

said perforations 3. By appropriate dimensioning of manufacturing parameters, such as plastic sheet temperature and the value of the subpressure, surface material manufactured in this way can be given a greater wall thickness at the tops of respective projections than in the remainder of the projection walls, because the plastic sheet will begin to solidify at the tops of the mould body 6 immediately it is placed thereon.

The sheet manufacturing apparatus is preferably constructed to produce continuous webs of surface material, wherein the plastic sheet is applied to a mould according to Figure 3 formed on the periphery of a suction drum directly from an extrusion nozzle. The suction drum may be provided with two vacuum boxes arranged sequentially in the movement direction of the plastic sheet, of which boxes the downstream vacuum box will have a greater capacity than the upstream box so that the desired subpressure can be maintained even when sheet material has ruptured after having passes into the holes 7 in the mould.

Figures 4 and 5 illustrate schematically another mould 9 which can be used in the inventive apparatus and in which the holes are produced in the surface material either by punching or with the aid of an ultrasonic horn.

The mould 9 is also formed in the periphery of a suction drum, as illustrated in Figure 4 which illustrates schematically a section of the mould 9. Distinct from the mould 5 illustrated in Figure 3, the mould 9 includes bodies 10 which project in a regular pattern radially inwards from the periphery of a cylindrical surface instead of radially outwards as in the case of the mould 5. The bodies 10 have a truncated pyramidal configuration and the walls of said bodies include a plurality of holes 11 which open into

the suction box 12 of the suction drum, although this has not been shown in Figure 4 for the sake of clarity. The base lines of the pyramids extend in an intersecting, diagonal pattern around the outer cylindrical surface of the mould 9 and the mould 9 has cruciform raised regions 13 between the pyramids at the points of intersection between the pyramid base lines. These raised regions 13 can be easily produced by machining down the outside of the mould 9 externally of the cruciform regions 13.

When using the mould 9 to produce inventive surface material, a sheet of plastic material in plastic state is placed on the mould and a subpressure is applied to the sheet so that the sheet will be drawn into the pyramidal bodies and therewith assume the shape of said bodies. No perforations are made in this stage of manufacture. The mouldable sheet is then caused to harden, optionally by supplying cooling air to the sheet. When the mouldable sheet has hardened, the sheet, while still on the mould 9, is caused to pass a counter-roller or an ultrasonic horn, so as to remove the material on the raised cruciform regions 13 of the mould and therewith form cruciform apertures in the hardened plastic sheet. The use of the mould 9 and a counter-roller or an ultrasonic horn when manufacturing the inventive surface material has the advantage that the amount of energy consumed and the amount of air that must be sucked away is less than when vacuum-forming the holes.

It is also conceivable to manufacture the surface material in a manner other than by vacuum-forming, for instance by passing the material between two moulds having mutually complementary projections and pits. It is also possible to begin with a flat plastic sheet and then heat the sheet to a mouldable state, instead of beginning with a newly extruded plastic melt.

It will be understood that the described and illustrated embodiment of the invention can be modified within the scope of the invention, particularly with respect to the shape of the projections and perforations and with respect to the patterns in which they are arranged. For instance, it is not necessary for that side of the surface material which lies proximal to the absorbent body to be flat, and it is also possible to use materials other than plastic sheet for the surface material. Because of the small contact surface between skin and surface material, not even hydrophilic material will be felt to be wet by a wearer. Plastic sheet is preferred, however, because of its low cost and good shapability. However, the pattern of projections, or possibly a combination of different patterns of projections, will preferably extend over the whole area of the surface material, so as to ensure good ventilation, whereas the pattern or patterns of perforations may be disposed solely in those parts of the surface material in which fluid can be expected to be discharged by the wearer. The invention is therefore only restricted by the content of the following Claims.

Claims

1. Surface material (1) for absorbent articles, such as diapers, sanitary napkins, incontinence guards and wound dressings, said surface material being intended to lie nearest the wearer's skin in use, characterized in that the surface material (1) includes a plurality of projections (2) on that side thereof which lies proximal to the wearer's skin in use, and a plurality of through-penetrating perforations (3) in parts that lie outside the projections.

