



Bogotá D.C.,
2020

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO

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DEP: 20 DIR.NUEVASCREACIONES
TRA: 02 PATENTES EVE: 323 ANUALIDADES
ACT: 440 RESPUESTA Folios: 2

Doctor(a)

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BOGOTA D.C.

Asunto: Radicación: 4 2024
Trámite: 2
Evento: 323
Actuación: 440
Folios: 2

Apreciado(a) doctor(a):

En atención al contenido de las comunicaciones relacionadas con el expediente citado en el asunto, adjunto le remito la certificación con la información de los pagos de la(s) tasa(s) de mantenimiento del certificado de Patente de Invención número 28876.

Es de anotar que la aplicación de los pagos se hace de acuerdo a la fecha de presentación y al período solicitado en tal escrito. En el caso de presentar en la casilla período/estado: PENDIENTE APLICACIÓN O DESGLOSE; se solicita informe a esta oficina si desea que sea aplicado para el siguiente período, de ser así, deberá manifestarlo por escrito como complemento de información a la anualidad. Lo anterior debe hacerse de acuerdo a lo dispuesto en el artículo 80 de la Decisión 486/00 y la resolución de tarifas vigente.

En el evento de no aceptar la aplicación indicada en el párrafo anterior, si lo estima conveniente podrá solicitar por escrito el desglose del(los) mencionado(s) pago(s).

Atentamente,

MARIA CONSUELO CASIJ REY
Secretaría General Ad Hoc

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RAD.:4 2024

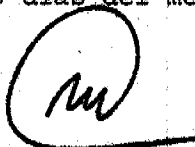
Secretaría General Ad Hoc

CERTIFICA

Que de conformidad con lo dispuesto en el artículo 80 de la Decisión 486 de la Comisión de la Comunidad Andina y las resoluciones de las tasas aplicables; se allegaron los siguientes recibos oficiales de caja, correspondientes a las tasas de mantenimiento del certificado de Patente de Invención número 28876:

Recibo	Fecha Radicado	Presentado Por	Período o Estado (AAAA/MM/DD)
8-98862 8-98863	2009/01/06	RODRIGUEZ D` ALEMAN DILIA MARIA	2009/01/14 al 2010/01/14
9-97901 9-97908 9-97934 9-97935 9-97936 9-97962 9-97963 9-97978	2010/01/05	RODRIGUEZ D` ALEMAN DILIA MARIA	2010/01/14 al 2011/01/14

Se expide en Bogotá D.C., a los 26 días del mes de Febrero de 2010



MARIA CONSUELO CASIJ REY

mbuitrag

Al contestar favor indique el número de radicación consignado en el rótulo

Sede Centro: Carrera 13 No. 27-00 pisos 2, 5, 7 y 10 PBX: 5870000
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Bogotá D.C. Colombia

United States Patent [19]

Donohoe

[11] Patent Number: 4,763,557

[45] **Date of Patent:** Aug. 16, 1988

[54] ONE-PIECE HOLLOW DRUMSTICK AND METHOD OF MAKING

[76] Inventor: **David G. Donohoe, Rte. 2, Box 276,
Springville, Calif. 93265**

[21] Appl. No.: 2,125

[22] Filed: Jan. 12, 1987

[51] Int. Cl.⁴ G10D 13/00

[52] U.S. Cl. 84/422 S

[58] Field of Search 84/422 S

[56] References Cited

U.S. PATENT DOCUMENTS

3.147.660 9/1964 Brillhart 84/422 S

4,202,241	5/1980	Lucas	84/422 S
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4,320,688 3/1982 Donohoe 84/422 S

Primary Examiner—L. T. Hix

Assistant Examiner—Brian W. Brown

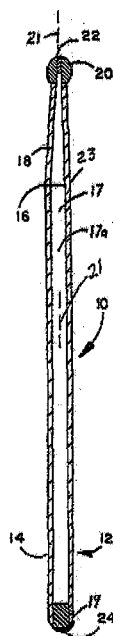
Attorney, Agent, or Firm—William L. Chapin

[57] **ABSTRACT**

A one-piece injection molded drumstick and method of

making the drumstick are presented. The drumstick has a conventional appearing exterior surface, i.e., a relatively long cylindrical rear handle section of relatively uniform external diameter, a relatively short shank section which tapers uniformly from the forward end of the handle section to a smaller diameter neck section, and a substantially short, enlarged bulbous tip section joined to the neck portion. Formed within the handle and shank portion of the drumstick is an axially symmetric tunnel having substantially the same taper as the exterior of the drumstick, thereby resulting in a hollow handle and shank portion of substantially uniform wall thickness. The tunnel tapers down to a generally cylindrical hollow section which passes out through the front end of the tip section. Uniform wall thickness is made possible by the use of a bushing surrounding and supporting the molding core and sliding longitudinally within the mold cavity in response to molten plastic injected into the mold, maintaining the exterior surface and tunnel precisely concentric.

