

Search history

Search 1: SFT=(core and roll and helicoi* and sheet) (Results 487)

Search 2: SFT=(core and roll and helicoi* and sheet) and IC=(b65h) (Results 65)

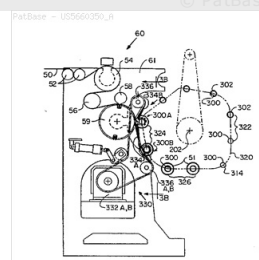
1) Family number: 12650729 (US5660350A)

METHOD OF WINDING LOGS WITH DIFFERENT SHEET COUNTS

Abstract: Source: US5660350A A web winding apparatus and a method of operating the apparatus are disclosed. The apparatus can include a turret assembly, a **core** loading apparatus, and a **core** stripping apparatus. The turret assembly supports rotatably driven mandrels for engaging hollow **cores** upon which a paper web is wound. Each mandrel is driven in a closed mandrel path, which can be non-circular. The **core** loading apparatus conveys **cores** onto the mandrels during movement of the mandrels along the **core** loading segment of the closed mandrel path, and the **core** stripping apparatus removes each web wound **core** from its respective mandrel during movement of the mandrel along the **core** stripping segment of the closed mandrel path. The turret assembly can be rotated continuously, and the **sheet** count per wound log can be changed as the turret assembly is rotating. The apparatus can also include a mandrel having a deformable **core** engaging member.

Probable Assignee: PROCTER AND GAMBLE CO

Earliest Publication Date: 19961203



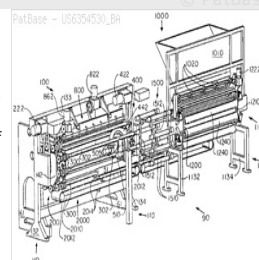
2) Family number: 23225353 (US6354530B)

METHOD OF CONTROLLING A TURRET WINDER

Abstract: Source: US6354530B A web winding apparatus and a method of operating the apparatus include a turret assembly, a **core** loading apparatus, and a **core** stripping apparatus. The turret assembly supports rotatably driven mandrels for engaging hollow **cores** upon which a paper web is wound. Each mandrel is driven in a closed mandrel path, which can be non-circular. The **core** loading apparatus conveys **cores** onto the mandrels during movement of the mandrels along the **core** loading segment of the closed mandrel path, and the **core** stripping apparatus removes each web wound **core** from its respective mandrel during movement of the mandrel along the **core** stripping segment of the closed mandrel path. The turret assembly can be rotated continuously, and the **sheet** count per wound log can be changed as the turret assembly is rotating. The apparatus can also include a mandrel having a deformable **core** engaging member.

Probable Assignee: PROCTER AND GAMBLE CO

Earliest Publication Date: 19961205



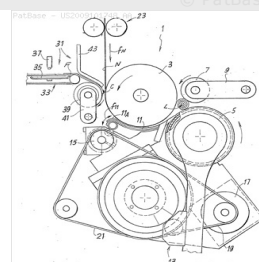
3) Family number: 33602444 (US2009101748A)

CORELESS ROLL OF WEB MATERIAL, MACHINE AND METHOD FOR ITS PRODUCTION

Abstract: Source: US2009101748A A method is described for obtaining a coreless **roll** (R) of web material with a first portion of web material forming an inner nucleus (R1) of said **roll** and a second portion of web material (R2) wound around the outside of said nucleus. The two portions (R1, R2) can be separated from one another and, for said purpose, an interface or discontinuity is created in at least one turn of the web material forming the **roll**, between said inner nucleus and said second portion of web material, so as to facilitate the extraction of the inner nucleus from the outer portion of the **roll**.

Probable Assignee: FABIO PERINI SPA

Earliest Publication Date: 20061103



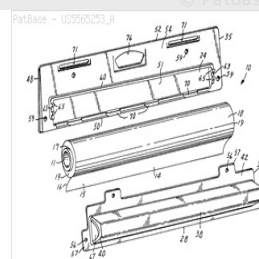
4) Family number: 11583372 (US5565253A)

DISPENSING ASSEMBLY

Abstract: Source: US5565253A A dispensing assembly adapted to be mounted on a backboard that may be supported on an easel or other support structure. The dispensing assembly includes a cylindrical **core**; a length of **sheet** material in a **roll** coaxially around the **core**; and a molded plastic enclosure including an elongate front portion defining an elongate chamber having an open side, and a rear portion adapted to be mounted on a backboard. The front and rear portions include journal surface portions at their ends that journal projecting end portions of the **core** with the **roll** in the chamber, which journal surface portions are separated when the front and rear portions of the enclosure are separated. Edges of the portions are spaced to define an elongate opening through which lengths of **sheet** material can be pulled from the **roll**, and the **sheet** can be cut against a sharp edge at the opening on the front portion of the enclosure.

Probable Assignee: 3M CO

Earliest Publication Date: 19960425



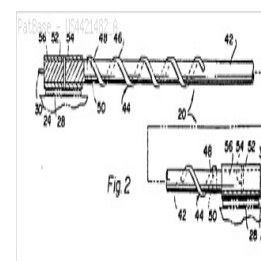
5) Family number: 2018286 (US4421482A)

CONVEYOR ROLL FOR CONVEYING HEATED GLASS SHEETS

Abstract: Source: US4421482A A conveyor **roll** (20,21,20') for conveying heated glass **sheets** on a horizontal **roller** conveyor of a glass **sheet** processing system is disclosed as including a shaft (42,70,42) having a support (44,72,80) of aromatic polyamide fibers for engaging the conveyed glass **sheets**. Kevlar fibers are preferably utilized for the support (44,72,80) so as to have the requisite thermal stability and resistance to cutting by broken glass. One embodiment of the **roll** (20) has a helically wrapped support (44) comprising braided Kevlar rope or an outer Kevlar sleeve (64) and a central **core** (62) which may be longitudinally extending metallic or glass fiber strands (66) or a helical spring (68). Another embodiment of the conveyor **roll** (21) includes a ceramic **roll** shaft (70) of fused silica extending through an outer sleeve (72) of Kevlar fibers. A further embodiment of the conveyor **roll** (20') includes a support (80) having annular conveying discs (82) made of Kevlar fibers and spaced along the length of the shaft (42). In each **roll** embodiment (20,21,20') the associated Kevlar support (44,72,80) preferably has an outer surface (46,74,86) of the same diameter as drive surfaces (56) on end members (52) of the shaft.

Probable Assignee: GLASSTECH INC A DE CORP

Earliest Publication Date: 19830707



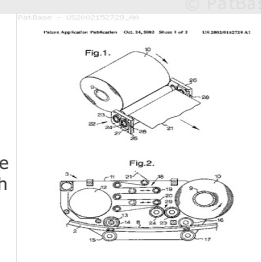
6) Family number: 28307839 (US2002152729A)

WEB TENSIONING DEVICE

Abstract: Source: US2002152729A A device for tensioning web, such as a plastics web dispensed from a shuttle in a wrapping machine, is disclosed. The wrapping machine usually includes an endless track positioned about an object to be wrapped and the shuttle travels on the endless track, dispensing the web as it goes. The rate at which web is dispensed varies as the shuttle progresses around the track and is dependent upon the shape of the track and the shape of the object to be wrapped. The web tensioning device attempts to maintain a constant tension in the web and includes a pair of **rollers** covered with resilient material. The **rollers** are urged together to form a nip with the resilient covering of the **rollers** compressed in the nip. The web is fed between the nip of the **rollers**.

Probable Assignee: SPG PACKAGING UK LTD

Earliest Publication Date: 20021024



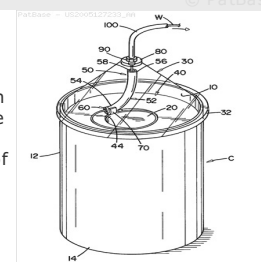
7) Family number: 31992628 (US2005127233A)

FLOATING LINER

Abstract: Source: US2005127233A A floating liner for a container of welding wire which floating liner includes a tube having two ends and a passageway extending between the two ends. The floating liner is unsupported between the top of the container and the retaining ring. The floating liner is designed to provide structural support to the wire and added stiffness or rigidity to the wire to inhibit buckling of the wire, knot formation in the wire that can form between the retaining ring and the top of the container. The floating liner has a weight profile that causes one end of the tube to at least partially float above the top surface of a layer of welding wire or retaining ring in the container as the welding wire is paid out of the container.

Probable Assignee: LINCOLN GLOBAL INC

Earliest Publication Date: 20050616



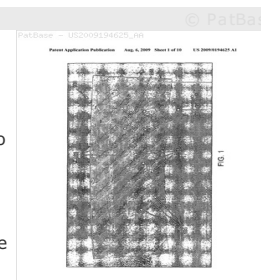
8) Family number: 43589230 (US2009194625A)

WINDING CORES FOR MATERIAL ROLLS HAVING HIGH ROLL STRAIN ENERGY, AND METHOD FOR MAKING SAME

Abstract: Source: US2009194625A Winding **cores** for elastically stretched or shrinkable materials are designed to significantly reduce the amount of **roll** strain energy developed during winding. This is accomplished by building into the **core** an energy-absorbing zone that can be collapsed by a substantial amount and in a relatively controlled fashion over a substantial period of time under the influence of a continued radially inward pressure exerted by the **roll** of wound material. The energy-absorbing zone is formed by one or more collapsible layers having repeated atomic regions projecting out of a plane of the **sheet** and each defining a plurality of normal vectors in different sub-regions of the atomic region, wherein the normal vectors, when projected onto the two-dimensional plane of the **sheet**, are in a plurality of different directions in the plane.

Probable Assignee: SONOCO DEVELOPMENT INC

Earliest Publication Date: 20090806



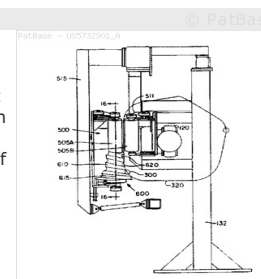
9) Family number: 8741976 (US5732901A)

TURRET WINDER MANDREL SUPPORT APPARATUS

Abstract: Source: US5732901A A web winding apparatus and a method of operating the apparatus include a turret assembly, a **core** loading apparatus, and a **core** stripping apparatus. The turret assembly supports rotatably driven mandrels for engaging hollow **cores** upon which a paper web is wound. Each mandrel is driven in a closed mandrel path, which can be non-circular. The **core** loading apparatus conveys **cores** onto the mandrels during movement of the mandrels along the **core** loading segment of the closed mandrel path, and the **core** stripping apparatus removes each web wound **core** from its respective mandrel during movement of the mandrel along the **core** stripping segment of the closed mandrel path. The turret assembly can be rotated continuously, and the **sheet** count per wound log can be changed as the turret assembly is rotating. The apparatus can also include a mandrel having a deformable **core** engaging member.

Probable Assignee: PROCTER AND GAMBLE CO

Earliest Publication Date: 19961205



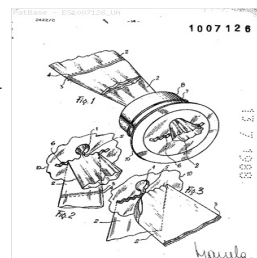
10) Family number: 17187927 (ES1007126Y)

NUEVO SUMINISTRADOR UNO A UNO DE BOLSAS O SACOS DE MATERIAL PLASTICO LAMINAR FLEXIBLE UNIDOS EN TREN Y CON LINEAS DE TREPADO EN SUS SOLDADURAS TRANSVERSALES.

Abstract: Source: ES1007126U NUEVO SUMINISTRADOR UNO A UNO DE BOLSAS O SACOS DE MATERIAL PLASTICO LAMINAR FLEXIBLE UNIDOS EN TREN Y CON LINEAS DE TREPADO EN SUS SOLDADURAS TRANSVERSALES, DE LOS DEL TIPO EN QUE PRESENTAN UNA TAPA CON ORIFICIO PARA LA EXTRACCION PARCIAL DE LA BOCA DE LA PRIMERA BOLSA O SACO DE MATERIAL FLEXIBLE LAMINAR, CARACTERIZADO POR EL HECHO DE DISPONER COMUNICADA CON ESTE ORIFICIO, UNA ABERTURA TRANSVERSAL DE DESPLIEGUE Y TRONZO DE DEL EXTREMO INFERIOR DE LA BOLSA O SACO FLEXIBLE LAMINAR TUBULAR, PARCIALMENTE EXTRAIDA Y SIENDO ESTA ABERTURA DE BORDES DENTADOS AFILADOS MAS ESTRECHA QUE LA LONGITUD TOTAL DE LA MISMA, CUAL TRONZO SE REALIZA AL IMPRIMIR CON FUERZA SUFICIENTE Y DESPUES DE LA EMERGENCIA PARCIAL EN SENTIDO AXIL DE LA ALUDIDA BOLSA O SACO, UNA CONTINUACION DE FUERZA EXTRACTORA EN SENTIDO PERPENDICULAR A LOS BORDES DENTADOS POR LOS QUE EMERGE, SE PRODUCE EL CORTADO TRANSVERSAL DESEADO SEPARANDOSE UNABOLSA O SACO DEL SIGUIENTE, CUYO BORDE QUEDA RETENIDO POR LA ABERTURA DENTADA. New One-to-one supplier of bags or sacks of plastic **sheet** material FLEXIBLE UNITED IN TRAIN AND WITH SCORE LINES IN ITS TRANSVERSE welds, OF THE TYPE THAT HAVE A LID WITH A HOLE FOR THE PARTIAL EXTRACTION OF THE MOUTH OF THE FIRST POUCH OR BAG OF FLEXIBLE **SHEET** MATERIAL, CHARACTERIZED BY THE FACT OF HAVING COMMUNICATED WITH THIS HOLE, A TRANSVERSE OPENING OF DEPLOYMENT AND PARTING OF THE LOWER END OF THE FLEXIBLE bag or tubular **sheet**, partially extracted and jagged edges sharp OPENING BEING NARROWER THAN THE TOTAL LENGTH OF THE SAME, which PARTING IS PERFORMED WHEN PRINTING WITH SUFFICIENT FORCE AND AFTER PARTIAL EMERGENCY AXIALLY OF The aforementioned bag or pouch, A CONTINUATION OF EXTRACTION FORCE IN THE DIRECTION PERPENDICULAR TO THE jagged edges that emerges, THE DESIRED CROSS CUT AWAY OR REMOVED FROM THE UNABOLSA, THE EDGE OF WHICH IS RETAINED BY THE OPENING NEXT GEAR.

