



Industria y Comercio
SUPERINTENDENCIA

Delegatura de Propiedad Industrial

División de Nuevas Creaciones

PCT
SOLICITUD

PATENTE DE INVENCION

21. EXPEDIENTE No.

05-102643

54. TITULO

CIERRE PARA BOTEILLAS QUE EVIDENCIA ALTERACIONES, PARTICULARMENTE
PARA BOTEILLAS QUE CONTIENEN BEBIDAS VALIOSAS

51. CLASIFICACION INTERNACIONAL

71. SOLICITANTE GUALA CLOSURES S.P.A.

DOMICILIO Alessandria, Italia.

74. APODERADO EMILIO FERRERO

C.C. 438.019 de Usaquén.

22. BOGOTA, D.C.,



Industria y Comercio

SUPERINTENDENCIA

PETITORIO

SUPERVISOR: [illegible]
 RELAYED: [illegible] FOLLOW: 70
 DATE (MM): 2005-10-27 17:32-11
 STATUS: ALL PCI-PRISM / NO FREE PCI ALL PRESENT
 COMMENTS: [illegible]

FORMULARIO UNICO DE SOLICITUD DE PATENTE PCT ENTRADA EN FASE NACIONAL

SOLICITUD DE:

- 1** ☒ Patente de Invención.
☒ Capítulo I.
- SOLICITUD DE:**
☐ Patente de Modelo de Utilidad.
☐ Capítulo II.

2
SOLICITANTE
(71)

Nombre: GUALA CLOSURES S.P.A.
sociedad constituida y existente bajo las
leyes de Italia

Dirección: Via San Giovanni Bosco
53/55,
15100 Alessandria
Italia

Domicilio: **Alessandria, Italia**

IDENTIFICACIÓN

C.C. ☐ NIT ☐
C.E. ☐ Otro ☐
Cual _____

Número

3
**REPRESENTANTE
O APODERADO**

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Dirección: Carrera 4ª. No. 72-35
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E-mail: clientes@camyp.com
Domicilio: Bogotá, Colombia.

IDENTIFICACIÓN

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C.E. ☐ Otro ☐
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Número 438.019 T.P 31.929

4
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(72)

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5 PCT (86)
Solicitud Internacional No. PCT/IT2003/000141 Fecha: 7 de marzo de 2003
Publicación Internacional No. WO 2004/078612 A1 Fecha: 16 de septiembre de 2004

6 Título (54) CIERRE PARA BOTELLAS QUE EVIDENCIA ALTERACIONES.
PARTICULARMENTE PARA BOTELLAS QUE CONTIENEN BEBIDAS VALI SAS