6 Claims, 1 Drawing Sheet



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106

U.S. Patent

Aug. 16, 1988

4,763,557

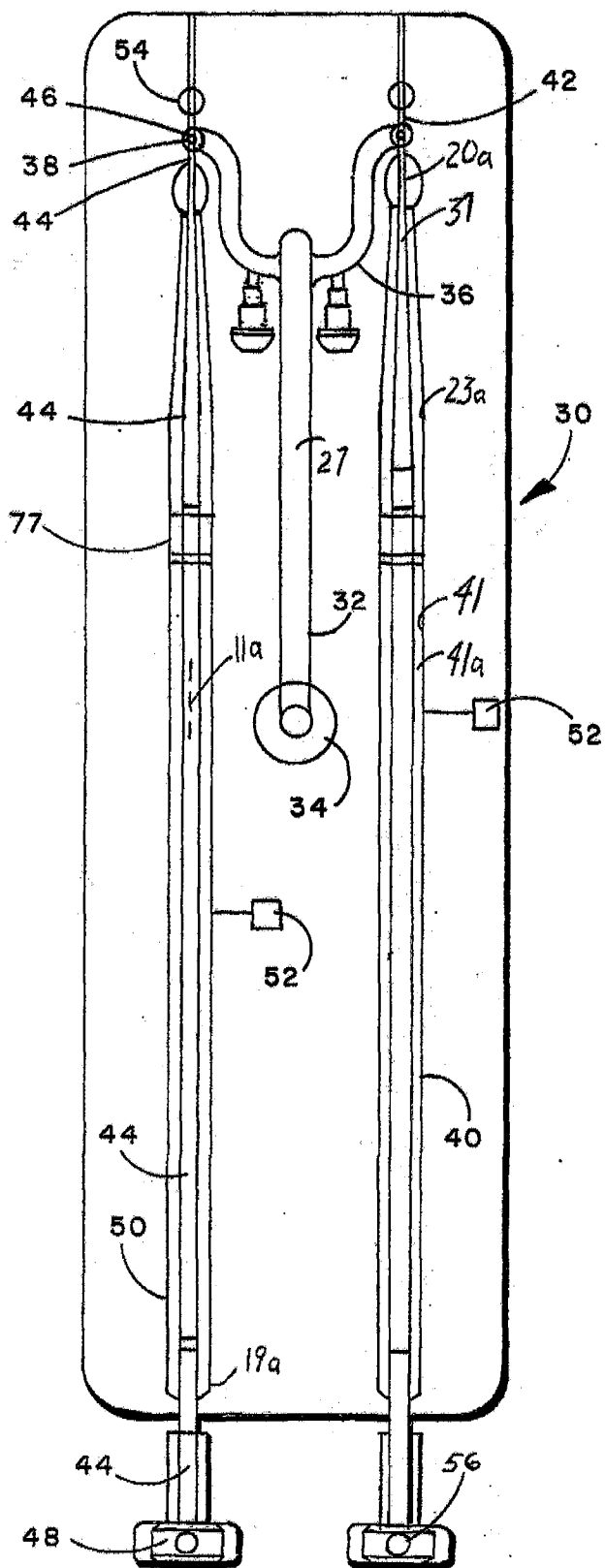


FIG. 6

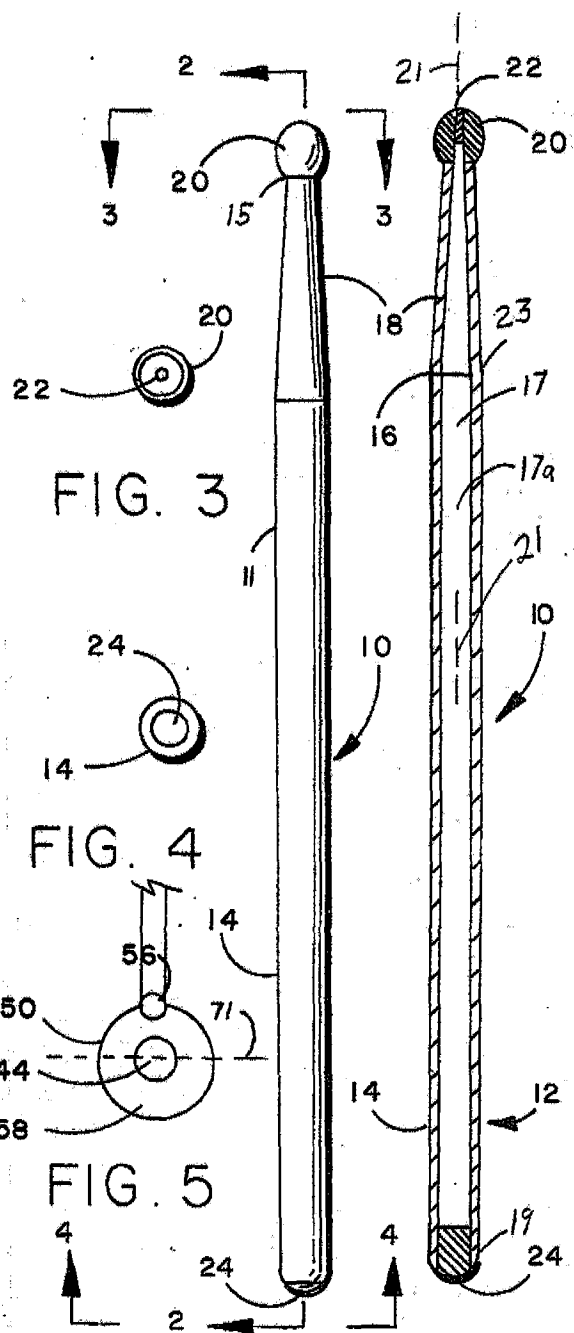


FIG. 3

FIG. 4

FIG. 5

FIG. 1

FIG. 2

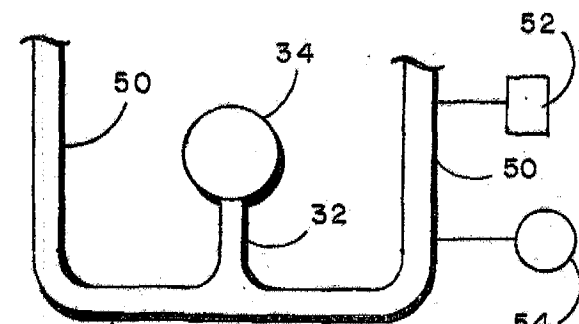


FIG. 7

ONE-PIECE HOLLOW DRUMSTICK AND METHOD OF MAKING

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to one piece drumsticks having an axial tunnel from end to end and methods of making such drumsticks.