Probable Assignee: SONOCO PRODUCTS COMPANY

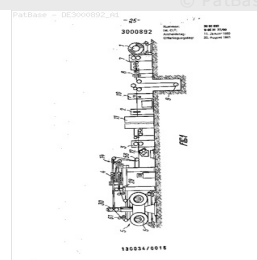
Earliest Publication Date: 19890116



11) Family number: 1887130 (DE3000892A1)

VORRICHTUNG ZUM HELIKOIDALEN AUFWICKELN VON AUS BREITSTREIFEN LAENGSGESCHNITTENEM BAND CONTINUOUS **SHEET METAL STRIP CUTTER - HAS WINDING DRUM FEEDING CUTTERS PASSING TO SEPARATING **ROLLS** WITH **SHEET** TENSIONER(SE 20.7.81)**

Abstract: Source: DE3000892A1 VORRICHTUNG ZUM HELIKOIDALEN AUFWICKELN VON AUS BREITSTREIFEN LLAENGSGESCHNITTENEM BAND P A T E N T A N S P R U e C H E 1 Vorrichtung zum helikoidalen Aufwickeln von aus Breit streifen laengsgeschnittenem Band mit einer Abwickel- haspel, einer Vorrichtung zum Verbinden von Streifen einer Vorrichtung zum Laengsschneiden von Streifen zu Baendern, einer Vorrichtung zum Auseinanderfuehren der Baender und einer Haspel mit einer Wickeltrommel, d a d u r c h g e k e n n z e i c h n e t, daX sie einen Bandspannungsregler (14) mit einem auf einer Stuetze gelenkig gelagerten zweiarmigen Hebel (15) enthaelt, dessen einer Arm eine Umlenkrolle (17) aufweist, waehrend der andere Iiebelarm mit der Kolbenstange (18) eines Hydraulikzylinders (19) gelenkig verbunden ist, dessen Kolben (20) an seinem gegenueberliegenden Ende eine mit einem Druckregler (22) im hydraulischen Steuerkreis eines hydraulik- zylinders (24) zur Steuerung des Reibantriebs (25) der Wickeltrommel (6) verbundene Zusatzstange (21) aufweist, und daX die Vorrichtung (4) zwn Auseinanderfuehrung Baender Rollen (27) zum Bandkanten um 90, Rollen (28), zum Auseinanderfuehren der Baender sowie eine **Rolle** (29) zum Rueckkanten der Baender enthaelt, deren Achse zur Achse der Wickeltrommel (6) parallel angeordnet ist, und dass ferner die Vorriciitung (33) zur Si- cherung der Durchrutschbestaendigkeit im Reibantrieb (25) der Wickeltrommel (6) zwei in randnahen Abschnitten Oeffnungen (37) aufweisende Ringe (34 und 35), der eine (34) (von denen) an der Wickeltrommel (6) und der andere (35) an der Trommel- welle (56) ausgesetzt ist, und zwei Buegel (38 und 39) enthaelt, die jeweils den betreffenden nungerl (3V) aufweisenden Ringabschnitt mit radialem Abstand umfassen an- den gegenueberlie genden Enden eine bicitiquelle (42) und einen Lichtempfaenger (43) aufweisen,wobei die Lichtempfaenger (43) in einen zwa Stromkreisvergleich der Impulszahl zur Bestimmung der Drehzaiil der Wickeltrommel (6) und der Trommelwelle (36) sowie einen Steuerstromkreis zur Drenzahlregelung der Trommelwelle (36) geschaltet sind, und daX ausschliesslich die Haspel (5) mit der Wickeltrommel (6), deren Achse in waagerechter Ebene angeordnet ist, auf einer Stuetze (49) in Richtung der Achse der Wickeltrommel (6) verstellbar gelagert ist und zur Gewaehrleistung der Hin- und Herbewegung einen Hydraulikantrieb (51) mit einem elektrohydraulischen Wandler (52) enthaelt, der an einen mit dem Lichtempfaenger (43) des Buegels (39) verbundenen Steuerstromkreis angeschlossen ist, wobei der Buegel mit einem an der Wickeltrommel (6) aufgesetzten Ring (34), einem Wicklungsschritt-Sollwertgeber (55), - einem Sollwertgeber (56) fue d ie Windungen je Wickellage sowie einen Stellungengeber (57) fuer die Haspel (5) operativ gekoppelt ist 2. The cutter has a **sheet** wound onto a **roll**. The **sheets** are joined together consecutively at one station and are cut into longitudinal strips at another. The strips are separated into separate **rolls** and are wound onto drums. The machine also has a planer and a quality control monitor. The strip also passes over a tensioner. The strips can be parted by knives and pass over an edge guide.



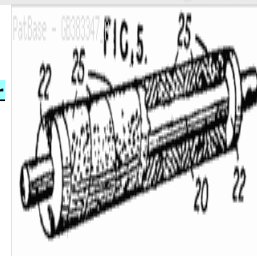
Probable Assignee: SLAVJANSKIJI VNI I PK I METALL

Earliest Publication Date: 19810820

12) Family number: 20095461 (GB383347A)

IMPROVEMENTS IN OR RELATING TO **ROLLS FOR USE IN FOLDING PAPER IN FOLDING MACHINES**

Abstract: Source: GB383347A 383,347. **Rollers**. CAMCO (MACHINERY), Ltd., 63, Farringdon Street, London.- (Toronto Type Foundry Co., Ltd.; York Street, Toronto, Canada.) Sept. 10, 1931, No. 25455. [Class 42 (ii).] A **roller** for folding **sheets** in paper-folding machines has cork or cork substance embodied in its **sheet**-engaging surface. The **roller** may be constructed entirely of cork or cork composition, or in the form of a sleeve or sleeve sections 25 mounted on a **core** 20 of metal or other unyielding material. Inclined interlocking faces may be formed on the ends of the sections 25 to prevent individual rotation of the sections and interengaging projections and grooves may be provided to improve the interlocking. In a modified construction, the **roller** is built up of wedge-shaped sectors of cork mounted on a rigid **core**. Further, the cork covering may be built up by projecting ground cork and a suitable binding agent from reciprocating nozzles on to the **core** which is being rotated. In another construction, the cork in the form of a strip is wound on the **core**. End caps 22 secure the cork sleeves, sectors, and c. in place on the **core**. If desired, a part or parts only of the **roller** surface may be formed of cork or cork composition and such parts may alternate with metal parts.



Probable Assignee: CAMCO MACHINERY LTD

Earliest Publication Date: 19321117

13) Family number: 21159193 (FR1397452A)

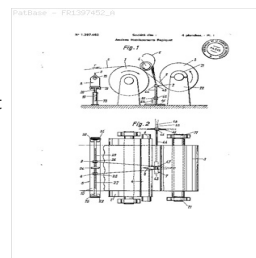
PERFECTIONNEMENTS AUX ENROULEUSES POUR FEUILLES DE PAPIER ET ANALOGUES IMPROVEMENTS TO REWINDING MACHINES FOR **SHEETS OF PAPER AND SIMILAR (MACHINE TRANSLATION)**

Abstract: Source: FR1397452A (Claim 1) **ATTENTION** debut du champ CLMS peut contenir fin de DESC **. Il est evident que l'invention n'est pas limitee aux realisations decrites et qu'on peut apporter a celles-ci des variantes d'execution.

Machine translation: (Claim 1) CAUTION ** start of CLMS field may contain end of DESC **. It is obvious that the invention is not limited to the embodiments described and we can make to these variants of execution.

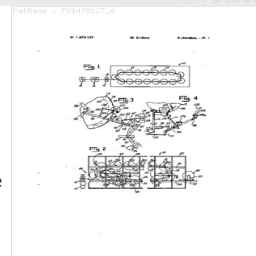
Probable Assignee: REPIQUET SA

Earliest Publication Date: 19650430



14) Family number: 21752019 (FR1478127A)

APPAREIL POUR ACCUMULER ET TRAITER DES BOBINES DE MATIERE EN BANDE COMME DU FEUILLARD OU DU PAPIER
APPARATUS FOR ACCUMULATION AND PROCESSING MATERIAL ROLL BAND AS THE STRIP OR PAPER (MACHINE TRANSLATION)



Abstract: Source: FR1478127A [Source: Claim 1] **ATTENTION** debut du champ CLMS peut contenir fin de DESC **. la plus en arriere du bati 14 c'est-a-dire pour permettre au ressort 222 de rapprocher le rouleau 88 du rouleau d'entrainement 89, enfin pour actionner le bras coude 90 afin de liberer les organes de serrage 88 d'un cote du transporteur sans fin de leur engagement avec la bande de matiere et pour degager le verrou 82 de l'encoche 84 dans la plaque terminale 86 du tambour afin de permettre sa rotation ulterieure. Au moment ou le bati 14 de support des rouleaux pinceurs se meut vers l'arriere, la timonerie 110, 112, 114 oblige l'arbre tubulaire 116 a tourner pour amener le bandage 120 en contact de travail avec le cote de la plaque terminale 86. Pour derouler la bande de matiere, on envoie le courant vers le moteur d'entrainement du rouleau d'avance 89 monte sur le bati 14. Le bandage 120, le mecanisme reducteur 150 et la poulie 151 associee avec lui font dce de freins agissant par friction pour retarder le deroulement de la bande de matiere. Apres que la longueur ou les longueurs selectionnees de matiere ont ete redressees et sectionnees, l'operateur peut arreter le mouvement des rouleaux pinceurs 15. Pour reenrouler la bande de matiere sur la bobine placee au poste de travail, on inverse l'entrainement des rouleaux redresseurs et des rouleaux pinceurs 15. Le moteur 118 est actionne pour entrainer le bandage 120 et faire tourner le tambour 13 afin de reenrouler la bande de matiere. La bobine peut etre entraine en rotation de maniere a assurer un enroulement plus rapide que les rouleaux pinceurs ne deplacent la bande de matiere vers l'arriere. C'est au fonctionnement du dispositif de reenroulement tel que le prevoit l'invention qu'est inherente l'aptitude du mecanisme a faire face a differentes quantites de matiere en bande lorsque la bobine est reenroulee. Le moteur 118 et le systeme d'entrainement des rouleaux pinceurs sont alors arretes quand seule une courte extremite de la bande est encore maintenue entre les rouleaux pinceurs. Le bord anterieur de la bobine montee sur son support au poste de travail est maintenu grace aux organes d'engagement tout pret pour un fonctionnement ulterieur. L'operateur peut alors actionner le cylindre mecanique 98 pour soutenir le bati portant les rouleaux pinceurs et actionner tout d'abord le systeme de serrage pour engager et bloquer un bord de la bobine sur son support au poste de travail et immobiliser le tambour de facon a l'empecher de tourner. Il doit etre entendu que si une realisation particuliere de l'invention a ete decrite, elle n'est pas limitee a cette realisation et que diverses variantes peuvent etre apportes sans s'en ecarter, dans le domaine des equivalences mecaniques. RESU 1" Appareil pour accumuler et manutentionner des bobines de matiere en bande tels que de la tole, du feuillard ou du papier comprenant en combinaison un organe de support de la bande de matiere destine a la supporter a un poste de travail, des organes d'enserrage relies fonctionnellement a cet organe de support pour enserrer le bord anterieur de la bande de matiere et le maintenir selon une position predeterminee, des organes d'engagement du bord anterieur de la bande de matiere pour Iderouler celle-ci par rapport a la bobine formee par elle, un organe d'actionnement deplacant les organes d'engagement en les rapprochant ou les eloignant selon le cas de la bobine au poste de travail, et un dispositif pour ouvrir et fermer les organes d'engagement afin d'engager selectivement le bord anterieur de la bande de matiere, des organes articules agissant fonctionnellement sur les organes d'enserrage pour liberer ce bord anterieur de la bande de matiere quand les organes d'engagement sont venus en prise avec elle afin de permettre le deroulement de la bande de matiere par rapport a la bobine, enfin un organe pour reenrouler la bobine apres une operation interessant une de ses extremités, de maniere a placer convenablement le bord anterieur en vue d'une operation subsequente. 20 Modes de realisation de l'appareil suivant 1" presentant les particularites conjugables suivantes: a. Les organes d'engagement de la bande de matiere sont constitues par des rouleaux pinceurs agissant sur l'extremite de cette bande; b. Les axes des deux rouleaux pinceurs sont disposes parallelement entre eux, ces rouleaux etant supportes par un bati de facon a pouvoir se rapprocher ou s'eloigner selon le cas l'un l'autre et de venir en prise avec le bord anterieur de la bande de matiere ou au contraire le liberer, et des moyens sont prevus pour entrainer ces rouleaux pinceurs afin de derouler la matiere de la bobine quand ces rouleaux sont en contact fonctionnel avec le bord anterieur de cette bande de matiere; c. Le systeme d'actionnement est constitue par un equipage a cylindre et piston actionne par un fluide; d. L'appareil comprend un transporteur sans fin portant plusieurs organes de support d'une bobine de matiere en bande et un systeme d'entrainement pour deplacer le transporteur sans fin, afin lde placer un organe de support choisi et la bobine portee par lui au poste de travail; e. L'appareil comprend un bati, des pistes portees par ce bati afin de supporter les organes portant les bobines, ces pistes comprenant une partie pivotante capable de se deplacer angulairement lorsque les organes de support le franchissent, ldes organes articules montes entre cette partie pivotante et un organe d'indication du poids, de sorte que quand l'organe de support de la bobine passe au-dessus de la partie articulee de la piste, cette partie soit deplacee et que l'organe articule relie a elle soit lui-meme deplace afin d'actionner l'organe indicateur du poids et d'indiquer le poids de la bobine qui s'y trouve; j. L'organe de support comprend un tambour supportant la bobine de matiere, ce tambour comportant une paire de plaques terminales dont l'une est munie d'encoches sur sa peripherie, les organes articules comprenant des griffes d'engagement selectif d'une encoche d'une des plaques terminales afin d'empêcher la rotation du tambour et de la bobine portee par lui, ces organes articules etant etudies de maniere a degager la griffe de l'encoche et en meme temps de liberer l'organe d'enserrage pour faire cesser son engagement avec le bord anterieur de la bande de matiere afin de permettre le deroulement de celle-ci; g. Le dispositif de reenroulement est constitue par un rouleau a entrainement mecanique associe fonctionnellement avec l'organe de support pour reenrouler selectivement la matiere sur la masse bobinee; k. Le rouleau est supporte par un bati en vue de son mouvement entre une position d'engagement avec l'organe de support et une position situee a quelque distance de cet organe de support, le bati etant deplace sous l'action du mouvement de l'organe articule pour amener le rouleau en prise avec l'organe de support quand l'organe d'enserrage libere le bord anterieur precite; i. L'appareil comprend un bati, et le systeme d'actionnement comporte un arbre rotatif dispose en principe transversalement au poste de travail, un equipage mecanique a cylindre comprenant une tige reliee fonctionnellement a cet arbre pour l'entrainer en rotation, un premier organe de jonction reliant fonctionnellement cette tige a cet arbre, cette tige comprenant un organe de blocage cooperant avec l'organe de support pour empêcher la rotation de l'organe de support et un second organe de jonction reliant fonctionnellement l'arbre a l'organe d'engagement, le fonctionnement de cet equipage a cylindre provoquant la rotation de l'arbre dans un sens en premier lieu pour rapprocher l'organe d'engagement du poste de travail et assurer l'engagement du bord anterieur de la bande de matiere et en second lieu pour deplacer la tige afin lde liberer l'organe enserreur de son engagement avec le bord anterieur de la bande de matiere et de liberer l'organe de blocage, de telle sorte que l'organe d'engagement puisse agir pour derouler la bande de matiere de la masse bobinee. [Source: Claim 1] ** WARNING ** start of CLMS field may contain end of DESC **. the most backward of bati 14 that is to say, to allow the spring 222 to bring the roller 88 of the drive roller 89, finally to operate the elbow arm 90 in order to release the clamping members 88 on one side the endless conveyor of their engagement with the strip material and to release the lock 82 of the notch 84 in the end plate 86 of the drum to enable its subsequent rotation. When the bati 14 bracket pinch rollers moves to the back, the linkage 110, 112,

