arcuate roller, passing the paper over a second arcuate roller which has the same center of curvature as the first arcuate roller, and unfolding the paper folds to yield the corrugated paper. The paper preferably turns about 90 DEG in passing over the first and second arcuate rollers, and after being unfolded there is provided additional corrugations by use of crimping rollers or the like.

Probable Assignee: YOKE JAMES H

Earliest Publication Date: 19831018



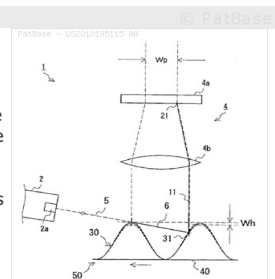
15) Family number: 43386830 (US2010195115 AA)

DEFECT DETECTOR FOR CORRUGATED CARDBOARD FLUTES

Abstract: Source: US2010195115 AA A defect detector for corrugated cardboard flutes comprises an optical projector for projecting to traveling flutes an inspection light having an effective line of which the length is about one pitch of flutes inclined slightly so that a tip of a normal flute is positioned on or slightly under the posterior end of the effective line and simultaneously a slope of an adjacent normal flute is positioned on the anterior end side of the effective line, an optical receiver equipped with a light-receiving element for receiving the inspection light reflected by a flute to output information according to the light-receiving position, and normal or abnormal determining means which determines that the flute height is normal if the light-receiving position detected is within an allowable range Wp.

Probable Assignee: PHONIC CO LTD

Earliest Publication Date: 20090618



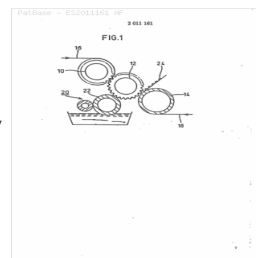
16) Family number: 19006597 (ES2011161 AF)

SINGLE-FACER MACHINE FOR MFG. CORRUGATED BOARDS OF DIFFERENT FLUTES ; SINGLE-FACER MACHINE FOR MFG. CORRUGATED BOARDS OF DIFFERENT FLUTES

Abstract: Source: ES2011161 AF The single facer machine comprises a first corrugating unit (36) having a pair of upper and lower rolls (32,34) a second corrugating unit (42) also having a pair of upper and lower rolls (38,40) and a common pressure roll (26). The pressure roll is in operative association with both the first and second corrugating units. - In operation either of the combination of the first corrugating unit and the pressure roll or of the second corrugating unit and the pressure roll is selected to form a single-faced corrugated board. Either the roll (26) is movable to selectively cooperate with a respective first or second unit (36,42) or each unit is selectively movable by hydraulic cylinders to cooperate by hydraulic cylinders to cooperate with the roll (26). The roll (26) is arranged to move eccentrically for selective cooperation or shifted by a hydraulic cylinder. Each corrugating unit has a glue applicator (47).

Probable Assignee: ISOWA INDUSTRY CO

Earliest Publication Date: 19891216

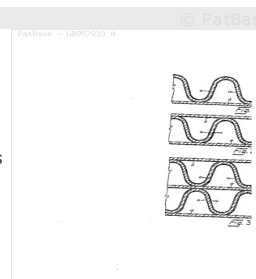


17) Family number: 20955004 (GB957933 A)

METHOD OF MANUFACTURING IMPROVED CORRUGATED PAPERBOARD

Abstract: Source: GB957933 A A wax-copolymer blend comprises about 40 percent -75 percent by weight of the wax-paraffin wax and microcrystalline wax are mentioned, with the remainder comprising the copolymer. Suitable copolymers are ethylene-vinyl acetate copolymer -with about 60-80 percent (preferably about 72 percent) by weight of ethylene-, ethylene ethyl acrylate copolymer-with about 65-85 percent by weight of ethylene-, or mixtures of these copolymers. The blend may be prepared by heating about half the wax to about 250-300 DEG F. in a high shear mixer, adding the copolymer to form a concentrate in which there are no discrete particles of the copolymer, and finally adding the rest of the wax. If the copolymer used has marginal heat sealing properties an additive-for example polyethylene or various rubbers of which examples are given-may be added. Wax additives-for example an antioxidant-may also be used.ALSO:A wax-copolymer blend comprises about 40-75 percent by weight of the wax-paraffin wax and microcrystalline wax are mentioned-with the remainder comprising the copolymer. Suitable copolymers are ethylene-vinyl acetate copolymer-with about 60-80 percent (preferably about 72 percent) by weight of ethylene-, ethylene ethyl acrylate copolymer-with about 65-85 percent by weight of ethylene-or mixtures of these copolymers. The blend may be prepared by heating about half the wax to about 250-300 DEG F. in a high shear mixer, adding the copolymer to form a concentrate in which there are no discrete particles of the copolymer, and finally adding the rest of the wax. If the copolymer used has marginal heat-sealing properties an additive-for example polyethylene or various rubbers of which examples are given, may be added. Wax additives-for example an antioxidant-may also be used.ALSO:A corrugated paper-board comprises at least one corrugated layer coated with a wax-copolymer blend, and at least one monoplanar liner bonded to the corrugated layer through the blend. The blend is applied to both sides of the paper layer by not roll "kiss" coating, gravure coating or curtain coating. The layer is then passed through corrugating rollers at about 100-110 DEG F, and the liner, heated sufficiently to effect a proper seal, is brought into contact with the corrugated layer. A second liner, if desired, is bonded in like manner to the other side of the corrugated layer while a double-walled corrugated board may be formed (Fig. 3 not shown). Penetration of the blend into the paper may be increased by heating the paper in an oven or by first applying wax to the paper followed by a thin coating of the blend. The blend or just the wax itself may be applied to one or both sides of the liner(s). A suitable blend comprises about 40 percent -75 percent by weight of the wax-preferably paraffin wax or perhaps microcrystalline wax-and the remainder comprising the copolymer. Suitable copolymers are ethylene-vinyl acetate copolymers-with about 60-80 percent by weight ethylene-, ethylene ethyl acrylate copolymer-with about 65-85 percent by weight ethylene-, and mixtures of these copolymers. If the copolymer used has marginal heat sealing properties an additive may be included - for example polyethylene or a rubber (examples given) - while a wax additive, - for example an antioxidant may also be included.