2. Description of the Prior Art

Drumsticks go back to pre-history. There have probably been more changes in drumsticks in the past ten years than in the previous 10,000 years. The amount of energy transmitted by the drumstick to the drum is one of the major factors determining the sound. Energy is a function of the square of the velocity times the mass of the drumstick. Normally it is the tip only which strikes the drum or other musical instrument such as cymbals.

To appreciate the energy required by the drummer, one really has to see a good drummer in action. He strikes the drum with tremendous velocity and very little time elapses between impacts on the drum. He may play for hours. For these reasons, primarily, playing the drum is not only playing a musical instrument, but also an athletic event. A good drummer has to be a good athlete at least in relation to his drumming. There has been a tendency toward lighter drumsticks. Because of the light weight of modern drumsticks and the tremendous velocities at impact, Drumsticks break relatively frequently. A set of drumsticks of typical prior art design lasts about one night.

It is well known that a hollow cylinder is stronger than a solid cylinder of the same sectional mass and other characteristics. This is why bridges are built with girders comprising thin perpendicular members such as a T or H cross-section instead of solid members. Apparently making material into a hollow cylinder shape permits the material to resist breaking or bending because there is a leverage advantage in having part of the material disposed farther from the material axis or other parts of material.

In addition, a drumstick which is totally hollow along its entire length vibrates differently than any other type of drumstick so that the sound generated when the drumstick hits the drum is slightly different. In a day when there are thousands of musicians not earning big money for everyone who is, a slightly different sound has been associated with many successful musicians and bands and anything which gives a band an ability to sound different can be a critical advantage in the subjective world of band sounds.

Part of the reason why hollow drumsticks, in spite of their other advantages, have not caught on is because, on information and belief, no one has previously made a hollow one piece drumstick. It has always been possible theoretically to make a hollow one piece drumstick. For example, you could make a solid drumstick, then drill a hole through it. Unfortunately, all prior art hollow drumsticks were economically impossible to make. Because of the advantages of hollow drumsticks, the prior art does disclose drumsticks which are hollow almost all the way through or drumsticks which are not one piece but are hollow all the way through. An example of the latter is Lucas, No. 4,202,241. Applicant's prior drumstick, Donohoe, No. 4,320,688, filed 12/8/80 and issued 3/23/82 has many of the advantages of the present invention, but is not quite ideal.

What is needed is a hollow one piece drumstick fabricated from a very strong material so that it will last about ten times as long as prior art drumsticks. The one piece construction reduces cost, increases strength, gives a slightly different sound characteristic, and possesses other advantages as set forth previously. Drumsticks manufactured according to the method set forth in the present application lasts about ten times as long as the most durable prior art drumsticks of similar weight and balance. Because drumsticks hit the drum thousands of times before breaking and are normally totally undamaged until one hit causes damage, even a slight increase in ability to resist damage from that one hit can and does increase the life of the drumstick by a factor of ten or more.

SUMMARY OF THE INVENTION

A one piece drumstick is presented. The drumstick comprises a tip having essentially the same outside shape as prior art drumstick tips but having an interior surface defining an axially symmetric tunnel. The drumstick, of course, is axially symmetric.

The drumstick further includes a wall formed in one piece with the tip at substantially the same time the tip is formed. The only difference in time being the fact that the plastic material from which the drumstick is made enters a mold at one end and is then pushed to the other end so that there are probably very slight differences in the time of formation of the two ends, the differences in time of formation being negligible. The wall also has essentially the same outside shape as prior art drumsticks, but has an interior surface defining a tunnel symmetrical about the axis around which the tip and wall are symmetrically disposed. The wall has a shank portion tapering to a narrower diameter at the shank/tip common external surface which is called the neck of the drumstick. The aft portion of the wall comprises a handle of substantially uniform exterior diameter. The tunnel within the tip and shank has a slightly lesser diameter at the fore end of the drumstick, such that the thickness of the wall from the neck of the drumstick to the butt end is substantially identical. In some examples, there is approximately a difference of 0.005 inches from the aft end of the shank to the butt end to permit easy core removal after molding.

It is believed that a drumstick fabricated according to the present invention should be claimed in the same application as the method of making the drumstick, so the present application includes both drumstick and method.

The method of molding a drumstick according to the present invention or any one-piece-hollow-from-end-to-end plastic drumstick, each disposed symmetrically around an axis and comprising a cylindrical wall of substantially uniform thickness aft of the tip of the drumstick, comprises the following steps.