114 forces the tubular shaft 116 has rotated to bring the bandage 120 in working contact with the side of the end plate 86. unroll the tape material, it sends the power to the motor drive of the feed **roller** 89 mounted on the frame 14. the bandage 120, the reduction gear mechanism 150 and the pulley 151 associated with it are dce brake friction acting to delay the conduct of the strip material. After that the length or selected lengths of material were recovered and divided, the operator can stop the movement of nip **rollers** 15. rewind the tape material on the coil PLACED workplace, we reverse the drive **rollers** rectifiers and pinch **rollers** 15. the motor 118 is actuated to cause the bandage 120 and rotating the drum 13 to rewind the tape material. The coil can be driven by way of rotation ensure a faster **roll** the nip **rollers** displace the material strip to the back. This is the operation of rewinding device as the invention provides for the inherent ability what the mechanism was to face a different strip of material quantities when the coil is rewound. The motor 118 and the drive system of the pinch **rollers** are then stopped when only one short end of the tape is still maintained between the pinch **rollers**. The anterior border of the rise reel on its support in the workplace is maintained thanks to the all ready engaging members for a later operation. The operator can then actuate the mechanical cylinder 98 to support the bati with the nip **rollers** and initially operate the clamping system for engaging and locking a coil board on its support to the workstation and hold the drum of way was keep it from turning. It must be understood that if a particular realization of the invention has been described, it is not limited to this realization and that various changes which have been made can be without being depart in the field of mechanical equivalences. RESU1 1 "Unit to build and handle the strip material coils such as **sheet** metal, the foil or paper comprising in combination a support member of the material strip indicated to endure a workstation, the organs 'Clamping subsequently assembled functionally has the support member to grip the anterior edge of the strip of material and maintain a predetermined position, the engagement members of the anterior edge of the material strip to Iderouler it relative to the coil formed by it, an actuator moving the engagement members together or them away as the case of the coil to the workstation, and a device for opening and closing the engaging members to selectively engage the anterior edge of the strip of material, the articulated bodies functionally acting on Clamping organs to liberate the anterior edge of the material strip when the engagement members come into engagement with it to enable the conduct of the tape matters relative to the coil, an organ finally to rewind the reel after an interesting operation one of its ends, a way to properly place the anterior edge for a subsequent operation.. 20 methods realization of the apparatus 1 "presenting the following peculiarities conjugatable a matter of the band The engagement members are constituted by pinch **rolls** acting on the extremity of this band b axes of the two. pinch **rolls** are arranged parallel to each other, these **rollers** being borne by a bati a way to get closer or move away as the case Ide one another and engage the anterior edge of the strip of material or on the contrary, liberate, and means are planned to train these pinch **rollers** to unroll the material of the coil when the **rollers** are in operative contact with the anterior edge of the strip material;. v the operating system is made by a crew has cylinder and piston actuated by a fluid d.The apparatus comprises an endless conveyor carrying several support members of a band material coil and a drive system to move the endless conveyor to Ide place a support member and coil scope chosen by him workplace; e. The apparatus comprises a frame, of the tracks carried by said frame for supporting the bodies carrying the bobbins, these tracks comprising a pivoting part able to move angularly when the support members pass through the, Ides articulated bodies mounted between the pivotable part and a body weight is indicated, so that when the coil audessus the support member passes from the articulated portion of the track, this portion is moved and the articulated member connected thereto or itself moves in order to actuate the weight indicator member and indicate the weight of the coil therein; J. The support member includes a drum supporting the coil material, the drum comprising a pair of end plates of which is notched on its periphery, the articulated members comprising engagement claws of a selective notch of the end plates to temples expensive drum rotation and coil scope by him, these articulated bodies being studied so as to release the claw of the notch and at the same time to release the body of Clamping to stop its engagement with the anterior edge of the material strip to allow RUNNING thereof; g. The rewinding device is a mechanical drive **roller** has functionally associated with the support member to selectively retract the matter on the coiled mass; k. The **roller** is supported by a bati for its movement between a position of engagement with the support member and a position situated at some distance from the support member, the bati being moves under the action of the movement of the body revolves to bring the **roller** engages with the support member when Clamping body frees the anterior edge cited above; i. The apparatus includes a bati, and the operating system has a rotary shaft has in principle transversely workstation crew has a mechanical cylinder with a shaft functionally reliee this tree has to lead in rotation, a first body junction operatively connecting said rod is that tree, this rod comprising a locking member cooperating with the support member to prevent rotation of the support member and a second joining member operatively connecting the shaft to the body of commitment, the operation of this crew has cylinder causing rotation of the shaft in one direction in the first place to bring the engaging member of the workstation and ensure the commitment of the anterior edge of the strip of material and second place to move the stem to Ide enserreur liberate the body from its engagement with the anterior edge of the strip of material and to release the locking device, so that the body can act commitment to unroll the tape matter of the coiled mass.

Earliest Publication Date: 19670421

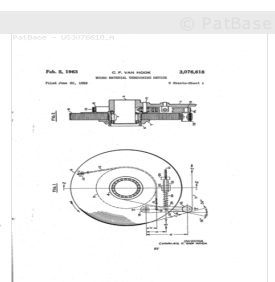
15) Family number: 22081993 (US3076618A)

WOUND MATERIAL TENSIONING DEVICE

Abstract: Source: US3076618A (Claim 1) 1. In a wound material tensioning device the combination comprising, a support frame, a circular drum rotatably journaled with respect to said frame and operative to concentrically hold wound material to be tensioned in its withdrawal from said drum, said drum having a concentric braking surface, a brake band continually in contact with said braking surface, a control lever pivoted at one end to said frame on a swina axis parallel to and spaced from the rotational axis of said drum, said swing axis being positioned on a line substantially midway between the outer and inner diameters of the wound material, the leading end of said band being attached to said control lever at a first radial distance from its swing axis, the other end of said band being attached to said frame, a material guide **roll** rotatably journaled with respect to said control lever at a second radial distance from said swing axis greater than said first radial distance and on an axis parallel to said swing axis, a spring acting upon said control lever and operative to cause a moment with respect to said control lever about said lever axis in the direction opposite to the pull of said band, the position of said guide **roll** relative the widely varying angles of approach thereto of the wound material at the beginning and end of run-off when said wound material on said drum is pulled from around said guide **roll** in a direction substantially perpendicular to the longitudinal axis of said control lever being such that the tension in the wound material in leaving the guide **roll** will be substantially equal at all conditions of runoff from full to empty.

Probable Assignee: HOOK CHARLES F VAN

Earliest Publication Date: 19630205



16) Family number: 22977986 (FR1348394A)

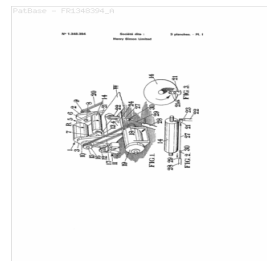
MECANISME POUR COUPER ET ENROULER UNE BANDE MECHANISM FOR CUTTING AND WINDING A BAND (MACHINE TRANSLATION)

Abstract: Source: FR1348394A (Claim 1) RESUME L'invention a principalement pour objets: A.

Machine translation: (Claim 1) SUMMARY The invention mainly objects of A.

Probable Assignee: SIMON LTD HENRY

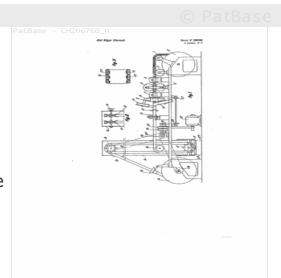
Earliest Publication Date: 19640110



17) Family number: 26039649 (CH206768A)

**PROCEDE DE FABRICATION D'UN TUYAU FLEXIBLE, INSTALLATION POUR SA MISE EN OEUVRE, ET TUYAU FLEXIBLE OBTENU AU MOYEN DE CE PROCEDE.
PROCESS FOR PRODUCING A HOSE, PLANT FOR IMPLEMENTATION, AND HOSE OBTAINED THROUGH THIS PROCESS. (MACHINE TRANSLATION)**

Abstract: Source: CH206768A REVENDICATIONS I Procédé de fabrication d'un tuyau flexible, caractérisé en ce qu'on déplace un ressort en hélice, au moins partiellement métallique, d'un mouvement de translation continu en ce qu'on enroule en même temps - en hélice, d'une façon continue, autour de ce ressort, en couches: superposées, une bande, de matière résistante aux liquides susceptibles d'être véhiculés à l'intérieur du tuyau, en ce qu'on ondule d'une façon continue le revêtement ainsi formé, et en ce qu'on revêt l'ensemble d'un produit élastique sous forme liquide, -de façon à former un tuyau flexible résistant intérieurement aux liquides, à véhiculer et extérieurement à l'humidité ambiante. II Installation pour la mise en œuvre du procédé -selon la revendication I, caractérisée par une vis, de même pas que celui du ressort à déplacer d'un mouvement de translation continu et destinée à recevoir le ressort précité, cette vis comportant au moins une section le long de laquelle les filets de la vis ont un diamètre supérieur au diamètre extérieur du ressort, par des moyens pour faire tourner -cette vis, agissant en combinaison avec la section précitée de cette vis, et par des moyens pour empêcher la rotation du ressort sans gêner la rotation de la vis. III Tuyau flexible obtenu au moyen du procédé selon la revendication I, caractérisé en ce qu'il comporte un ressort en hélice au moins partiellement métallique, une bande continue de matière résistante à l'action des hydrocarbures, cette bande étant enroulée en hélice et en couches superposées avec encollage des spires successives, une bande d'épaisseur enroulée également en hélice et en couches superposées autour de la première bande, les deux revêtements formés par ces bandes étant ondules et maintenus en place par une ficelle, et un revêtement continu en matière élastique adhérent étroitement -par interpénétration au revêtement formé par la deuxième bande. SOUS-REVENDICATIONS 1 Procédé suivant la revendication I, caractérisé en ce qu'on effectue le décalage du ressort, de telle sorte qu'il ne reçoive qu'un mouvement de translation régulier et continu. 2 Procédé suivant la revendication I et la sous-revendication 1, caractérisé par le fait qu'on enroule autour du premier revêtement, fait en matière d'étanchéité, un deuxième revêtement d'épaisseur constituée par une bande de tissu lâche de coton enroulée en hélice, en couches superposées, et recevant ensemble, avec le premier revêtement, les ondulations, un revêtement de matière élastique étant formé par-dessus le revêtement de coton, et en ce qu'on effectue la pose du revêtement élastique et son séchage également d'une façon continue, sans pour cela, arrêter le déplacement régulier du ressort. 3 Procédé suivant la revendication I et les sous-revendications 1 et 2, caractérisé en ce qu'on encolle la bande de matière d'étanchéité au cours de son enroulement, sur ses deux faces, et en ce qu'on maintient le revêtement de matière d'étanchéité et le revêtement de coton sous leur forme ondulée à l'aide d'une ficelle sous tension venant se poser dans la gorge **helicoidale** située entre les spires successives du ressort, une deuxième ficelle d'un diamètre plus grand, venant se poser au-dessus de la première ficelle, de façon à remplir la gorge **helicoidale** et donner à l'ensemble de la structure ainsi obtenue une surface extérieure lisse avant que ladite structure ne reçoive le revêtement de produit élastique. 4 Procédé suivant la revendication I et les sous-revendications 1 à 3, caractérisé en ce que l'encollage de la bande de matière d'étanchéité est fait par frottement et non par roulement, c'est-à-dire par une action de brossage. 5 Installation suivant la revendication II, caractérisée par le fait que ladite section de la vis le long de laquelle les filets ont un diamètre supérieur au diamètre extérieur du ressort est montée dans un palier empêchant le déplacement axial de la vis et permettant de l'entraîner dans un mouvement de rotation. 6 Installation suivant la revendication II, caractérisée par le fait que la vis comporte au moins une section le long de laquelle les filets ont un diamètre inférieur au diamètre extérieur du ressort, l'installation comportant au moins une poulie à gorge s'appliquant contre le ressort dans la section précitée de la vis, de façon à empêcher la rotation du ressort sans gêner la rotation de la vis. 7 Installation suivant la revendication II et la sous-revendication 6, caractérisée par le fait que la gorge de la poulie précitée est revêtue d'une substance élastique. 8 Installation suivant la revendication II et la sous-revendication 7, caractérisée par le fait qu'elle comporte des moyens pour entraîner la vis portant le ressort dans un mouvement de rotation autour de son axe et des moyens, commandés par le même dispositif d'entraînement, pour enrouler en hélice, d'une façon continue, et en couches superposées une bande de matière d'étanchéité. Des moyens pour encoller cette bande avant qu'elle ne soit posée sur le ressort, sur au moins une face, des moyens pour enrouler en hélice, en couches superposées, autour de ce premier revêtement, une bande de tissu de coton, des moyens pour former dans ce double revêtement une gorge en forme d'hélice correspondant à l'espace situé entre les spires du ressort, des moyens pour appliquer sous tension, à l'intérieur de cette gorge, une ficelle destinée à maintenir en place les ondulations formées par la gorge en hélice, -des moyens pour empêcher la rotation du ressort autour de son axe, un tambour pour recevoir la structure ainsi formée après qu'elle a quitté la vis de support et des moyens pour revêtir de matière élastique la structure sortant de la vis et pour sécher l'ensemble du tuyau ainsi formé sur son trajet de la vis rectiligne vers le tambour sur lequel le tuyau termine son enroulement. 9 Installation suivant la revendication II et la sous-revendication 8, caractérisée par le fait que les moyens, pour empêcher la rotation du ressort pendant qu'il se déplace le long de la vis sont constitués, d'une part, par une première poulie à revêtement de caoutchouc, sur laquelle le ressort passe en sortant d'un tambour et au moment où il s'engage sur la vis, et de deux autres poulies placées -de part et d'autre du ressort monte sur la vis et destinées à empêcher sa rotation tout en lui permettant d'avancer sur la vis -ces deux poulies tournant librement autour de leurs axes et exerçant l'une même pression, de façon à ne pas appliquer le ressort contre la vis, 10 Installation suivant la revendication II et la sous-revendication 8, caractérisée par le fait que les moyens pour enrouler, d'une part, la bande de matière d'étanchéité et, d'autre part, la bande de tissu d'épaisseur autour du ressort porte par la vis, sont constitués par deux tambours portés par des axes inclinés, par rapport à l'axe de la vis, d'un angle déterminé suivant la nombre de couches superposées de chaque revêtement et la largeur des bandes respectives, ces axes étant portés à leur tour par des bras d'un manchon qui reçoit un mouvement de rotation en même temps que la vis. 11 Installation suivant la revendication II et les sous-revendications 8 et 10, caractérisée par le fait que la vis -comporte deux sections le long desquelles les filets ont un diamètre supérieur au diamètre extérieur du ressort, l'une de ces sections étant montée dans un simple palier, tandis que l'autre est montée dans un and lt;B and gt;cous- and lt;B and gt;sinet monte à son tour dans un palier, ce coussinet étant relié avec les filets de la vis de façon à transmettre à celle-ci un mouvement de rotation, le manchon portant les deux tambours étant monté dans, le même palier, de telle sorte que les deux organes sont entraînés dans le même mouvement de rotation. 12 Installation suivant la revendication II et la sous-revendication and lt;B and gt;8, and lt;B and gt; caractérisée par le fait que les moyens destinés à onduler le double revêtement sont constitués par trois galets dont la périphérie a une forme telle qu'ils s'engagent entre les filets du ressort, ces galets étant inclinés en conséquence, de telle sorte que -le double revêtement, après avoir passé entre ces trois galets, reçoive des ondulations correspondant aux spires du ressort. 13 Installation suivant la revendication II et la sous-revendication 8, caractérisée par le fait que les moyens destinés à empêcher la torsion du ressort au cours des opérations d'enroulement sont constitués par un groupe de galets radiaux dont les axes sont placés à angle droit par rapport à l'axe de la vis et dont l'un est soumis à l'action de ressorts qui l'appliquent contre la structure du tuyau. 14