2. Surface material according to Claim 1, characterized in that the projections (2) have rounded tops (4).

3. Surface material according to Claim 1 or 2, characterized in that the projections (2) and the perforations (3) are disposed in a regular pattern across essentially the whole area of the surface material.

4. Surface material according to any one of the preceding Claims, characterized in that the projections (2) are hollow and have a greater material thickness at the tops (4) thereof than in their remaining portions.

5. Surface material according to any one of the preceding Claims, characterized in that the projections (2) have an upwardly narrowing shape.

6. Apparatus for manufacturing surface material (1) for absorbent articles, such as diapers, sanitary napkins, incontinence guards and wound dressings, said surface material being intended to lie proximal to the wearer's skin in use, characterized by a mould (5) which includes a regular pattern of conical or pyramidal bodies (6) which project out from a smooth surface and which have rounded top surfaces; holes (7) in the

**REPUBLICA DE COLOMBIA
SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO**

RESOLUCION 2647

Por la cual se acepta un desistimiento

Rad. N° 00-28637

EL SUPERINTENDENTE DE INDUSTRIA Y COMERCIO
en ejercicio de sus facultades legales, en especial de las que se confirieron en el artículo
4, numeral 5 del decreto 2153 de 1992, y

CONSIDERANDO:

Que el solicitante, a través de apoderado debidamente facultado para el efecto, desistió de la solicitud de privilegio de patente de invención contenida en el expediente indicado en la referencia, en los términos del artículo 12 de la Decisión 486 de la Comisión de la Comunidad Andina.

RESUELVE:

ARTICULO PRIMERO: Aceptar el desistimiento de la solicitud de que se da cuenta en la parte considerativa.

ARTICULO SEGUNDO: Hacer las anotaciones correspondientes y archivar el expediente.

ARTICULO TERCERO: Notificar personalmente el contenido de la presente resolución a la doctora Marcela Castillo Torres, o a quien haga sus veces, en su calidad de apoderado de SCA Hygiene Products GmbH., entregándole copia de la misma, advirtiéndole que contra ella procede el recurso de reposición interpuesto ante el Superintendente de Industria y Comercio, al momento de la notificación o dentro de los 5 días hábiles siguientes a ella.

NOTIFÍQUESE Y CUMPLASE

Dada en Bogotá, D.C., a los

06 FEB. 2007

EL SUPERINTENDENTE DE INDUSTRIA Y COMERCIO,


JAIRO RUBIO ESCOBAR

Doctora
MARCELA CASTILLO TORRES
Calle 93 A N° 14 – 17, Of. 311.
Bogotá D.C.

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SUPERINTENDENCIA

Radicación : 0-28637- -10-0 Fecha: 2007-02-07 08:21:54
Trámite : 2 PATENTES
Evento : 1 REGDEPOSITO
Actuación : 432 COMUNICACTOADM
Destinatario : MARCELA CASTILLO TORRES Folios 1

Señor (a) (es)
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BOGOTA D.C.

08 FEB. 2007

Referencia RESOLUCION : 2647
Fecha : 06/02/2007
Expediente : 0-28637
Trámite : 2 PATENTES DE INVENCION
Evento : 1 REGISTRO/DEPOSITO/CONCESION/DEPOSITO
Actuación : 432 COMUNICACION ACTO ADMINISTRATIVO

Comedidamente le solicito presentarse a este Despacho ubicado en la Carrera 13 No. 27 - 00 Piso Quinto (5), de la ciudad de Bogotá D.C., dentro del término de cinco (5) días hábiles contados a partir del envío de la presente citación, en horario de 8:00 a.m. a 4:30 p.m. jornada continua, con el fin de notificarle personalmente el contenido de la resolución de la referencia proferida dentro del expediente tramitado con el número de radicación citado en el asunto.

De no hacerse presente en el término indicado anteriormente, la providencia en mención se notificará por edicto, el cual se fijará por el término de diez (10) días en el Centro de Documentación e Información.

Para su comodidad el texto completo de la resolución se encontrará disponible en la página web de la Entidad desde el día hábil siguiente al de su notificación, la cual podrá ser consultada desde un computador con acceso a Internet, en la página www.sic.gov.co, con el número de resolución a través de la opción servicios en línea - caracter general - consulta actos administrativos.

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