Liquid plastic capable of being injection molded is caused to flow from a reservoir via at least one coupling runner through a gate into a drumstick mold having an interior surface defining a cavity of the same shape as the exterior surface of the drumstick to be molded. The mold interior surface is axially symmetric. The drumstick mold is disposed around a removeable tunnel-forming core. The tunnel forming core is axially symmetric about the axis of the drumstick mold. The fore end of the core is cylindrical forward of approximately the center of the tip of the mold then tapers outward at the angle of taper desired for the drumstick

to be formed, a distance equal to the distance from the fore tip that the drumstick is to taper. The core then is of substantially uniform diameter to form a substantially uniform interior diameter of the handle of the drumstick. The liquid plastic, as the plastic fills the mold, pushes a plunger bushing sliding around the core inside the mold and having the approximately the internal diameter of the core aft external diameter and the plunger bushing having the external diameter of the mold for internal diameter from fore end of handle to butt end, thereby stabilizing the core during filling. The plunger bushing holds the core in a stable position until the plastic surrounds the core after which the plastic holds the core in a stable condition, thereby causing the drumstick which is formed to have a uniform thickness which is desirable for purposes of strength and uniformity of sound generated by the drumstick. The liquid plastic is then cooled by prior art means to form a drumstick. The drumstick is ejected by opening the mold which in most examples known to the prior art divides in half and pushing out the drumstick by means of ejector pins coupled to push against the drumstick. The core is removed from the drumstick by pulling the core in the aft direction in relation to the drumstick. In some examples, in order to make the core easier to remove, the thickness of the wall from the fore end of the handle to the butt end differs by about 0.005 inches to permit easy core removal after molding. Other examples include a tip plug inserted into the tip and a butt plug inserted into the butt end of the drumstick and a light weight foam which fills the drumstick tunnel.

DRAWING DESCRIPTION

Reference should be made at this time to the following detailed description which should be read in conjunction with the following drawings, of which:

FIG. 1 is a side view of a drumstick fabricated according to the present invention;

FIG. 2 is a partially cut away side view of a drumstick of FIG. 1;

FIG. 3 is a front view of a drumstick according to the present invention;

FIG. 4 is an aft view of a drumstick according to the present invention;

FIG. 5 illustrates the resetting of a part of a mold as the halves of the mold have come together and the ejector pin is being removed;

FIG. 6 is a side view of a drumstick according to the present invention being injection molded; and

FIG. 7 is another view of a part of the injection molding of a drumstick according to the present invention.

DETAILED DESCRIPTION

Reference should be made at this time to FIGS. 1-7 which show various examples of a drumstick 10 according to the present invention and the mechanism 30 by which a drumstick 10 according to the present invention may be injection molded. FIGS. 1 and 2 illustrate side and side cut away view of a one piece drumstick 10 having an external surface 11 substantially identical to prior art drumsticks (not shown) but having an interior surface 16 defining an axial tunnel 17.

A tip 20 has essentially the same outside shape as prior art drumstick tips (not shown) but has an interior surface defining an axial tunnel 17 symmetrical about an axis 21 around which the tip 20 is symmetrically disposed.

A wall 14 is formed in one piece with the tip 20 at substantially the same time the tip 20 is formed. The wall 14 has essentially the same outside shape defined by surface 11 as prior art drumsticks, but has an interior surface 16 defining a tunnel 17 symmetrical about the axis 21 about which the tip 20 and wall 14 are symmetrically disposed. The tunnel 17 extends the entire length of the drumstick 10 although FIGURES 1 and 2 illustrate a possible example of the invention having plugs 22, 24 in the fore and aft ends of the drumstick 10. The wall 14 has a shank fore portion 18 tapering to a narrow diameter at the shank/tip common external surface 15 which is called the neck 15. The aft portion of the wall 14 comprises a handle 12 of substantially uniform exterior diameter, the tunnel 17 within the shank 18 and tip 20 tapering to a lesser diameter as the fore part of the drumstick 10 is approached, such that the thickness of the wall 14 from the neck 15 to the butt end 19 is substantially identical except for approximately a difference of 0.005 inches (5/1000ths) in a preferred example from the aft end 23 of the handle 12 to the butt end 19 to permit easy core removal after molding.

FIGS. 6 and 7 illustrate the method of molding a one-piece, hollow-from-end-to-end plastic drumstick 10 disposed symmetrically around an axis 21 and comprising a cylindrical wall 14 of substantially uniform thickness aft of the tip 20 of the drumstick 10. Injection molding is utilized as perhaps best shown in FIG. 6 which illustrates a molding arrangement 30. The method comprises causing liquid plastic 27 capable of being injection molded to flow from the reservoir 34 via at least one coupling runner 32 through a gate 36 into a drumstick mold 40 having an interior surface 41 defining a cavity 41a of the same shape as the exterior surface 11 of the drumstick 10 to be molded. The mold interior surface 41 is axially symmetric. The drumstick mold 40 is disposed around a removeable tunnel forming core 44. The tunnel forming core is axially symmetric about the axis 11a of the drumstick mold 40. The fore end 31 of the core 44 is cylindrical forward of approximately the center of the tip 20a of the mold 40. The core, then tapers outward at the angle of taper desired for the drumstick 10 to be formed along core taper 37. The tapered distance in distance equal to the distance between the fore tip 20a and the uniform diameter handle portion 12. The core 44 is then of substantially uniform diameter from end of taper 23a to aft end 19a. The differences in diameter between mold 40 and core 44 are substantially identical aft of the tip 20a.

After the mold 40 as described previously herein is filled with plastic, the plastic is injection molded by means known to the prior art to mold a drumstick 10. The drumstick 10 is then ejected by opening the mold which divides in half along a line 71 (see FIG. 5) by means of ejection pins 54, 56 coupled to push against the drumstick. The core 44 is then removed from the drumstick 10 by pulling the core 44 in the aft direction in relation to the drumstick 10. The drumstick may then be finished by means known to the prior art. If desired, a tip 22 and/or butt 24 plug may be inserted into the drumstick as shown in FIG. 2 and the aft end 19 of the drumstick 10 may be rounded as shown in FIGS. 1 and 2. FIG. 6 illustrates a rectangular aft end angle which may also be desired for certain applications and is a second example of the drumstick 10.