Installation suivant la revendication II et la sous-revendication 8, caracterisee par deux bobines, dont l'une porte une ficelle destinee a rtre introduite soyas tension entre les spires du ressort, de facon a maintenir les deux revetements ondules en place, la deuxieme portant une ficelle de plus grand diametre, des- tinee a remplir la gorge **helicoidale** ainsi formee, de facon que la structure qui sort de la vis d'entrainement ait une surface exterieure lisse au moment ou elle penetre dans un bain de latex. la Installation suivant la revendication II et la sous-revendication 8_, caracterisee par le fait que les moyens d'encollage comportent un recipient contenant la colle, un rouleau immerge partiellement dans cette colle et pouvant tourner libre ment autour de son axe, un racloir a res- sort destine a enlever le surplus de la colle de la surface du rouleau, des moyens de guidage pour la bande de ma tiere d'etancheite, comportant une sur face cylindrique dont le centre est place sur l'axe de la vis, cette surface etant destinee a venir en contact tangentiel avec le rouleau d'encollage pendant la rotation du tambour qui porte la, bande de matiere d'etancheite, le rouleau d'en collage etant entraine dans le mouve ment de rotation a une vitesse telle qu'il y ait un contact par frottement entre la surface cylindrique precitee et la peri pherie du rouleau. 16 Installation suivant la revendication II et les sous-revendications 8 et and lt;B and gt;15, and lt;/B and gt; carac- teris6e par le fait que le dispositif d'en collage est complete par un rouleau monte fou autour de son axe et destine a rouler sur la surface exterieure du reve tement -de matiere d'etancheite qui vient d'etre forme autour du ressort, ce rop- leauenlevant le surplus de la colle de and lt;B and gt;la and lt;/B and gt; surface de la, structure formee et le transportant sur la surface interieure de la bande de matiere d'etancheite au cours de son enroulement. 17 Installation suivant la revendication II et la sous-revendication 8, caracterisee par le fait qu'elle comporte une chambre a la partie inferieure de laquelle se trouve un bain de matiere elastique, le tuyau penetrant dans cette chambre, a sa sortie de la vis, par une ouverture pla- cec clans l'axe de la vis, apres quoi il passe sur une premiere poulie et se -di rige vers le bas de la. chambre ou il vient s'enrouler autour d'une poulie folle tout en passant a l'interieur du bain and lt;B and gt;de, and lt;/B and gt; matiere elastique, apres quoi ce tuyau passe sur une poulie placee dans la partie superieure de la chambre, re passe sur une deuxieme poulie plongee egalement dans le bain de matiere elas tique, repasse une deuxieme fois sur une poulie superieure et sort de la chambre, celle-ci etant traversee par un courant d'air chaud, de facon que les deux cou ches successives de matiere elastique soient sechees pendant le passage du tuyau a l'interieur de la, chambre. 18 Installation suivant la revendication II et les sous-revendications 8 et 17, carac- terisee par.le fait que le tuyau, en sor tant de la eliambre precitee, passe a. tra vers une boite remplie de poudre de talc, apres quoi il s'enroule sur un tambour d'emma,gasinaae. 19 Tuyau suivant: la revendication III, ca racterise en ce qu'il comporte en outre un revetement serre sur le revetement elas tique. `?0 Tuyau suivant la revendication III, ca racterise en ce que le ressort a en coupe la forme d'un demi-cercle dont la base et une partie des deux cotes sont formes par le corps metallique du ressort et le reste par une matiere de remplissage. `?1 Tuyau suivant la, revendication III, ca- racterise en ce que la matiere elastique est and lt;B and gt;du and lt;/B and gt; latex. CLAIMS I A method of manufacturing a flexible pipe ble CHARACTERIZED IN # that moves a coil spring, at least partially metallic, a transla tion of continuous movement in which is wound at the same time-in propeller, a con tinues way around this spring; in layers superimposed, a band of r6sis- matter as liquid vehicles that may be in the interior of the pipe, in that waves of one way continuous re clothing and shape, and in that re vet an entire elastic liquid form, -the way to form a hose internally resistant to liquids, to convey and exteriorly ment has the ambient moisture. II Installation for implementing the method -according to claim I, character- laughing stock by a screw. not even to that of the spring has a continuous move translational motion and destiny has receive the spring cited, this screw COMPOR as at least one section along which the threads of the screws have a diameter superior to the diameter Outside of Your fate by means for rotating screw -cotte acting in combination with the cited above section of this screw, and means for preventing the spring roitation gener without rotation of the screw. III flexible hose obtained by the pro cede claim I, characterizes in that it comprises a spring metal propeller at least partially, a web of matter Tessant to the action of hy dro-carbides, this band is wound in propeller and layered su- perpuseos with gluing the suc- cessive turns a thick band also helically wound and superposed layers around the first band, the two forms of these coatings being wavy band and kept pla.ee by a string, and a continuous elastic coating in acceding matter closely -by interpenetration coating to form the second band. SUB-DREAM dications 1 Procede claim I, characterizes by effecting the spring Depla cement, so he receives a regular and continuous translational movement. 2 Procede following. I claim and under-claim 1, characterized by the fact that wraps around the first coating, made in matters of tightness, a second coating is thick with a cotton cloth moor loose helically wound in layers su perposees and receiving together with the first coating, ripples, a coating of elastic matter being shaped over the cotton coating, and in carrying out the installation of rev (" - elastic ment and drying ment equal a continuous way, without this, stop the regular displacement of the spring. 3 next Procede lia claim I and the sub-claims 1 and 2, characterizes in that glued the band tightness matter in its winding, on both sides, and in that hand holds the coating of waterproof eitj of matter 'and cotton coating under their corrugated shape with a power cord from landing in the throat **helicoi** dale situated between successive turns of the spring, a second string of a dia meter taller, coming to rest above the first string, way to fill the helical throat and give to the whole structure and obtained a smooth outer surface before said structure receives the product of elastic coating. according to Procede. I claim and subordinate claims 1 to 3, characterized in that said gluing of matter band of tightness is made by rubbing, not working, that is to say by a brushing action. 5 Apparatus according to claim II, characterized in that said section of the screw along which the nets. an upper diameter at ext laughing diameter of the spring is assembled in a bind pa empechant- axial displacement of the screw and for the train in a rotational movement. 6 Apparatus according to claim II, characterized in that the com screw has at least one section along which the threads have a laughing NCI diameter to outer diameter of the spring, the installation comprising at least one sheave s' pressing against the spring in the cited above section of the screw, a way of lia prevent rotation of the gener res spell without rotation of the screw. 7 Apparatus according to claim II and sub-claim 6, characterized in that the groove par.le pre cited pulley is coated with a substance elas tic. 8 Installation and claim lt; B and gt; 11, and lt;/ B and gt; characterized by the fact that it comprises means for driving the screw with the spring in a rota tion of movement around de.son axis and means, controlled by the same in-1 rainement device for winding helically d in a continuous way, and layered knew perposees band soot matter of waterproof- ing.Ways to glue the tape before it is. placed on the first spring on at least one side, means for winding helix, neck Clies superimposed around this first coating, a band of cotton fabric, means for forming a coating in this dual shaped groove of helix corresponding to the space between the spring coils -from, means for app cate on, in the interior of the groove; a destiny twine holding in place. undulations formed by the throat propeller, -the moyensi to prevent rotation of the spring about its axis, a drum for receiving the structure thus formed after it leaves the mounting screws and means to upholster elastic structure of matter out of the screw and for seclher hose assembly thus forms on its path from the straight screw towards the drum on which the hose ends wraps. 9 Apparatus according to claim II and the e- claim 8, characterized in that the means for preventing rotation of the spring as it moves along the screw are constituted on the one hand, by a first pulley rubber coating has, on which the spring pass coming out of a drum and the moment he. engages the screw and de7zx other hand -to PLACED pulleys and other spring mounted on the screw and a destinies prevent rotation while allowing it to move forward on the screw -these two pulleys rotating freely around their axes and even exercising lia pres sure of a way not to apply the resources sort.contre the screw according to claim 10 Installation II sub-claim 8, characterized by le.fait the means for reeling, a First, the matter of sealing strip and on the other hand, the thick band of tissue around the spring holder by the screw, are constituted by two doors with drums, inclined axis with respect to the the screw axis by an angle determined according to the number of superimposed layers Sees of each coating and the width of the respective bands, these axes being portes.a turn by the arms of a man who receives a cap of ro tation movement at the same -time that the screw. Installation according to claim 11 II and the dependent claims 8 and 10, character- ized by the fact that the screw - has two sections along which the nets have a diameter superior to the outside diameter of the spring-, one of these sections being buildup in a single step, tan- -DIS the other is in a buildup and lt; B and gt; and cous- lt; / B and gt; sinet up in turn in a bearing, the bearing being connected with the threads of the, way to screw it to transmit rotary motion, the sleeve carrying the two drums being mounted in the same level, so that the two bodies are driven in the same rotation. Installation according to claim 12 and under-II and claim lt; B and gt; 8, and lt;/ B and gt; characterized by the fact that I was waving means intended double coating are constant titues by three **rollers** which Externa series has such a hole that they engage between the spring-nets, these **rollers** being inclined yen Accordingly, such sortke that -the dual coating, after spending between three **rollers**, receives waves corresponding to the spring coils. 13 Apparatus according to claim II and the sub-nevendication 8, characterized in that the means for preventing the torsion spring in the: winding operations are constant titues by a set of radial **rollers** whose axes are placed a right angle to the axis of the. screws and one of which is subjected to the action of springs which apply it against the structure of the pipe. Installation according to claim 14 and under-II claim 8,

characterized by two coils, one of which carries a helical destiny has introduced the soybeans tension between the spring coils, a way of keeping the two wavy coverings in place, the second wearing a string of larger diameter, destined to remplir the helical groove thus formed, from way that the structure comes out of the screw drive has a smooth outer surface when it penetrates into a latex bath. The installation according to Claim II and the sub-8 claim, characterized in that the sizing means comprises a container containing glue, a **roller** partially immersed in the glue and rotatable free round its axis, a scraper spring has indicated to remove excess adhesive from the surface of the **roller** guide means for the band of my tire of tightness, with a cylindrical surface on which the center is positioned on the axis of the screw, this surface being destined to come into tangential contact with the glue **roller** during rotation of the drum carrying the, matter band tightness of the bonding **roller** being leads in the movement of rotation has a rate such that 'there is frictional contact between the cylindrical surface cited above and periphery of the **roll**. Installation according to claim 16 II and the sub-claims 8 and It; B and gt; 15 and It; / B and gt; character- terise that the bonding device is supplemented by a crazy **roll** up around its axis and intended to **roll** on the outer surface of the dream of charge -from matter of tightness that has just been formed around the spring This rop- leauenlevant the excess glue and It; B and gt; and the It; / B and gt; surface, and carrying structure formed on the inner surface of the band tightness matter during its winding. Installation according to claim 17 and under-II claim 8, characterized by the fact that it includes a chamber to the lower part of which is a bathing elastic matter, penetrating the pipe in this room has its output of the screw through an aperture plate cec clans axis of the screw, after which it passes over a pulley first and -di rige down the. room or it is wound around an idler pulley while passing in the interior of the bath and It; B and gt;; and It; / B and gt; elastic matter, after which the pipe passes over a pulley PLACED in the upper part of the chamber, re passes over a second pulley also dive into the bath of matter elas tic, returns a second time on an upper pulley and leaves the room, it being crossed by a stream of hot air, in way that both neck successive tasks of elastic matter are dried during passage of the pipe in the interior of the room, bedroom. Installation according to claim 18 II and the dependent claims 8 and 17, characterized par.le that the pipe, as the sor eliambre cited above, passes. tra to a box filled with talcum powder, after which it is wound on a drum of emma, gasinaae. 19 Next Tip: Claim III ca terized in that it further comprises a green coating on the coating elas tic. ' ? 0 The tubing of claim III ac terized in that the spring has the sectional form of a semicircle of which the base and part of the two sides are formed by the metal body and the remainder of the spring by a material filling. ' 1 along the pipe, claim III, characterizes in that the matter is elastic and It;? B and gt; and the It; / B and gt; latex.

Probable Assignee: CHERNACK ABEL EDGAR

Earliest Publication Date: 19390831

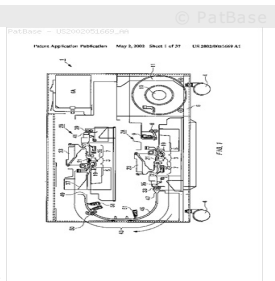
18) Family number: 28199892 (US2002051669A)

DOUBLE-SIDED PRINTING APPARATUS

Abstract: Source: US2002051669A The present invention is made to provide a double-sided printing apparatus at a relatively lower cost having little possibilities of dust generation or slowing feed speed of a continuous paper without complex mechanical structure nor control process, which includes: a first printer including a first transporting unit; a first recording unit disposed on upper or lower side of a transportation path of a recording medium, the recording medium being horizontally transported from the first transporting unit; and a first discharging unit for discharging the recording medium after printing; a second printer including a second transporting unit; a second recording unit disposed on upper or lower side of the transportation path of the recording medium horizontally transported from the first transporting unit, wherein the second recording unit is disposed on the same side where the first recording unit is disposed; and a second discharging unit for discharging the recording medium; and a guiding path disposed from the first discharging unit to the second discharging unit through which the recording medium printed by the first recording unit is guided, wherein surface of the recording medium is maintained in a plane while the recording medium is guided by the guiding path.

Probable Assignee: SEIKO EPSON CORP

Earliest Publication Date: 20020327



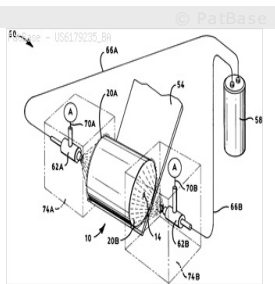
19) Family number: 29612579 (US6179235B)

COLLASPE RESISTANT CENTER FEED **ROLL** AND PROCESS OF MAKING THEREOF

Abstract: Source: US6179235B The center feed **roll** may include a wound **sheet** material having lessened wound tension due to exposure to moisture. This exposure may prevent the inward collapse of **sheet** material into the **core** of the center feed **roll**.

Probable Assignee: KIMBERLY CLARK CORP

Earliest Publication Date: 20000309



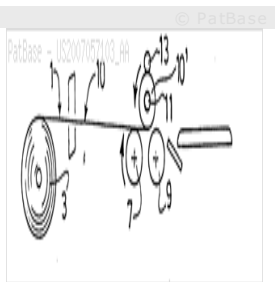
20) Family number: 31478278 (US2007057103A)

CENTRE-FEED **ROLL** AND PRODUCTION METHODS THEREOF

Abstract: Source: US2007057103A The invention relates to a coreless **roll** (10', 20, 30) including of a **sheet** (10) made of dry flexible material, such as an absorbent fibrous material, that is formed by the **rolling** of a **sheet** around a winding axis characterized in that it includes a center-feed (center unwinding) first strip (10 B, 21, 31) forming a projection along the axis in relation to at least one part of the plane of one of the sides of the **roll**. In particular, this first strip is constituted by a portion of the internal end of the **sheet** constituting the **roll**. The first internal turn is thus permitted to unwind, even if the center opening is reduced.