Probable Assignee: CONTINENTAL OIL CO



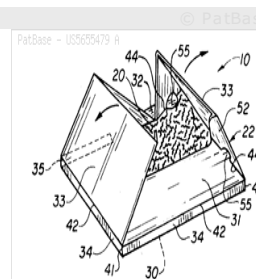
18) Family number: 28851295 (US5655479 A)

LIGHTWEIGHT DISPOSABLE KITTY LITTER BOX METHOD

Abstract: Source: US5655479 A A lightweight disposable kitty litter box (10) comprises a container (22) which forms a closed receptacle and fresh kitty litter (20) which is enclosed within the closed receptacle. The kitty litter (20) comprises a resilient paper product having a density between 0.01 and 0.10 ounces per cubic inch. The container (22) is convertible between a closed condition in which it forms said closed receptacle and an open condition in which it forms an open receptacle. To supply a kitty litter box for a cat, the container (22) is converted into the open condition to form the open receptacle to thereby allow the cat access to the fresh kitty litter (20). The cat may then interact with the fresh kitty litter (20) until it reaches a sanitarily unacceptable state. The sanitarily unacceptable kitty litter is then enclosed in the closed receptacle by converting the container (22) into the closed condition. The container (22), and the sanitarily unacceptable kitty litter enclosed therein, may then be disposed as a unit.

Probable Assignee: RANPAK CORP

Earliest Publication Date: 19931014



19) Family number: 661339 (FR2029360 A1)

Abstract: Source: FR2029360 A1 [Source: Claim 1] 1. - Paper Bag characterized by a mechanical transformation of the structure and the appearance of the paper, without contribution of foreign material of any kind, obtained by performing spline or corrugations oriented in long, wide or across, in one direction or hatched without limitation of size or shape.

Probable Assignee: CHARFA LA

Earliest Publication Date: 19701023

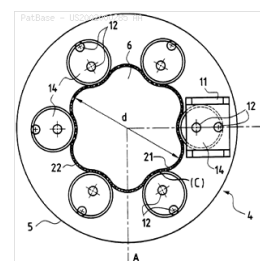
20) Family number: 28179532 (US2002000285 AA)

RIGID CORRUGATED CARBOARD

Abstract: Source: US2002000285 AA The invention relates to a method for manufacturing a rigid corrugated board, comprising, beforehand, a stage for the production of at least one single-faced web of given width by the adhesive bonding of a flute to a single-faced covering. According to the invention, the following stages are carried out: a) the single-faced web is bent according to a desired shape, b) the tops of the flute of the bent single-faced web are coated with glue, c) at least one double-faced covering of the same width as the single-faced web is adhesively bonded to the said single-faced web in such a way that it matches the bent shape of the said web. The invention also relates to an apparatus for carrying out the method and to the rigid corrugated board obtained according to the method.

Probable Assignee: SMURFIT WORLDWIDE RESEARCH EUR

Earliest Publication Date: 19950614



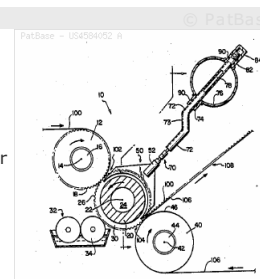
21) Family number: 5007884 (US4584052 A)

VACUUM SINGLE FACER

Abstract: Source: US4584052 A A single facer machine of the vacuum or fingerless type for making a corrugated paperboard laminate. A new means for applying vacuum to the paperboard on the second corrugator roll. The second corrugator roll is provided with axially spaced circumferential grooves, the grooves being deeper than the flutes on the roll. Each groove is provided with a vacuum finger, coupled to a source of vacuum, each vacuum finger being curved at its intake mouth which sealingly engages the sides of its respective groove to supply vacuum thereto. The angular extent of the curved intake mouth is supplementary to the angular extent of engagement of the corrugated paperboard with the second corrugator roll.