Quality of drumsticks 10 produced by this method is maintained by use of a plunger bushing 77 shown in FIG. 6. The plunger bushing 77 slides longitudinally

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within cavity 41 of the mold 40 during filling. The liquid plastic 32 pushes the plunger bushing 77 as the plastic 32 fills the mold 40. The plunger bushing 77 has the internal diameter of the core 44 and external diameter about which it is disposed and the external diameter of the mold 40 for internal diameter within which it slides from fore end of handle 12 to butt end 19, thereby stabilizing the core 44 during filling which results in a more uniform drumstick 10, not having minor changes in wall thickness which the drumstick 10 would otherwise have which would cause drumstick weakness and undesirable changes in characteristics.

FIG. 6 shows mold 30 upside down compared to the way molding is actually done. Plastic 32 enters near tip 20a at the bottom and flows upward toward head 48 from which mold 30 hangs. In actual operation, a hydraulic core puller well known to the prior art and not shown, is used to pull cores 44 from drumsticks 10. In FIG. 6, two drumsticks 10 are shown being molded at the same time. Obviously, some other number other than two could be molded at the same time and all that would be required would be a different number of elements than shown in FIG. 6.

FIG. 5 illustrates a core 44 having been set back into a mold cavity 50 which has been put back together along dividing line 71 to form a space 58 into which plastic 27 is to flow. An ejector pin 56 is about to be removed after having ejected the previous drumstick 10.

Drumsticks 10 may be made with tunnel 17 of uniform diameter inside handle 12 so that handle 12 has walls of uniform diameter. but in the preferred example, there is a slight difference to permit easy core 44 removal after molding. The use of the plunger bushing 77 permits extremely precise control of the thickness of the wall of the handle 12 by maintaining core 44 in a precise orientation until core 44 is surrounded by plastic 27 which then stabilizes core 44.

A particular example of the invention plus the same example having a slightly different thickness handle 12, and tip plug 22, butt plug 24 and light weight foam 17a filling drumstick tunnel 17 has been described. Other

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examples will be obvious to those skilled in the art. The invention is limited only by the following claims.

I claim:

1. A one-piece drumstick consisting of:
 - (a) relatively long cylindrical handle section of relatively uniform external diameter,
 - (b) an integrally formed, relatively short shank section which tapers uniformly from the forward end of said handle section to a smaller diameter neck section,
 - (c) an integrally formed substantially shorter enlarged tip section joined to the forward end of said shank section and,
 - (d) an integrally formed central coaxial tunnel extending the entire length of said drumstick, that portion of said tunnel underlying said handle portion and said shank portion of said drumstick having a substantially uniformly smaller diameter than the overlying exterior surface of said drumstick, thereby resulting in a substantially uniform wall thickness of said handle and shank portions, said tunnel having a diameter which decreases monotonically from the rear portion of said drumstick to the front portion thereof.
2. The drumstick of claim 1 wherein that portion of said tunnel passing through said tip section is no larger in diameter than that portion of said tunnel underlying the junction between said tip section and said shank section.
3. The drumstick of claim 2 wherein that portion of said tunnel passing through said handle section tapers to somewhat smaller diameter from the rear end of said handle section to the forward end of said handle section.
4. The drumstick of claim 3 further including a light weight foam filling said tunnel.
5. The drumstick of claim 3 further including a tip plug extending into said tunnel from the forward end of said tip.
6. The drumstick of claim 3 further including a butt plug extending into said tunnel from the rear end of said handle section.

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**SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
DIVISIÓN DE NUEVAS CREACIONES**

2020

Bogotá, D.C., 01 de Febrero del 2008

Abogada

Dra. DILIA RODRIGUEZ D'ALEMAN

ASUNTO

Radicación **04- 002024**
Trámite 002
Evento 001
Actuación 430
Oficio **2295**
Folios 017

Patente de Invención

☒

Patente de Modelo de Utilidad

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Vía Nacional

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Vía PCT (fase nacional)

☐

Cap. I

☐

Cap. II

☐

No. Sol. Internacional

Fecha de Presentación Internal.

Como resultado del examen de fondo, realizado con fundamento en el artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le comunica:

1. Documentos estudiados

- 1.1. Descripción: Folios: 06 a 20 como se radicó inicialmente.
- 1.2. Reivindicaciones: Folios: 21 a 25 como se radicó inicialmente.
- 1.3. Dibujos: Folios: 27 a 28 como se radicó inicialmente.
- 1.4. Prioridad: Folios: 1 14/01/2003, ITALIA (IT), No.03425012.6

2. Objeto de la invención

Titulo de la invención: **"AGARRADERA DE VASIJA DE COCINA Y METODO DE ELABORACION RELACIONADO". (Folio 1).**

La reivindicación No.1 dice. "Una agarradera de vasija de cocina que comprende: un cuerpo alongado de una pieza (2) hecha de material plástico que tiene, en un primer extremo (2a), medios (3) para conexión a una vasija de cocina; la agarradera se caracteriza en que dicho cuerpo (2) comprende, internamente, una cavidad longitudinal (5) que se extiende al menos a lo largo de una porción agarrada en huso. (Ver folio 21).