Probable Assignee: GEORGIA PACIFIC FRANCE

Earliest Publication Date: 20050120



21) Family number: 31763985 (EP1516840B1)

DEVICE FOR REMOVING WASTE OF A WEB FROM A TAMBOUR

Earliest Publication Date: 20050323

PatBase™ - 25541377.0

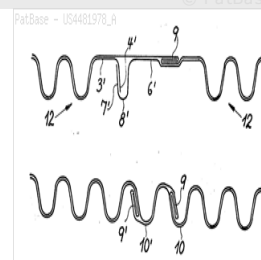
Diagram illustrating the exploded view of the PatBase™ device, showing the main body (1) and the PatBase™ (2) assembly. The main body (1) includes components such as the PatBase™ (2), PatBase™ (3), PatBase™ (4), PatBase™ (5), PatBase™ (6), PatBase™ (7), PatBase™ (8), PatBase™ (9), PatBase™ (10), PatBase™ (11), PatBase™ (12), PatBase™ (13), PatBase™ (14), PatBase™ (15), PatBase™ (16), PatBase™ (17), PatBase™ (18), PatBase™ (19), PatBase™ (20), PatBase™ (21), PatBase™ (22), PatBase™ (23), PatBase™ (24), PatBase™ (25), PatBase™ (26), PatBase™ (27), PatBase™ (28), PatBase™ (29), PatBase™ (30), PatBase™ (31), PatBase™ (32), PatBase™ (33), PatBase™ (34), PatBase™ (35), PatBase™ (36), PatBase™ (37), PatBase™ (38), PatBase™ (39), PatBase™ (40), PatBase™ (41), PatBase™ (42), PatBase™ (43), PatBase™ (44), PatBase™ (45), PatBase™ (46), PatBase™ (47), PatBase™ (48), PatBase™ (49), PatBase™ (50), PatBase™ (51), PatBase™ (52), PatBase™ (53), PatBase™ (54), PatBase™ (55), PatBase™ (56), PatBase™ (57), PatBase™ (58), PatBase™ (59), PatBase™ (60), PatBase™ (61), PatBase™ (62), PatBase™ (63), PatBase™ (64), PatBase™ (65), PatBase™ (66), PatBase™ (67), PatBase™ (68), PatBase™ (69), PatBase™ (70), PatBase™ (71), PatBase™ (72), PatBase™ (73), PatBase™ (74), PatBase™ (75), PatBase™ (76), PatBase™ (77), PatBase™ (78), PatBase™ (79), PatBase™ (80), PatBase™ (81), PatBase™ (82), PatBase™ (83), PatBase™ (84), PatBase™ (85), PatBase™ (86), PatBase™ (87), PatBase™ (88), PatBase™ (89), PatBase™ (90), PatBase™ (91), PatBase™ (92), PatBase™ (93), PatBase™ (94), PatBase™ (95), PatBase™ (96), PatBase™ (97), PatBase™ (98), PatBase™ (99), PatBase™ (100).

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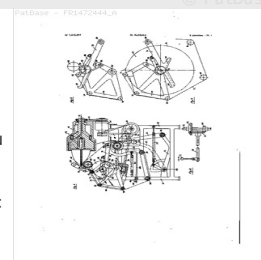
PatBase PDF Export - Page: 9 10/08/2018

26) Family number: 1472715 (US4481978A)**METHOD OF MANUFACTURING HELICALLY WOUND TUBES AND TUBES MANUFACTURED BY SAID METHOD**

Abstract: Source: US4481978A A typical embodiment of the invention produces helically wound tubes from strips of thin plate in which adjacent edges are provided with interlocking ribs that are folded over to form a compressed bead. A further rib is formed at the bead, the bead providing one of the sides of the new-formed rib.

Probable Assignee: WESTERBARKEY WESTAFLEX**Earliest Publication Date:** 19791030**27) Family number: 22558676** (FR1472444A)**PROCEDE ET MACHINE POUR L'EXECUTION DE ROULEAUX DE FIL
METHOD AND MACHINE FOR WIRE ROLLS EXECUTION (MACHINE TRANSLATION)**

Abstract: Source: FR1472444A [Source: Claim 1] **ATTENTION** debut du champ CLMS peut contenir fin de DESC **. et d'autre sont relies entre eux par un arbre 80 et sont soumis a l'action d'un ressort de traction 82, qui est assujetti d'une part a un bras de levier 84 fixe sur l'arbre 80 et, d'autre part, au bati 10. L'arbre 76 est maintenu dans les coussinets des bras-supports 74 par des cliquets 86 montes sur ces bras. Les bras-supports 74 se prolongent vers l'avant au-dela des coussinets de l'arbre 76 et sont soumis a leur extremite de becs 88 en saillie vers le haut. Les bras-supports comportent enfin des glissieres 90, qui cooperent a la maniere decrite plus loin avec des goujons 92 des chassis 58. Dans l'intervalle subsistant entre le cylindre directeur 42 et le cylindre d'amenee 48 s'engage une bande de recouvrement 94, qui se deplace sur des rouleaux 96 et est entrainee par un rouleau 98 en synchronisme avec la tete enrouleuse 12. Les chassis 58 portent des goujons 100 (fig. 5), susceptibles d'osciller en meme temps que les chassis autour des axes 60 et dont le role sera expose plus loin. Au bras de levier 84 est articulee une tringle 102, qui porte a son extremite libre une butee reglable 104, destinee a actionner un interrupteur 106 commandant la courroie de transmission 22. Les figures 3 a 6 ne representent que les elements essentiels de la machine, indispensables pour en expliquer le fonctionnement. L'arbre 76 de la douille 78 est, a la figure 3, introduit dans les deux bras-supports 74 et bloque par les cliquets 86. La douille 78 du rouleau se trouve dans une boucle de la bande presseuse 32, qui est entrainee par le cylindre 30, passe sur le cylindre d'amenee 48 qui la conduit a la boucle, puis est renvoyee par le cylindre directeur 42. Le rotor 16 de la tete enrouleuse 12, entraine en meme temps, fournit a son extremite 18 une nappe dans laquelle le fil est dispose en spires perpendiculaires a la longueur de la nappe, presentant la forme d'helices allongees et se chevauchant a la facon d'ecailles. Cette nappe est enroulee sur la douille 78 entrainee par la bande presseuse 32 et est soumise a la pression dirigee radialement vers l'interieur qu'exerce la bande presseuse sur la douille du rouleau. La circonference du rouleau 50 augmente en meme temps que son diametre, de sorte que le rouleau tendeur 44 vient occuper progressivement la position representee en traits mixtes a la figure 1, pour laquelle la force de traction du ressort 56 est notablement plus grande qu'a l'origine. La pression radiale sur le rouleau 50 va par consequent en croissant au fur et a mesure que son diametre augmente. Le rouleau 50 atteint peu a peu sa dimension definitive, comme le montre la figure 4. Les bras-supports 74 ont ete entre temps repoussees de l'arbre 76 vers le bas a l'encontre de la force du ressort 82. La butee 104 s'est donc rapprochee peu a peu de l'interrupteur 106, qui fait entrer en action l'embrayage magnetique de la transmission a courroie 22, de sorte que la tete enrouleuse 12 s'arrete et ne fournit plus de nappe a son extremite 18. La bande presseuse 32 peut alors continuer a tourner pendant un certain temps; il est avantageux de disposer a ce moment sur le rouleau 50 une enveloppe parfaitement permeable aux liquides (bains de teinture) et aux gaz (air de sechage), qui protege le rouleau contre les deteriorations mecaniques et les deformations. Le cylindre 30 est ensuite separe de la transmission a chaine 28 par l'embrayage magnetique precise et la bande presseuse 32 est ainsi mise a l'arret. Pour retirer le rouleau 50 de la machine, on applique la roue de friction 70 contre la roue de friction 66 au moyen de la manette 72; l'arbre 64 et l'engrenage a vis sans fin 62 font osciller vers l'avant les chassis 58 avec les cylindres directeurs 38 a 42, lesquels viennent occuper la position de la figure 5. Pendant ce mouvement, les goujons 100 ont souleve les cliquets 86 en liberant l'arbre 76 et en permettant au rouleau 50 de rouler ou de glisser sur le prolongement des bras-supports 74 vers l'avant, jusqu'aux becs 88; le rouleau peut alors etre retire de la machine. Les bras-supports 74, qui se trouvent ainsi liberes, ne peuvent pas suivre la traction du ressort 82 et revenir vers le haut, ce mouvement leur etant interdit par les goujons 92 contre lesquels ils prennent appui par leurs glissieres 90. Au moment ou les roues de friction 70 et 68 sont accouplees au moyen de la manette 72, les chassis 58 se rabattent, et les goujons 92, coulissant sur les glissieres 90, laissent les bras-supports 74 osciller progressivement vers le haut (fig. 6), jusqu'a ce qu'ils reprennent leur position d'origine de la figure 3. Les goujons 92 empechent les prolongements des bras-supports 74 de venir buter contre le cylindre directeur 42 lorsqu'ils ne portent pas de douille 78. Naturellement l'invention n'est nullement limitee au mode d'execution represente et decrit qui n'a ete choisi qu'a titre d'exemple. RESUME L'invention a principalement pour objets I. Un procede pour l'execution de rouleaux de fil par enroulement d'un fil ou de preference d'une nappe de fil, dans laquelle le fil est dispose en spires perpendiculaires au sens de la longueur du ruban, en forme d'helices allongees et se recouvrant a la facon d'ecailles, l'enroulement etant effectue sur un axe ou une douille, ledit procede etant remarquable, notamment, par les caracteristiques suivantes considerees separement ou en combinaisons 10 Pendant l'operation d'enroulement, on exerce une pression dirigee radialement vers l'interieur sur la quasi-totalite de la circonference du rouleau; 20 On augmente la pression au fur et a mesure que le diametre du rouleau devient plus grand. II. Une machine pour la mise en oeuvre du procede specifie sous I et remarquable, notamment, par les caracteristiques suivantes considerees separement ou en combinaisons 1° Elle comporte une bande presseuse entrainee qui est soumise a une tension longitudinale, de preference reglable, et enserre pratiquement en totalite la circonference du rouleau de fit en le laissant libre qu'une fente parallele a l'axe du rouleau, par laquelle le fil ou la nappe de fil est amene au rouleau; 2° La tension longitudinale est engendree par un rouleau tendeur, qui est dispose dans une boucle de la bande presseuse et est soumis a l'action d'un ressort; 3U L'axe et la douille du rouleau tourbillonne de part et d'autre dans des bras-supports oscillants, qui sont charges par des ressorts, de telle facon que leur force portante va de preference en augmentant avec le diametre et le poids du rouleau; 40 L'axe de la douille est bloque sur les bras-supports par des cliquets susceptibles de s'effacer vers le haut; 5 Les bras-supports se prolongent vers l'avant au-dela des paliers de l'axe de la douille et portent a leur extremite un bec en saillie vers le haut; 60 La bande presseuse s'enroule autour de cylindres directeurs inferieurs qui tourbillonnent a poste fixe dans le bati de la machine et autour de cylindres directeurs superieurs qui tourbillonnent a chacune de leurs extremités dans un eliasse susceptible d'etre escamote vers l'avant en oscillant autour d'un axe parallele a celui du rouleau; 7° Les deux chassis sont entraines par un mecanisme commun de commande; 8° Chaque chassis est assujetti a un goujon tournant autour de l'axe d'oscillation du chassis et qui, au moment ou ce dernier est escamote, vient rencontrer de bas en haut le cliquet monte sur le bras-support correspondant; 9° L'axe peut etre amene dans une position angulaire reglable par rapport au chassis; 100 Chaque chassis est muni d'une butee qui definit, en cooperation avec une glissiere dispo.see sur le bras-support, la hauteur maximale du bras-support soumis a l'action d'un ressort; 11u Dans le cas ou la machine est equipee d'une tete enrouleuse selon le brevet nO 929.123 precise pour l'execution de la nappe de fil, l'extremite de sortie de la tete enrouleuse se trouve au voisinage de la fente parallele a l'axe du rouleau et il est prevu, au-dessus de cette extremite de sortie, une bande de recouvrement entrainee, qui fait penetrer la nappe de fil dans la fente; 12° La tete enrouleuse et la bande presseuse sont entrainees en synchronisme; 130 La machine comprend un interrupteur actionne par les bras-supports qui coupe l'entraine- ment de la tete enrouleuse en fonction du diametre du rouleau; 140 La position de coupure de l'interrupteur est reglable. [Source: Claim 1] ** WARNING ** start of CLMS field may contain end of DESC **. and the other are connected together by a shaft 80



and are subjected to the action of a tension spring 82 which is secured on the one hand a fixed lever arm 84 on the shaft 80 and, on the other hand, the built 10. the shaft 76 is held in the bearing support arms 74 by pawls 86 mounted on these arms. The support arms 74 extend forward beyond the bearings of the shaft 76 and are subject to their extremity 88 protruding beaks up. The support arms finally include glissieres 90, which cooperate in the manner described below with studs 92 of the frame 58. In the gap remaining between the cylinder and the cylinder director 42 of 48 people brought undertakes a cover strip 94, which moves on **rollers** 96 and is driven by a **roller** 98 in synchronism with the winding head 12. the frame 58 carry pins 100 (fig. 5) capable of oscillating at the same time as the frame around the axes 60 and whose role will explain below. The lever arm 84 is articulated a rod 102, bringing its free end has an adjustable butee 104 destiny was flipping a switch 106 controlling the transmission belt 22. Figures 3 to 6 represent only the essential elements of the machine, necessary to explain the operation. The shaft 76 of the sleeve 78 is, in Figure 3, introduced into the two support arms 74 and blocked by the pawl 86. The sleeve 78 of the **roller** is in a loop of the pressure belt 32, which is driven by the cylinder 30 passes on the cylinder of the people brought 48 leading to the loop, then is returned by the director cylinder 42. the rotor 16 of the coiler head 12, causes the same time, provides to its extremity 18 in a **sheet** which the wire is available in coils perpendicular to the length of the web, presenting the form of helices lengthened and overlapping to the way of scales. This **sheet** is wound on the sleeve 78 driven by the pressure belt 32 and is subject to the pressure directed radially inwards exerted by the press band on the sleeve of the **roll**. The circumference of the **roll** 50 increases at the same time as its diameter, so that the tension **roller** 44 comes progressively occupy the position represented in broken lines in Figure 1, wherein the tensile force of the spring 56 is substantially greater has originally. The radial pressure on the **roller** 50 is therefore low as and as its diameter increases. The **roller** 50 gradually reached its final dimension, as shown in Figure 4. The brassupports 74 were meanwhile regrowth of the shaft 76 downwardly against the spring force 82. Thrust 104 s' rapprochee is gradually switch 106, which kick in the magnetic clutch of the transmission belt 22, so that the head reel 12 stops and no longer provides web has its extremity 18. the pressure belt 32 can then continue to turn for a while; it is advantageous to have at that time on the **roll** 50 perfectly permeable shell liquid (dye baths) and gases (air drying), which protects the **roller** against the deteriorations and mechanical deformations. The cylinder 30 is then separated from the transmission chain 28 by the magnetic clutch cited above and the pressure belt 32 is thus up to the stop. To remove the **roller** 50 of the machine, is applied to the friction wheel 70 against the friction wheel 66 by means of the lever 72; the shaft 64 and the gear a worm 62 oscillate forwards the frame 58 with the guiding **rollers** 38 to 42, who come to occupy the position of Figure 5. During this movement, the pins 100 have raised the latches 86 by releasing the shaft 76 and allowing the **roll** 50 to **roll** or slide on the extension of the support arms 74 forwardly, until the nozzles 88; then the **roll** can be removed from the machine. The support arms 74, which are thus freed, can not follow the pull of the spring 82 and return to the top, this movement being banned by their studs 92 against which they are supported by their glissieres 90. By the time the friction wheels 70 and 68 are mated by the controller 72, the frame 58 fold, and the studs 92 sliding on glissieres 90, leave the support arms 74 gradually swing upwards (fig. 6), until has what they resume their original position of Figure 3. the pins 92 prevent extensions of the support arms 74 to abut against the cylinder 42 when director do not wear sleeve 78. Naturally the invention is by no means limited to the execution method described and represented which has been selected has example.SUMMARY The invention mainly objects I. A Method for carrying wire **rolls** by winding a wire or preferably a wire cloth, in which the yarn is available in coils perpendicular to the direction of length of ribbon-shaped helices lengthened and overlapping scales to the way of the winding being carried on a pin or socket, said method being remarkable in particular by the following characteristics regarded separately or in combinations During 10 the winding operation, a pressure is exerted directed radially inwards over almost the entire circumference of the **roller**; 20 is increased pressure as a measure the diameter of the **roll** becomes larger. II. A machine for implementing PROCESS specifies under I and remarkable, especially, by the following characteristics regarded SENA- larly or in combination 1 "It has a pressing DRIVEN band that is subjected to a longitudinal tension, preferably adjustable, and encloses substantially all the circumference of said **roller** leaving free a slot parallel to the axis of the **roller**, by which the thread or the yarn **sheet** is fed to the **roller**; 2 "the longitudinal tension is generated by a tensioning **roller**, which is arranged in a loop of the press band and is subjected to the action of a spring; 3U The pin and the bush of the **roller** is journaled on each side in the oscillating supporting arms, which are loaded by springs in such a way that their bearing capacity is preferably increasing with the diameter and the weight of the **roll**; 40 The axis of the bush is blocked on brassupports by detents may fade up; 5 The support arms extend forwardly beyond the bearings of the axis of the socket and bear their extremity has a spout projecting upwardly; 60 The pressure belt wraps around cylinders LOWER directors journaled a fixed position in the bati of the machine and around cylinders superiors directors journaled at each of their extremities in a eliasis likely to be retracted forward in swing about an axis parallel to that of the **roller**; 7 "The two frames are driven by a common mechanism of control; 8" Each frame is subject to a rotating bolt around the oscillation axis of the chassis and which, when it is retracted, just meet from below high ratchet up the corresponding support arm; 9 "The axis can be brings in an adjustable angular position relative to the frame; 100 Each frame has a butee which defines in cooperation with dispo.see chute on the support arm, the maximum height of the subject brassupport. to the action of a spring; 11u in case the machine is equipped with a winding head according to patent nO 929 123 cited above for the execution of the wire cloth, the extremity of the winding head output is adjacent to the slot parallel to the axis of the **roller** and is provided above the outlet end, a cover driven belt, which penetrate the yarn **sheet** in the slot; 12 "the coiler head and the pressure belt is entrained synchronously; The machine 130 comprises a switch actuated by the bearing arms which cuts the workout of the winding head as a function of **roll** diameter; 140 The switch cut-off position is adjustable.