Probable Assignee: BAUM THEODORE M

Earliest Publication Date: 19860422



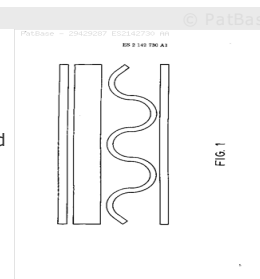
22) Family number: 29429287 (ES2142730 AA)

PROCESS FOR OBTAINING LAMINATED CORRUGATED CARDBOARD, AND CARDBOARD THUS OBTAINED ; PROCESS FOR OBTAINING LAMINATED CORRUGATED CARDBOARD, AND CARDBOARD THUS OBTAINED

Abstract: Source: ES2142730 AA Cardboard formed by a sandwich, made from a smooth inner covering paper and another smooth outer covering paper, which encloses a corrugated paper and another, similar smooth paper, glued with a vegetable glue, the following being obtained: in a first stage, corrugated paper glued to the smooth inner covering paper in the second stage, on a modified corrugating press, the other smooth paper only is heated and surface-conditioned and, in a third stage, in a double gluing machine, the smooth outer covering paper and the free face of the corrugated paper are joined to the other smooth paper.

Probable Assignee: CARTONAJES INT

Earliest Publication Date: 19990504



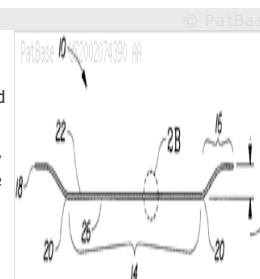
23) Family number: 28230955 (US2002074390 AA)

MULTI-PLY FOOD CONTAINER

Abstract: Source: US2002074390 AA A food container comprising three or more plies, a first ply, a second ply, and at least a third ply. The first ply is oriented towards the hands and face of the user and receives food in use. The first ply is essentially continuous throughout its plane. The third ply is oriented towards the lap of the user or a table top in use. The second ply spaces the first and third plies apart. In a preferred embodiment, the food container may be made of a corrugated material. The food container may be made from a blank which is deformed out of its plane during manufacture.

Probable Assignee: PROCTER AND GAMBLE CO

Earliest Publication Date: 19990923



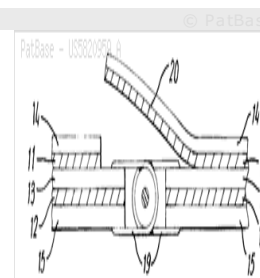
24) Family number: 14833827 (US5820959 A)

CORRUGATOR FABRIC

Abstract: Source: US5820959 A PCT No. PCT/GB95/01111 Sec. 371 Date Jan. 28, 1997 Sec. 102(e) Date Jan. 28, 1997 PCT Filed May 17, 1995 PCT Pub. No. WO95/33095 PCT Pub. Date Dec. 7, 1995A corrugator fabric comprising a first baselcloth having a first staple fiber layer secured to the lower face thereof and a second staple fiber layer secured to the upper face thereof, a second baselcloth having a lower face secured to the second staple fiber layer and optionally the first baselcloth, a third staple fiber layer secured to the upper face of the second baselcloth, a jointing body to form a seam for said fabric and a seam flap including at least one baselcloth covering said jointing body.

Probable Assignee: SCAPA GROUP PLC

Earliest Publication Date: 19951111



25) Family number: 14999522 (US6206995 BA)

MOVING-WEB SLACK REDUCING SYSTEM INCLUDING A DEFORMABLE TENSION ROLLER

Abstract: Source: US6206995 BA A moving-web slack reducing system including a deformable tension roller, such as a brush-type tension roller having an outer surface defined by the ends of a plurality of bristles. The slack reducing system may be deployed in a preheater assembly for a machine for manufacturing corrugated board. The bristles of the deformable tension roller allow the outer surface of the tension roller to deflect both radially and in the cross-machine direction without binding to the paper web. The bristles may also deflect variably across the tension roller in the cross-machine direction. Thus, the deflection of the bristles adjusts automatically and virtually instantaneously to changes in the tension of the paper web to compensate for variations in tension across the web in the cross-machine direction. This allows the brush-type tension roller to take the slack out of the paper web without having to rapidly and precisely adjust any actuators.

Probable Assignee: CORRUGATED GEAR AND SERVICES INC

Earliest Publication Date: 20010327