La reivindicación No.13 dice. "Un método de elaboración de una agarradera de vasija de cocina (1) del tipo que tiene un cuerpo alongado, de una pieza (2), el método **comprende** una etapa de moldear material plástico en un molde (10) teniendo, internamente, un asiento de moldeo (11) de la misma forma que la agarradera (1); y el método **se caracteriza** por suministrar al interior de dicho molde (10), un miembro movable (15) que define una cavidad longitudinal (5) al interior de dicho cuerpo (2); y por que, luego de dicha etapa de moldeo, de dicho miembro movable (15) se extrae desde un extremo de dicho cuerpo (2) para liberar dicha cavidad longitudinal (5). (Ver folio 25).

El problema planteado de esta solicitud en estudio es el de llevar acabo "**una agarradera de vasija de cocina y método de elaboración relacionado**", con los siguientes objetivos:

- Suministrar una agarradera de vasija de cocina y su respectivo método relacionado, que según su diseño y su configuración de sus elementos que lo conforman, permiten reducir el incremento de la temperatura de la manija ensamblado al artículo de cocina cuando se esta utilizando.
- Suministrar una agarradera de vasija de cocina y su respectivo método relacionado, que según su diseño y su configuración de sus elementos que lo conforman, haciendo que el aire circule dentro de la manija, reduciendo la concentración de calor mediante la refrigeración por aire.
- Suministrar una agarradera de vasija de cocina y su respectivo método relacionado, que según su diseño y su configuración de sus elementos que lo conforman, hace que se emplee menos cantidad de material en la manija, reduciendo su peso sin afectar la rigidez ni la resistencia mecánica de dicho producto.
- Suministrar una agarradera de vasija de cocina y su respectivo método relacionado, que según su diseño y su configuración de sus elementos que lo conforman, la cual facilite el manejo de dicha manija debido a su perfil curvado ergonómico para mayor comodidad para el usuario.

Para solucionar este problema técnico de la solicitud en estudio comprende una agarradera de vasija de cocina y método de elaboración relacionado.

El objeto de la invención definido anteriormente se clasifico de acuerdo con el IPC así: **A47J45/00, A47J36/00, A47J45/06, A47J45/07, B29C45/26, B29C45/00.**

3. De la solicitud de Patente

3.1. Reivindicaciones (artículo 30 D 486).

- En la reivindicación No.1, las características que se enuncian dentro de esta reivindicación independiente, son muy generales y tienen un sentido amplio, conteniendo información técnica conocida en el estado de la técnica, además no definen las características esenciales de la protección de la agarradera de vasija de cocina, y no presenta en forma concisa lo nuevo que se esta aportando a la tecnología.

Se le sugiere al solicitante que presente un nuevo capítulo reivindicatorio sin ampliar la materia de la invención, redactando o modificando dicha

reivindicación incluyendo las características esenciales de la novedad, incluyendo una reivindicación independiente conteniendo todas las características esenciales que definen la invención, y seguidamente conteniendo sus reivindicaciones dependientes definiendo las realizaciones particulares de la invención. En el capítulo reivindicatorio se definen las características técnicas esenciales particulares que se desean proteger de la invención.

- En la reivindicación No.13, expone *“Un método de elaboración de una agarradera de vasija de cocina (1) del tipo que tiene un cuerpo alargado de una pieza (2), el método comprende..... y por que, luego de dicha tapa de moldeo, dicho miembro movable (15) se extrae desde un extremo de dicho cuerpo (2) para liberar dicha cavidad longitudinal (5).* Las características que se enuncian en dicha reivindicación independiente relacionada con el método son muy generales y tienen un sentido amplio, conteniendo información técnica conocida en el estado de la técnica, además no definen las características esenciales que hacen que el método sea diferente de lo ya conocido o este dentro del estado de la técnica.

Se le sugiere al solicitante que presente un nuevo capítulo reivindicatorio sin ampliar la materia de la invención, redactando nuevamente o suprimiendo las reivindicaciones independientes y dependientes relacionadas al método, asimismo se le recuerda al solicitante que un método es un modo estructurado y ordenado para obtener un resultado, en este caso los pasos o etapas de fabricación o manufactura para llegar al producto.

4. Determinación del Estado de la Técnica

Teniendo en cuenta la fecha de presentación nacional, con fecha del 14 de Enero del 2004, se encontraron los siguientes documentos relevantes:

Nº	Documento	Título	Fecha de Publicación
D1	EP0240225	HANDLE FOR SAUCEPANS AND THE LIKE	24/03/1987
D2	US4763557	ONE-PIECE HOLLOW DRUMSTICK AND METHOD OF MAKING	16/08/1988

5. Evaluación de los requisitos de patentabilidad (según requisito artículo 14 D486):

5.1. Evaluación de la Novedad (artículo 16 D 486).

De acuerdo con la definición de novedad del artículo 16 de la Decisión 486 de la Comisión Andina y basándose en el objeto de la invención se realizo el siguiente análisis:

Teniendo en cuenta tal y como se plantea la reivindicación No.1 y la reivindicación No.13, de acuerdo al estado de la técnica, el documento mas cercano para las reivindicaciones No.1 y No.13 es el documento D1 y D2. A continuación se presenta un análisis comparativo (ver tabla No.1), (ver figura 2 y 3) del D1 y D2 del estado de la técnica (D1 EP0240225, D2 US4763557) con respecto a la reivindicación No.1 y No.13, de la solicitud en estudio, para analizar y evaluar su novedad.