Earliest Publication Date: 19670310

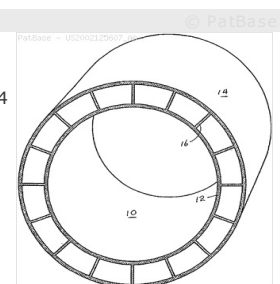
28) Family number: 28090233 (US2002125607A)

RIBBED **CORE** DUAL WALL STRUCTURE

Abstract: Source: US2002125607A An elongated composite tube made up of an inner tube 42 and an outer tube 44 (see Fig. 3) with a plurality of elongated helical ribs disposed between the inner tube and the outer tube in a supporting relationship to both. A slinky like toy made from the composite tube is also disclosed, as is a method of making both.

Probable Assignee: PROTEUS INC

Earliest Publication Date: 20000224



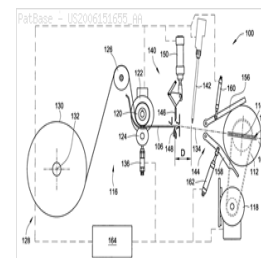
29) Family number: 33021229 (US2006151655A)

METHOD AND APPARATUS FOR WINDING A FILTER MEDIA PACK

Abstract: Source: US2006151655A A method and apparatus are provided, for forming a filter element including a media pack in the form of a coiled web of fluted filter media, by feeding the web of fluted filter media at a controlled linear speed onto a mandrel rotated by a winding motor providing a controlled driving torque to the mandrel, to thereby maintain a controlled tension on the web of fluted filter media as the web is wound onto the mandrel. The web may be fed at a substantially constant linear speed to the mandrel, and/or the winding motor may be controlled in a manner providing substantially constant driving torque to the mandrel for maintaining a constant tension on the web as a function of the constant driving torque. Coiled media packs having circular or non-circular cross sections, can be formed with either **cored**, or **core**-less construction.

Probable Assignee: BALDWIN FILTERS INC

Earliest Publication Date: 20060518



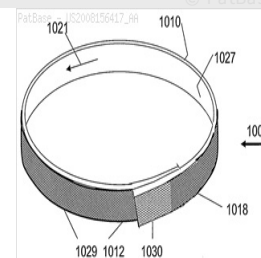
30) Family number: 40968362 (US2008156417A)

PROCESS AND EQUIPMENT FOR MANUFACTURING THREE DIMENSIONALLY SHAPED OR BELTED ARTICLES, SUCH AS GARMENTS OR ABSORBENT ARTICLES

Abstract: Source: US2008156417A The present invention is a process and the respective equipment for the manufacture of shaped articles, such as disposable absorbent articles, which have a three dimensional shape, or which comprise closed belt-like structures such as hoops in the leg and/or waist opening. The articles can be produced at high production speeds out of conventional web materials (100, 1010), and can be designed to a wide variety of designs for improved dynamic fit, leakage performance and wearer's comfort.

Probable Assignee: CONCEPTS FOR SUCCESS

Earliest Publication Date: 20061005



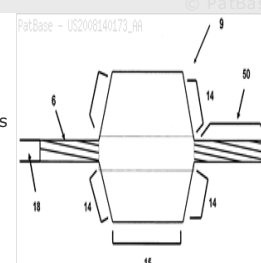
31) Family number: 41512899 (US2008140173A)

NON-SHORTENING WRAPPED BALLOON

Abstract: Source: US2008140173A A non-shortening catheter balloon having a longitudinal axis and an inflatable balloon able to be affixed to a catheter shaft is provided. The balloon has an uninflated length which remains relatively unchanged upon inflation and is formed of least two helically oriented wrapped passes of balloon materials at a balanced force angle. Methods of making this balloon are also provided.

Probable Assignee: W L GORE AND ASSOCIATES INC

Earliest Publication Date: 20080221



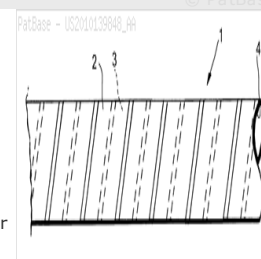
32) Family number: 42501432 (US2010139848A)

PRODUCTION OF TUBULAR BODY COMPRISING TWO OR MORE LAYERS OF HELICALLY BENDED STRIPS

Abstract: Source: US2010139848A Process for the manufacture of an elongated, multilayered tubular body (1) comprising an elongated, tubular inner hollow **core** (5), optionally an elongated, tubular inner casing (4) and an elongated, tubular outer casing, the inner casing, when present, surrounding the hollow **core**, the outer casing surrounding the inner casing, when present, or otherwise the hollow **core**, the outer casing comprising at least two layers (2, 3), each layer consisting of one or more longitudinally preformed, flat elongated metal strips, the preforming of the strips such that the strips have been bent helically in such a way that the consecutive windings of the helix or helices touch or almost touch to each other, each strip in one layer overlapping with other strips in other layers, the layers in the outer casing being bound to each other by an adhesive.

Probable Assignee: SHELL OIL CO

Earliest Publication Date: 20081113



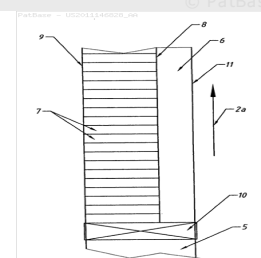
33) Family number: 44167188 (US2011146828A)

FLEXIBLE DUCT AND MEANS OF PRODUCTION

Abstract: Source: US2011146828A A helically formed flexible duct primarily directed to applications in ducted heating, ventilating and air conditioning, of three dimensions including a predetermined length, an inner diameter reinforced with a helically laminated wire member between self laminating substrate, an outwardly radial compartment formation constructed with strip portions of substrate material which form gaps to accommodate outwardly expanding radial dimensions and containing an insulating member, and an outer covering member delivered to a larger radial circumference at an applied circumferential speed exceeding the circumferential speed of the inner diameter substrate tube formation rate.

Probable Assignee: DONNELLY WILLIAM JAMES

Earliest Publication Date: 20091230



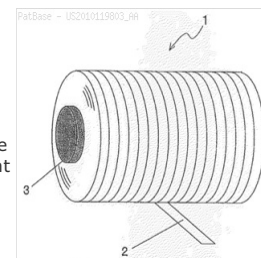
34) Family number: 44985148 (US2010119803A)

PRESSURE-SENSITIVE ADHESIVE TAPE **ROLL**

Abstract: Source: US2010119803A A pressure-sensitive adhesive tape **roll** includes a bobbin and, helically wound therearound, a double-sided pressure-sensitive adhesive tape. The tape includes a double-sided pressure-sensitive adhesive body including a pressure-sensitive adhesive layer containing bubbles and/or hollow microspheres, and arranged on both sides thereof, a release liner A wider than the adhesive body, and an olefinic release liner B. In portions occupying 70 percent or more of the total length of the tape, a crosswise extending-off portion of the release liner A of an (n)th-turn portion of the adhesive tape vertically overlaps the adhesive body of an adjacent (n+1)th-turn portion of the adhesive tape to form an overlapping portion; the width of the overlapping portion is one half or more of the width of the adhesive body; and the adhesive body of the (n)th-turn adhesive tape is not present below the adhesive body of the adjacent (n+1)th-turn adhesive tape.

Probable Assignee: NITTO DENKO CORP

Earliest Publication Date: 20100513



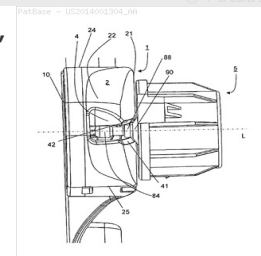
35) Family number: 51416978 (US2014001304A)

RETENTION MECHANISM IN A DISPENSER FOR RETAINING AN EXCHANGEABLE **ROLL** OF MATERIAL, RETENTION SYSTEM, DISPENSER, AND METHOD FOR INSERTING A **ROLL** OF MATERIAL INTO SUCH A RETENTION MECHANISM

Abstract: Source: US2014001304A A retention mechanism in a dispenser for retaining an exchangeable **roll** of material, the retention mechanism includes a housing including a front wall. An insertion slot for a bearing pin of an end plug of the exchangeable **roll** extends along the front wall. A cam lock is arranged in the housing so as to be rotatable in a plane which is parallel to the front wall and to the direction of extension of the insertion slot. The cam lock includes a retaining member which is movable between an open position and a locked position by rotating the cam lock. When the retaining member is in the open position, the bearing pin can be inserted into the insertion slot, and when the retaining member is in the closed position, the bearing pin is retained in a locking section of the insertion slot.

Probable Assignee: SCA HYGIENE PRODUCTS AB

Earliest Publication Date: 20120705



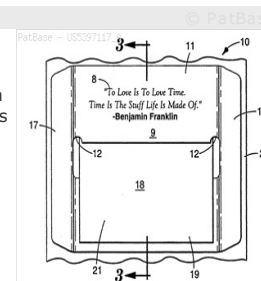
36) Family number: 10354297 (US5397117A)

SHEET DISPENSER

Abstract: Source: US5397117A A **sheet** dispenser including a coherent stack of adhesive-bearing **sheets** that can be unobtrusively permanently or removably adhered on a page of a book, catalog, brochure, etc. The dispenser has a supple cover layer that is a thin, tear-resistant polymeric film that has opposite retaining peripheral portions extending around the sides of the stack and attached to a backing **sheet** for the dispenser, and has a pressure-sensitive adhesive layer on one or two attachable peripheral portions of the cover layer by which the dispenser can be adhered to the page.

Probable Assignee: 3M CO

Earliest Publication Date: 19950314



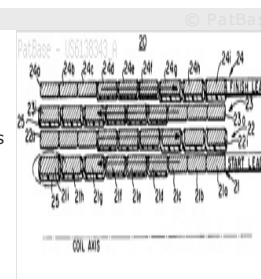
37) Family number: 12632908 (US6138343A)

METHOD FOR MANUFACTURING A VARIABLE INSULATED HELICALLY WOUND ELECTRICAL COIL

Abstract: Source: US6138343A A method and apparatus for manufacturing a variable insulated helically wound electrical coil is disclosed. Insulated rectangular wire is fed from a supply reel to a coating zone and within the coating zone liquid resin insulation is selectively applied to the wire so it has additional insulation only in those areas of the coil where the dielectric strength is needed. The insulated wire is fed through a curing station to allow curing of the additional insulation prior to winding the cured insulated wire into a coil. The cured insulated wire is wound into a coil of predetermined shape at a winding station whereby the portions of the wire having the additional insulation are located in the areas of the coil where the greatest dielectric strength is needed. The timing of the resin application to the wire is coordinated with the winding of the coil so that the proper insulation thicknesses are achieved at the required locations in the coil. There is also disclosed a variably insulated helically wound high voltage electrical coil for a transformer wherein a variable thickness of cured synthetic resin insulation is applied to the turns in each layer of the coil so that the insulation increases in thickness from substantially zero at one end of the layer where layer-to-layer voltage stresses will be low and the required maximum thickness at the opposite end of the layer where voltage stresses will be high and this progression and insulation thickness is repeated on each adjacent layer of the coil.

Probable Assignee: ABB INC

Earliest Publication Date: 19990211



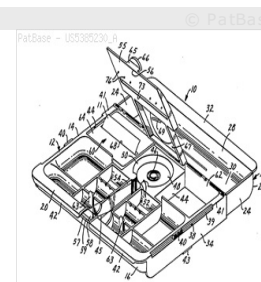
38) Family number: 20691567 (US5385230A)

ADJUSTABLE TRAY ASSEMBLY FOR USE IN DESK DRAWERS

Abstract: Source: US5385230A An adjustable tray assembly adaptable for use in desk drawers having side walls spaced at various distances. The tray assembly includes a first portion having a plurality of open top receptacles and a support lip projecting away from one side, and a second portion also with a projecting support lip and mounted on the first portion to affording relative movement between the portions to change the spacing between the first and second support lips so that they can be supported on the upper edge surfaces of the side walls of the drawers of different widths with the first and second portions bridging therebetween. The tray assembly can also include dispensers for office supplies including note paper, tape flags and tape; the tape dispenser being of a novel low profile design.

Probable Assignee: 3M CO

Earliest Publication Date: 19920723



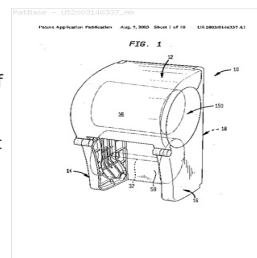
39) Family number: 28624353 (US2003146337A)

SUPPORT SLED FOR **ROLLS** OF ABSORBENT **SHEET** AND DISPENSER INCORPORATING SAME

Abstract: Source: US2003146337A A **roll** support sled is adapted to support a plurality of **rolls** of absorbent **sheet**, such as **rolls** of coreless tissue for mounting in a dispenser of the class including a pair of vertically oriented guide tracks for guiding the **roll** support sled in vertical motion for sequential dispensing of the **rolls**. At least one of the guide tracks of the dispenser defines a locking shoulder and the **roll** support sled includes: first and second spindles, first and second frame rails, one of which is movable, as well as a novel latch dog assembly. The latch dog assembly is inwardly biased and disposed adjacent at least one of the spindles. The latch dog is configured so that it is urged outwardly to a locking position upon disposing a **roll** of absorbent **sheet** about its adjacent spindle and is biased inwardly to a release position upon depletion of the **roll** of absorbent **sheet** material disposed about its adjacent spindle. In a preferred embodiment the latch dog assembly includes a pivotally mounted gauge member adapted to engage the end of a **roll** of absorbent **sheet** material positioned about its adjacent spindle whereby the gauge member is urged outwardly into generally parallel alignment with a frame rail of the support sled upon contact with the **roll** of absorbent **sheet** material. When contacted by a full **roll**, the latch dog assembly is urged outwardly to its locking position. Upon depletion of the **roll** of absorbent **sheet** material disposed on the spindle, the latch dog assembly pivots inwardly so that it assumes its release position. The support sled then drops vertically, for instance, under the influence of gravity to expose a reserve **roll** of absorbent **sheet** material for dispensing.