Fig. 1 del Documento en Estudio

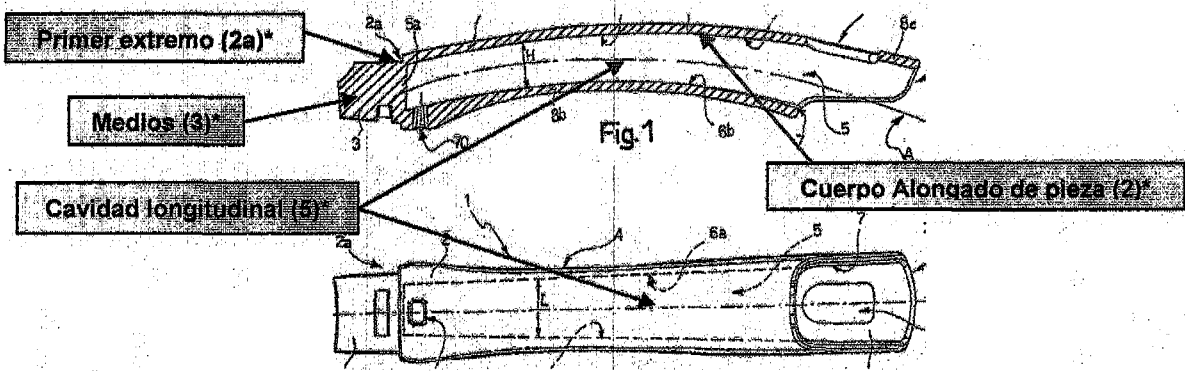


Fig. 2 del Documento D1 EP0240225

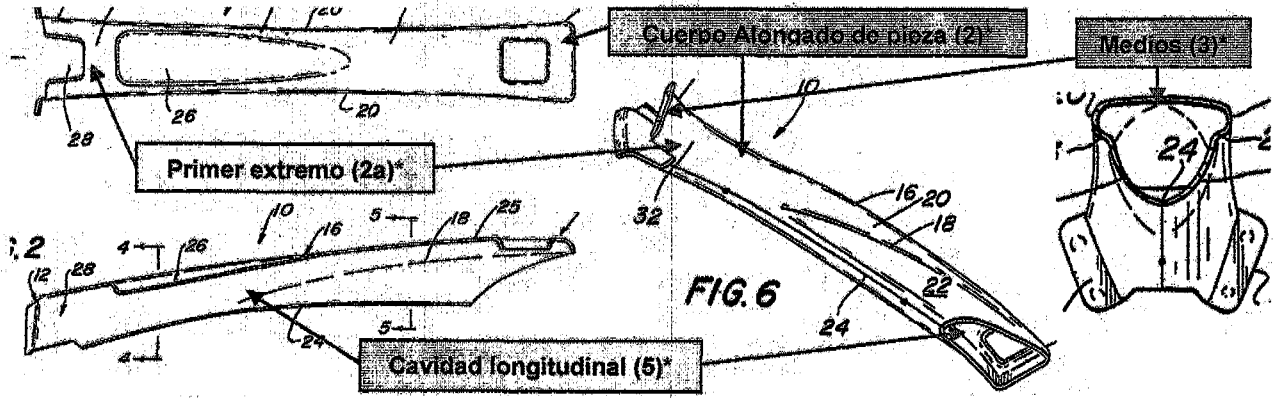


Fig. 1A del Documento en Estudio

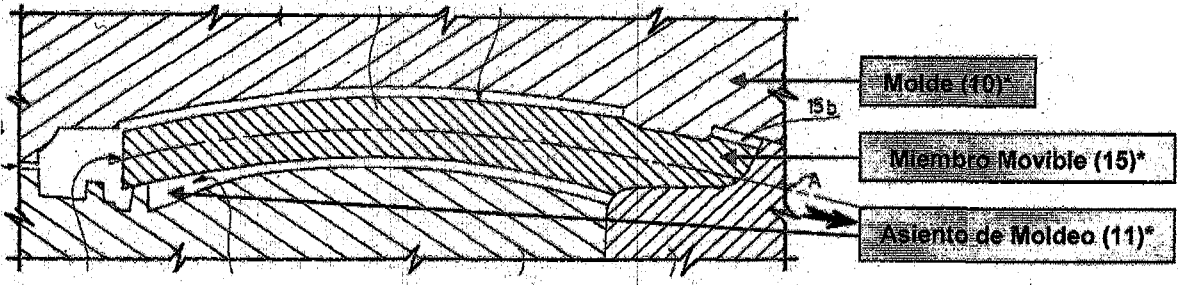
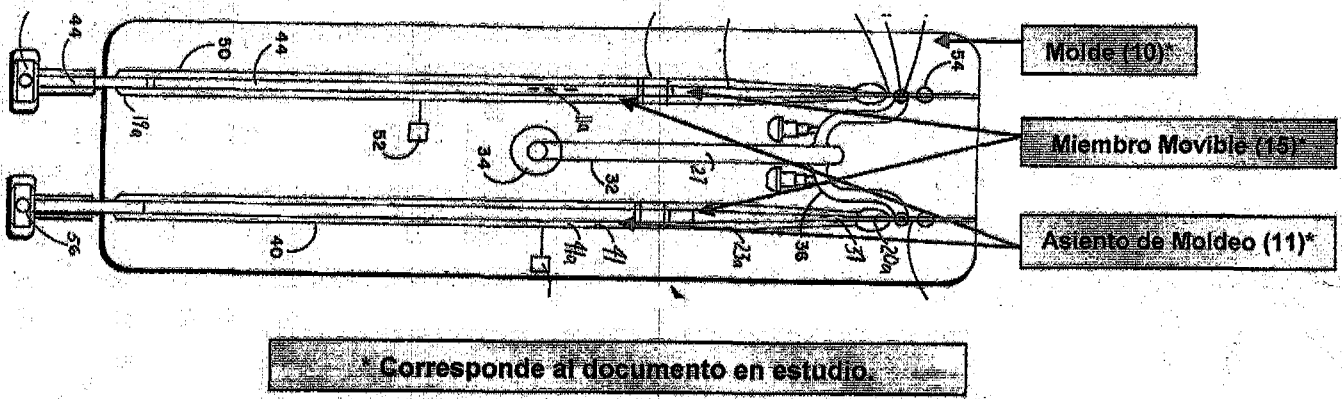


Fig. 3 del Documento D2 US4763557



Nota: En la tabla No.1, se enuncian en la casilla de comparación la explicación que es **Afirmativa** si las reivindicaciones están comprendidas dentro del estado de la técnica (documento D1 y D2), en caso contrario se enunciará como **No es Afirmativa**.

Tabla 1.

ESTUDIO DE NOVEDAD			
Solicitud en Estudio		Estado de la Técnica	Estado de la Técnica
"Agarradera de vasija de cocina y metodo de elaboracion relacionado"		Documento D1 EP0240225 HANDLE FOR SAUCEPANS AND THE LIKE	Documento D2 US4763657 ONE-PIECE HOLLOW DRUMSTICK AND METHOD OF MAKING
Reivindicación 1:		La reivindicacion No.1 "Una agarradera de vasija de cocina, <u>que comprende:</u>	
	A)	<u>un cuerpo alargado de una pieza (2) hecha de material plástico que tiene,</u>	Afirmativa (Ver folio 79, 82, 83 y 84 ver figuras 1, 2, y 6 folios 80 y 81)
	B)	<u>en un primer extremo (2a).</u>	No Afirmativa
	C)	<u>medios (3) para conexión a una vasija de cocina:</u>	No Afirmativa
	D)	la agarradera <u>se caracteriza en</u> que dicho cuerpo (2) comprende, internamente, <u>una cavidad longitudinal (5) que se extiende al menos a lo largo de una porción agarrada en huso.</u>	No Afirmativa
Reivindicación 13:		La reivindicación No.13 dice. "Un método de elaboración de una agarradera de vasija de cocina (1) del tipo que tiene un cuerpo alargado, de una pieza (2), el método, <u>comprende</u>	
	A)	<u>una etapa de moldear material plástico en un molde (10).</u>	No Afirmativa
	B)	<u>teniendo, internamente, un asiento de moldeo (11) de la misma forma que la agarradera (1);</u>	Afirmativa (Ver folio 85, 87, 88, y 89, ver figura 6 folio 86)
	C)	y el método <u>se caracteriza por</u> suministrar al interior de dicho molde (10), <u>un miembro movable (15) que define una cavidad longitudinal (5) al interior de dicho cuerpo (2).</u>	No Afirmativa
	D)	y por que, luego de dicha etapa de moldeo, <u>de dicho miembro movable (15), se extrae desde un extremo de dicho cuerpo (2) para liberar dicha cavidad longitudinal (5).</u>	Afirmativa (Ver folio 85, 87, 88, y 89, ver figura 6 folio 86)

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Mediante el análisis se puede concluir de la tabla No.1, que en la solicitud en estudio donde se presenta la reivindicación No.1, con respecto al documento D1 en los ítems A, B, C y D, están contenidos dentro del estado de la técnica. Por lo que se concluiría que la reivindicación No.1 de la solicitud no es nueva y no cumpliría con lo estipulado en el artículo 16 de la decisión 486.

Mediante el análisis se puede concluir de la tabla No.1, que en la solicitud en estudio donde se presenta la reivindicación No.13, con respecto al documento D2 en los ítems A, B, C y D, están contenidos dentro del estado de la técnica. Por lo que se concluiría que la reivindicación No.13 de la solicitud no es nueva y no cumpliría con lo estipulado en el artículo 16 de la decisión 486.

Por lo tanto, el objeto de la solicitud en estudio podría ser idéntico a lo comprendido en el estado de la técnica, con lo cual quedaría desvirtuada la novedad de esta, entendiéndose que cuando se ha establecido la falta de novedad de la invención, no es necesario evaluar el nivel inventivo, dado que no existe diferencias entre la invención y el estado de la técnica.

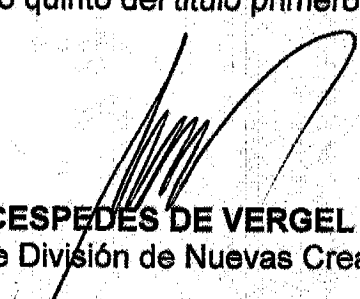
Conclusión:

Los requisitos de patentabilidad de la presente solicitud se encuentran afectados así:

N°	Documento N°	Reivindicaciones Afectadas	Requisito que Afecta
D1	EP0240225	1 a 12	Novedad
D2	US4763557	13 a 17	Novedad

En cumplimiento del artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le indica que debe dar respuesta dentro del término de sesenta días contados a partir de la fecha de notificación de la presente comunicación. En caso de no dar respuesta al presente requerimiento, o si a pesar de la respuesta subsistieran los impedimentos para la concesión, se denegará la patente.

Notifíquese el presente oficio conforme a lo dispuesto en el numeral 5.2 literal e), del capítulo quinto del título primero de la circular única, No. 10 del 2001.


ALIX CESPEDES DE VERGEL
Jefe de División de Nuevas Creaciones

El anterior requerimiento fue notificado por fijación en lista, de fecha

14 FEB. 2008

CONCEPTO TECNICO Numero: 217	EXAMINADOR TECNICO Código No. 202072
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JSC