Probable Assignee: GPCP IP HOLDINGS LLC

Earliest Publication Date: 20030620



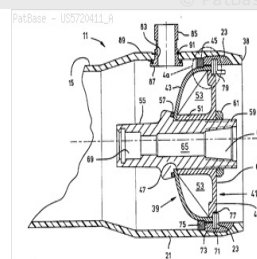
40) Family number: 30060550 (US5720411A)

PRESSURE VESSELS AND END CLOSURES THEREFOR

Abstract: Source: US5720411A Pressure vessels having end closures for sealing at least one open end are constructed so as to provide full-bore access to a generally tubular shell portion wherein one or more filter cartridges will be disposed. A sealing ring of rectangular cross section is seated in a groove provided in the tubular shell at a location axially inward of a cylindrical surface region wherein a central annular groove is provided. A closure head fits within this annular surface and includes a shoulder which prevents insertion past the sealing ring. The head may be a 2-piece construction wherein a flanged and dished element having an inward facing convex surface of oblate spheroidal shape protrudes through the interior of the sealing ring and mates with a securing plate having an annular notch in the periphery of its outer face that aligns with the groove in the tubular shell to create a pocket designed to receive a helical locking ring in the form of a spring-like band of at least two revolutions that cannot be inadvertently removed when the vessel is pressurized. A bell-end configuration for the tubular shell is efficiently created from filament-reinforced polymeric resin through the use of a sacrificial insert that not only creates the seat for the sealing ring but also provides space to accommodate side flow fluid connections.

Probable Assignee: CODELINE CORP

Earliest Publication Date: 19970925



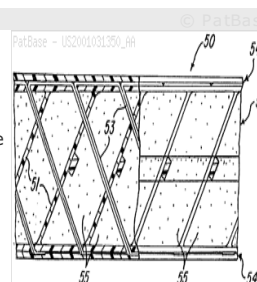
41) Family number: 31717392 (US2001031350A)

FIBER REINFORCED COMPOSITE CORES AND PANELS

Abstract: Source: US2001031350A A fiber reinforced **core** is formed from plastics foam material having elongated porous and fibrous webs and/or rovings extending through the foam material. The rovings may extend angularly through the webs, and strips of the foam material may be helically wound with layers of crossing rovings to form the webs. Porous and fibrous skins for the **core** may be formed by the wound rovings and by parallel continuous rovings, and the foam strips may be formed with internal grooves adjacent the webs and connected by a feeder channel for infusing a hardenable adhesive resin into the grooves and outwardly through the webs to the skins with differential pressure on the resin.

Probable Assignee: WEBCORE IP INC

Earliest Publication Date: 20010705



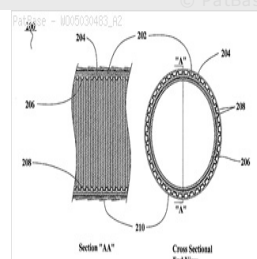
42) Family number: 31796030 (WO05030483A2)

HIGH STRENGTH COMPOSITE MATERIAL GEOMETRY AND METHODS OF MANUFACTURE

Abstract: A flexible or rigid composite material is formed by spirally winding a composite material tape (510) around a composite material **core** (506) using a spiral winding apparatus (508). Using a flexible composite material **core** (506) allows the composite material to conform to any shape. Dual plane, dual axis composite material geometry is used in order to strengthen the composite material structure.

Probable Assignee: HUNT ROBERT D

Earliest Publication Date: 20050407



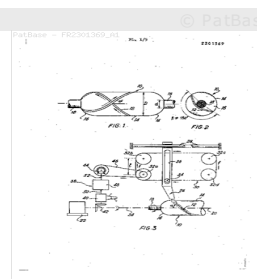
43) Family number: 3523986 (FR2301369A)

PERFEC WINDING IMPREGNATED YARN ONTO MANDREL TO FORM HOLLOW BODY - BY CONTROLLING MANDREL SPEED DEPENDENT ON YARN POSITION

Abstract: Source: FR2301369A A device for winding impregnated yarn onto a mandrel to form a hollow body includes a main drive shaft connected by a clutch to a mandrel drive shaft and also connected via a transmission to a yarn traverse guide guiding the yarn onto the mandrel. The position of the yarn being fed onto the mandrel is detected to actuate opening of the clutch to control the speed of the mandrel drive shaft and therefore the mandrel speed, and a sensor detects the relative angular positions of the main drive shaft and mandrel drive shaft to allow controlled acceleration and deceleration of the mandrel to ensure that the mandrel is always rotating at the correct speed as yarn is fed onto it. The arrangement is simple and automatically controls the mandrel to ensure uniform winding of the yarn onto it.

Probable Assignee: PLASTREX MANURHIN SARL

Earliest Publication Date: 19760917



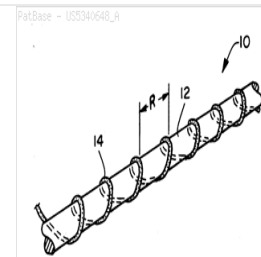
44) Family number: 3579754 (US5340648A)

ELONGATED ELEMENT COMPRISING HELICALLY PATTERNED ADHESIVE

Abstract: Source: US5340648A A threadlike or ribbonlike elastic strand is provided with a substantially continuous filament of adhesive helically wrapped around the elastic strand. The elastic strand is suitable for use in disposable absorbent products such as diapers and adult incontinent products. Also disclosed is a method and apparatus for making such adhesive-wrapped elastic strands.

Probable Assignee: KIMBERLY CLARK CORP

Earliest Publication Date: 19921001



45) Family number: 46710466 (AR037066A)

METODO PARA SURTIR MATERIAL FLEXIBLE EN LAMINA DESDE UN SURTIDOR, SURTIDOR DE PAPEL EN ROLLO CONTROLADO ELECTRONICAMENTE Y DISPOSICION DE COMUNICACION DE DATOS PARA USO CON EL SURTIDOR.

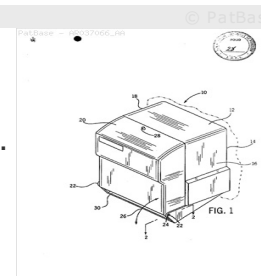
METHOD TO PROVIDE FLEXIBLE MATERIAL IN ELECTRONICALLY LAMINATES FROM A JET, JET OF CONTROLLED **ROLL** PAPER AND DISPOSITION OF DATA COMMUNICATION FOR USE WITH THE JET. (MACHINE TRANSLATION)

Abstract: Source: AR037066A Un surtidor, controlado en forma electronica, de toalla en rollo que tiene un sistema para transmision de datos. El surtidor suministra en forma automatica un tramo predeterminado de toalla de papel desde el rollo de suministro, despues de que a un tramo de toalla lo hubo separado un usuario que tira de, y arranca la, toalla sobresaliente haciendola pasar sobre una hoja estacionaria de corte. El surtidor se alimenta con pilas y tiene un motor electrico, un mecanismo electromecanico de suministro y un microregulador incorporado para controlar la operacion de vigilancia del surtidor. Ademas de las funciones primordiales de control, el microregulador vigila parametros tales como la condicion de las pilas, cuanto se usa de la toalla, el estado del sistema, los errores del sistema y las condiciones de operacion carentes de seguridad. Tambien se proporciona interruptores por pulsador para programar la longitud de los tramos de toalla y el retardo en el suministro. El surtidor comprende, ademas, un transmisor optico para transmitir datos visuales e infrarrojos hacia un dispositivo receptor. Informacion util sobre el estado del surtidor la puede discernir, de manera visible, un operador, por medio del empleo de patrones primitivos de destello de baja velocidad, al tiempo que datos digitales infrarrojos de alta velocidad simultaneamente se pueden incorporar en o multiplexarse con los datos visibles.

Machine translation: A jet, controlled in electronic form, of **roll** towel that has a system for data transmission. Jet provides in form automatic section predetermined of towel of paper from **roll** of provision, after to a towel section there was separated a user who throws of, and starts, excellent towel making happen it over a stationary leaf of cut. The jet is fed with batteries and has an electrical motor, an electromechanical mechanism of provision and an incorporated microregulator to control the operation of monitoring of the jet. In addition to the fundamental functions of control, the microregulator watches parameters such as the condition of the batteries, whatever is used of the towel, the state of the system, the devoid errors of the system and conditions of operation of security. Also one provides switches by pulser to program the length of the towel sections and the retardation in the provision. The jet includes/understands, in addition, an optical transmitter to transmit visual and infrared data towards a receiver. Useful information on the state of the jet can discern it, of visible way, an operator, by means of the use of primitive patterns of sparkle of low speed, to the time that infrared digital data of high speed simultaneously can be incorporated in or multiplexar themselves with the visible data.

Probable Assignee: COLMAN GROUP INC

Earliest Publication Date: 20041020



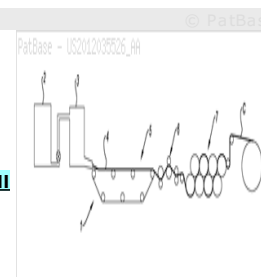
46) Family number: 48252808 (US2012035526A)

FIBROUS **SHEET** DISINTEGRATING IN WATER, PROCESS FOR MANUFACTURING SAID FIBROUS **SHEET**, USE OF SAID FIBROUS **SHEET** FOR THE MANUFACTURE OF A **CORE**

Abstract: Source: US2012035526A A fibrous **sheet** having a basis weight of between 20 and 1000 grams per square metre being manufactured according to a wet papermaking process, and disintegrating in water in less than 120 seconds, has 10 to 70 percent starch and at least 30 percent of papermaking fibres on the basis of the total weight of the dry fibrous **sheet**. The **sheet** may be used for the manufacture of a water disintegrable **core** in a **roll** of tissue paper.

Probable Assignee: SCA TISSUE FRANCE

Earliest Publication Date: 20110204



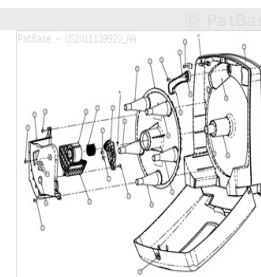
47) Family number: 49092980 (US2011139920A)

DISPENSER FOR MULTIPLE **ROLLS** OF WEB MATERIAL WITH AUTOMATIC **ROLL** TRANSFER, AND METHOD OF LOADING SAME

Abstract: Source: US2011139920A A dispenser for sequentially dispensing web material from a plurality of **rolls** includes a carousel rotatably mounted in a dispenser body. The carousel includes a plurality of **roll** holders that extend parallel to an axis of rotation of the carousel. The carousel includes a sensor that senses whether a **roll** of web material on one of **roll** holders is depleted or substantially depleted. A movable trigger latch blocks rotation of the carousel until the **roll** of web material on the current **roll** holder is depleted or substantially depleted; at that point, the carousel rotates by gravity in a first direction.

Probable Assignee: SCA TISSUE NORTH AMERICA LLC

Earliest Publication Date: 20110616



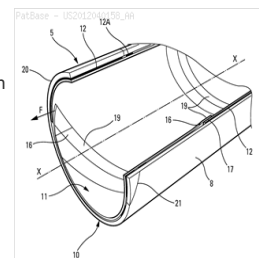
48) Family number: 49384321 (US2012040158A)

CORE FOR A PRODUCT IN **SHEET** FORM WOUND AROUND THIS **CORE**, AND **ROLL** FORMED WITH SUCH A **CORE**

Abstract: Source: US2012040158A A **core** has a cylindrical wall which that can be torn axially and is made up of two superposed strips, these strips respectively being an outer strip in contact with the product and an inner strip, these strips being wound on one another and joined together by regions of attachment for example by bonding. At least one of the longitudinal edges of the inner strip is not attached or is weakly attached over a determined width in order, over at least part of its helical length, to form a free and accessible tab facing the outer strip.

Probable Assignee: SCA TISSUE FRANCE

Earliest Publication Date: 20110804



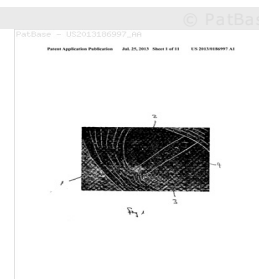
49) Family number: 49509549 (US2013186997A)

CORE FOR AN ENDLESS WEB OF A PLASTIC FILM

Abstract: Source: US2013186997A A **core** which can be plugged onto a winding shaft for winding an endless, flexible material web to form a reel (10, 60, 70), wherein the **core** has means for adjusting the diameter of its surface to be wound between a rest state of reduced diameter and an expanded working state, and wherein the winding surface is of jointless configuration in the expanded state. A reel can therefore be stored until it is used up, and the **core** can then be pulled out of the reel and the reel can be surrendered, with the result that the circulation of sleeves is dispensed with.

Probable Assignee: SWISS WINDING INVENTING AG

Earliest Publication Date: 20110831



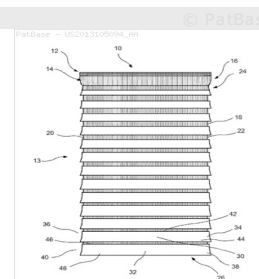
50) Family number: 49800880 (US2013105094A)

PROCESS AND SYSTEM FOR MANUFACTURING A ROLLER BLIND

Abstract: Source: US2013105094A A process and system for manufacturing **roller** blinds is provided which includes structure for performing plural steps including a first step of helically winding slat fabric about a drum, thereby forming a slat product. A second step includes moving the slat product from the drum to a platform. A third step includes winding the slat product about a **roller** tube to form a **roller** blind. A fourth step includes moving the blind from the platform to a heat treating device.

Probable Assignee: HUNTER DOUGLAS INC

Earliest Publication Date: 20111020



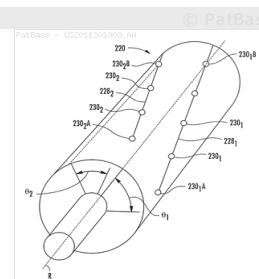
51) Family number: 50071422 (US2011301003A)

INDUSTRIAL ROLL WITH MULTIPLE SENSOR ARRAYS

Abstract: Source: US2011301003A An industrial **roll** includes: a substantially cylindrical **core** having an outer surface; a polymeric cover circumferentially overlying the **core** outer surface; and a sensing system. The sensing system includes: a first signal carrying member serially connecting a first set of sensors; a second signal carrying member serially connecting a second set of sensors; and a signal processing unit operatively associated with the first and second signal carrying members and configured to selectively monitor the signals provided by the first and second set of sensors.

Probable Assignee: STOWE WOODWARD LICENSCO LLC

Earliest Publication Date: 20111204



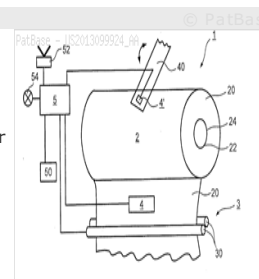
52) Family number: 50438767 (US2013099924A)

DISPENSER AND ROLL OF FLEXIBLE SHEET MATERIAL

Abstract: Source: US2013099924A A dispenser for dispensing flexible **sheet** material includes a **roll** of material, the **roll** of material having a **core**. One end portion of the flexible **sheet** material is adhered to the **core** by a pickup glue. The dispenser includes a sensor for sensing the pickup glue of the **roll** of material and a control unit for triggering at least one action of the dispenser in response to the detection of the pickup glue.

Probable Assignee: SCA HYGIENE PRODUCTS AB

Earliest Publication Date: 20120105



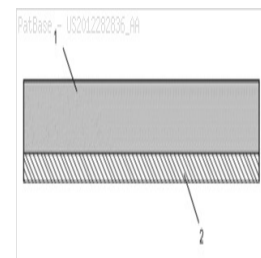
53) Family number: 52322191 (US2012282836A)

ADHESIVE TAPE FOR JACKETING ELONGATE MATERIAL SUCH AS ESPECIALLY CABLE LOOMS AND JACKETING METHOD

Abstract: Source: US2012282836A An adhesive tape, especially for wrapping cables, consisting of a preferably textile carrier and of a pressure-sensitive adhesive which is applied on at least one side of the carrier and is in the form of a dried polymer dispersion, the polymer being synthesized from: a) 40 percent to 90 percent by weight of n-butyl acrylate and/or 2-ethylhexyl acrylate b) 0 percent to 10 percent by weight of an ethylenically unsaturated monomer having an acid or acid-anhydride function c) 60 percent to 10 percent by weight of one or more ethylenically unsaturated monofunctional monomers different from (a) and (b) d) 0 percent to 1 percent by weight of a difunctional or polyfunctional monomer and the pressure-sensitive adhesive comprising between 15 and 100 parts by weight of a tackifier (based on the mass of the dried polymer dispersion).

Probable Assignee: TESA SE

Earliest Publication Date: 20121107



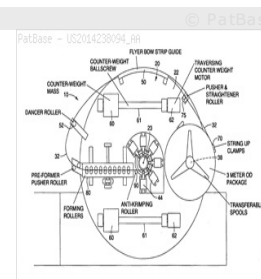
54) Family number: 53523089 (US2014238094A)

FLEXIBLE PIPE CARCASS FORMING APPARATUS

Abstract: Source: US2014238094A An apparatus for forming a carcass for encasing a tubular member including a driven rotor (20) having a front face rotatable about a pivot axis and a spool mandrel (38) positioned eccentrically on the driven rotor (20). The spool mandrel (38) is adapted to rotatably mount a **roll** of coiled strip material (32). The rotor (20) includes at least one counterweight (60) mounted on the front face that is dynamically movable to at least partially balance the changing weight of the **roll** of strip material as the strip material (32) is removed from the **roll**. At least one pusher **roll** assembly (75) is mounted on the front face and contacts a portion of the strip material (32) to partially deform the coiling of the strip material as the material is removed from the **roll**. An anti-kink **roll** assembly (90) prevents kink deformation of the strip material (32) during the formation of the carcass.

Probable Assignee: BARTELL MACHINERY SYSTEMS LLC

Earliest Publication Date: 20130418



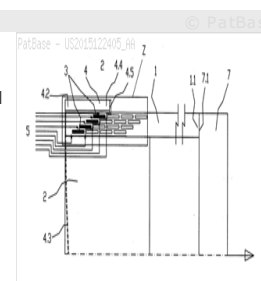
55) Family number: 55038489 (US2015122405A)

METHOD TO PRODUCE PLASTIC TUBE

Abstract: Source: US2015122405A A method to produce plastic tube. The material of the plastic tube is fed around a having a same diameter as the inside diameter of the tube. The material is fed as an uninterrupted material flow which, after having settled upon the **core**, goes forward following essentially the helical line in the side direction of the **core** inside a mold mounted on the **core**. The plastic tube is formed of the material ribbons and melted plastic material fed to the spaces between the ribbons. The round and rising **sheet** at the end of the mold directs the material flow to the side direction of the **core** and the head of the plastic tube gets welded and fixed to the starting tube that is used to draw the tube as the production process advances in the side direction of the **core**.

Probable Assignee: PLASTIC PIPE MOBILE OU

Earliest Publication Date: 20131017



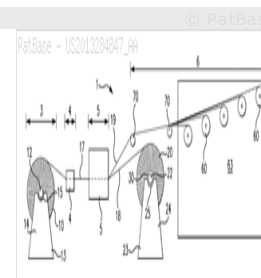
56) Family number: 55051768 (US2013284847A)

PREPREG TAPE SLITTING APPARATUS AND METHOD

Abstract: Source: US2013284847A A method and apparatus is provided for simultaneously producing wide and narrow slit tape from the same master **roll**.

Probable Assignee: WEB IND INC

Earliest Publication Date: 20131031



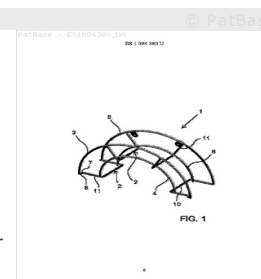
57) Family number: 55203251 (ES1094380Y)

SOPORTE COLGADOR DE MANGUERAS

Abstract: Source: ES1094380U 1. Soporte colgador de mangueras del tipo que comprende al menos tres varillas centrales (2) que definen su base (10) y unas prolongaciones (11), que se unen a al menos dos varillas laterales frontales, una superior (3) y una inferior (4) y a al menos dos varillas laterales posteriores, una superior (5) y una inferior (6), definiendo una estructura (1) caracterizado porque las prolongaciones (11) finalizan en al menos un codo (7) y al menos una extensión (8) que se extiende hacia el exterior de la estructura (1), y porque en dicha extensión (8) se fija al menos una de las varillas laterales (3, 4, 5, 6). 2. Soporte, de acuerdo con la reivindicación 1, caracterizado porque la extensión (8) se fija a al menos una de las varillas superiores (3, 5). 3. Soporte, de acuerdo con la reivindicación 2, caracterizado porque las varillas centrales (2) se fijan a la varilla superior posterior (5). 4. Soporte, de acuerdo con la reivindicación 2, caracterizado porque las varillas centrales (2) se fijan a la varilla superior frontal (3). 5. Soporte, de acuerdo con alguna de las reivindicaciones anteriores, caracterizado porque dichas varillas son pletinas. 1. Tubing hanger type support comprising at least three central rods (2) defining the base (10) and some projections (11), which bind to at least two front side rails, an upper (3) and a lower (4) and at least two side rods later, an upper (5) and a bottom (6), defining a structure (1) characterized in that the extensions (11) terminate in at least one bend (7) and at least one extension (8) which extends towards the outside of the structure (1), and that on said extension (8) is fixed at least one of the lateral rods (3, 4, 5, 6). Two. A support according to claim 1, characterized in that the extension (8) is fixed to at least one of the top rods (3, 5). Three. A support according to claim 2, characterized in that the central rods (2) are fixed to the upper rear (5) rod. April. A support according to claim 2, characterized in that the central rods (2) are fixed to the upper front rod (3). May. Support according to any of the preceding claims, characterized in that said rods are plates.

Probable Assignee: MAIOL GERMANOS S L

Earliest Publication Date: 202131128



58) Family number: 55525370 (US2015342423A)

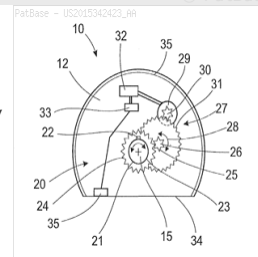
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DISPENSER

Abstract: Source: US2015342423A Dispenser suitable for dispensing absorbent **sheet** material from a **roll** disposable within said dispenser. The dispenser including: a dispenser body; a rotational shaft suitable for penetration of said **roll**; a drive unit; and an energy storage system for storing energy. The drive unit is rotationally coupled to said rotational shaft, which includes engagement means suitable for rotationally locking said rotational shaft with said **roll**. Externally caused rotation of said rotational shaft drives said drive unit, thereby enabling accumulation of energy in said energy storage system, and said drive unit is configured to be powered by energy from said energy storage system for temporarily rotating said rotational shaft. The engagement means includes at least one projection and/or at least one recess arranged on a circumferential outer surface of said rotational shaft for radial engagement with said **roll**.

Probable Assignee: SCA HYGIENE PRODUCTS AB

Earliest Publication Date: 20140109



59) Family number: 55525373 (US2015136894A)

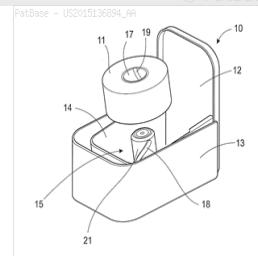
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CORE MEMBER FOR AN ABSORBENT SHEET ROLL

Abstract: Source: US2015136894A A hollow cylindrical **core** member (17) suitable for supporting a **roll** (11) of absorbent **sheet** material. The **core** member (17) includes a central axis (22), an outer cylindrical surface (20), and an inner cylindrical surface (23). The inner cylindrical surface (23) includes engagement means suitable for rotationally locking said **core** member (17). The engagement means include at least one elongated recess (19) and/or projection (29) extending helically along said inner cylindrical surface (23), or at least one elongated projection (29) extending in a direction of said central axis (22).

Probable Assignee: SCA HYGIENE PRODUCTS AB

Earliest Publication Date: 20140109



60) Family number: 57224266 (US2014231568A)

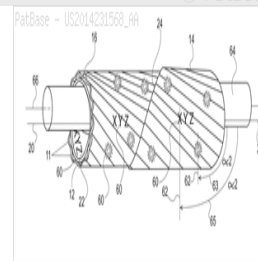
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FIBROUS CORES

Abstract: Source: US2014231568A The present disclosure is directed to a fibrous **core** comprising a fluted layer; and a liner disposed on the fluted layer. The fluted layer and the liner are helically wound defining a longitudinal **core** axis.

Probable Assignee: PROCTER AND GAMBLE CO

Earliest Publication Date: 20140821



61) Family number: 58733051 (CO7170150A)

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MIEMBRO CENTRAL DE UN ROLLO DE HOJA ABSORBENTE CENTRAL PART OF A ROLL OF SHEET ABSORBENT (MACHINE TRANSLATION)

Abstract: Source: CO7170150A La invencion se refiere a un miembro de nucleo cilindrico hueco (17) adecuado para soportar un rollo (11) de material de papel absorbente. El miembro de nucleo (17) contiene un eje central (22), una superficie cilindrica externa (20), y una superficie cilindrica interna (23). La superficie cilindrica interna (23) comprende un medio de acoplamiento adecuado para el bloqueo de rotacion de dicho miembro de nucleo (17). El medio de acoplamiento contiene al menos una ranura alargada (19) y/o saliente (29) que se extiende **helicoidalmente** a lo largo de dicha superficie cilindrica interna (23), o al menos un saliente alargado (29) que se extiende en una direccion de dicho eje central (22). The invention relates to a hollow cylindrical **core** member (17) suitable for supporting a **roll** (11) of absorbent paper material. The **core** member (17) contains a central shaft (22), an outer cylindrical surface (20), and an inner cylindrical surface (23). The inner cylindrical surface (23) comprises a suitable coupling means for blocking rotation of said **core** member (17). The coupling means contains at least projection (29) extending helically along said inner cylindrical surface (23) at least one leaving an elongate slot (19) and / or, or elongated (29) extending in a direction of said central axis (22).

Probable Assignee: SCA HYGIENE PROD AB

Earliest Publication Date: 20150128

62) Family number: 62738495 (US2017361563A)

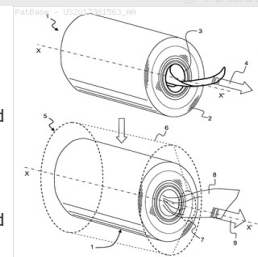
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A TEARABLE CORE, A ROLL INCLUDING SUCH A CORE AND A TEARABLE CORE MANUFACTURING METHOD

Abstract: Source: US2017361563A A tearable **core**, adapted for winding a **sheet** product, includes a cylindrical body wall defining a longitudinal hole of longitudinal axis XX'. The cylindrical body wall is tearable from an edge, and includes an outer strip and an inner strip that are helically wound on one another and displacedly overlapped in a lateral direction parallel to the longitudinal axis XX', and secured together through their mutually facing surfaces by a first region of attachment. The strips are made of the material having characteristics such that the inner strip and the outer strip are made of cardboard having different water drops. The cylindrical body wall is formed by securing together the outer strip, a first end part of the outer strip of one turn being superposed and secured to a second end part of the outer strip of an adjacent turn through their mutually facing surfaces by a second region of attachment.

Probable Assignee: SCA TISSUE FRANCE

Earliest Publication Date: 20160623



63) Family number: 63628366 (US2016280490A)

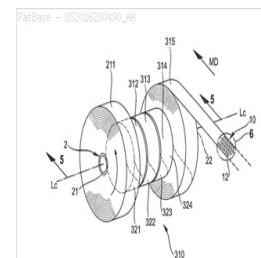
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SPOOL OF A THREE-DIMENSIONAL SUBSTRATE

Abstract: Source: US2016280490A A spool comprises a three-dimensional substrate and a **core**. The three-dimensional substrate comprises a plurality of projections extending outwardly from a plane of the substrate. The spool comprises a first plurality of spirally wound portions and a first plurality of helically wound portions. The substrate is spirally wound around the **core** to form each spirally wound portion of the first plurality of spirally wound portions. The spirally wound portions of the first plurality of spirally wound portions are located next to each other along a longitudinal axis of the **core** between a first transversal side edge of the **core** and a second transversal side edge of the **core**. The substrate is helically wound around the **core** along the longitudinal axis of the **core** to form each helically wound portion. Each helically wound portion extends between two adjacent spirally wound portions of the first plurality of spirally wound portions.

Probable Assignee: PROCTER AND GAMBLE CO

Earliest Publication Date: 20160928



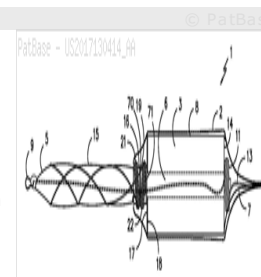
64) Family number: 65606699 (US2017130414A)

CONTAINMENT BOOM AND METHOD OF DEPLOYMENT

Abstract: Source: US2017130414A A method of deploying a containment boom is provided whereby an elongated material, such as a **sheet**, yarn, or yarn bundle, is formed into a **roll** and the material is pulled from the interior of the **roll** to create a helical structure. A pull rope is threaded through the interior of the **roll** and is deployed along with the material, such that the material is wrapped around the pull rope. The pull rope prevents the boom from stretching and distorting the helical structure formed by the material, as well as preventing the material from self-wrapping. Multiple **rolls** of material may be provided in a single boom package arranged in coaxial alignment. When the materials are connected in parallel, they are integrated into a single boom having concentrically wrapped materials, thereby providing for greater stability and functionality.

Probable Assignee: LEIGH FIBERS LLC

Earliest Publication Date: 20170511



65) Family number: 9536805 (US2004206762A)

PRESSURE VESSEL AND PROCESS FOR PRODUCING THE SAME

Abstract: Source: US2004206762A The pressure vessel of the present invention comprises an inner shell capable of serving as a gas barrier and a pressure resistant outer shell provided to cover the inner shell, said outer shell being made of an FRP comprising reinforcing fibers and a resin and is 35 GPa or more in tensile modulus and 1.5 percent or more in tensile breaking strain. The present invention can provide a pressure vessel not only light in weight, but also excellent in retaining its internal pressure against repetitive impacts and also excellent in reliability. The process for producing a pressure vessel of the present invention comprises the step of forming a pressure resistant outer shell made of an FRP comprising reinforcing fibers and a resin and is 35 GPa or more in tensile modulus and 1.5 percent or more in tensile breaking strain, around an inner shell capable of serving as a gas barrier, by a filament winding method or a tape winding method. The present invention can produce a pressure vessel excellent in retaining its internal pressure, excellent in reliability, and light in weight at a low cost.

Probable Assignee: TORAY IND INC

Earliest Publication Date: 19970612