7 Clasificación Internacional (51) B65D 49/04

8 Prioridad SI ☐ NO ☒	(33) Pais de Origen	(32) Fecha	(31) Número de Solicitud

9 Comprobante de pago No.: 05 – 75,976 Fecha: 3 de octubre de 2005

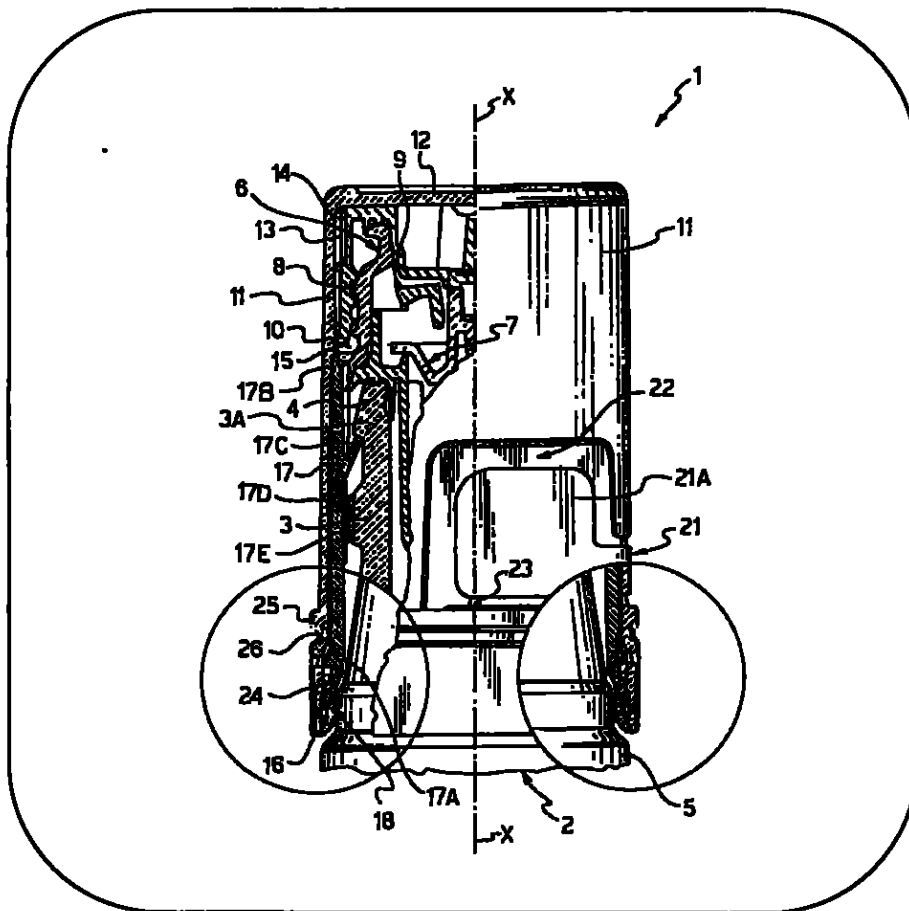
10

Anexos:

- ☒ Comprobante de pago de la tasa de presentación de la solicitud.
- ☐ Comprobante de pago por reivindicación de prioridad.
- ☒ Documento que acredita la existencia y representación legal cuando el solicitante sea persona jurídica.
- ☒ Poderes, si fuere el caso.
- ☒ Documento de cesión del inventor al solicitante o a su causante.
- ☐ Declaraciones.
- ☒ Copia de la solicitud internacional. (Resumen, descripción, reivindicaciones, dibujos)
- ☒ Traducción de la solicitud internacional al castellano. (Resumen, descripción, reivindicaciones, dibujos)
- ☐ Copia del examen preliminar efectuado por la IPEA.
- ☐ Traducción del examen preliminar efectuado por la IPEA.
- ☐ De ser el caso, copia del contrato de acceso.
- ☐ De ser el caso, documento que acredite la licencia o autorización de uso de conocimientos tradicionales de las comunidades indígenas.
- ☐ De ser el caso, certificado de depósito del material biológico.
- ☒ Arte final 12x12
- ☐ De ser el caso, información sobre otras solicitudes de patente o títulos obtenidos en el extranjero por el mismo titular o su causante, relacionadas parcial o totalmente con la invención de esta solicitud.
- ☒ Otros: VER HOJA ANEXA

11

FIGURA CARACTERÍSTICA



12

Solicito la concesión de la patente,

NOMBRE: EMILIO FERREROFIRMA: *Emilio Ferrero*
C.C. 438.019 de Usaquén T.P. 31.929

DOCUMENTOS ANEXOS

1. ☒ **Publicación Internacional WO 2004/078612 A1**

Descripción:

Páginas 18 en el idioma original

Páginas 21 en español

Reivindicaciones: Número (s) 6

Figuras: Número (s) 10

2. ☒ **Forma PCT/RO/101. PCT Request**
3. ☐ **Forma PCT/RO/106. Invitation to Correct Defects.**
4. ☒ **Forma PCT/ISA/210. Informe de Búsqueda Internacional.**
5. ☒ **Forma PCT/ISA/220. Notificación De La Transmisión Del Informe De Búsqueda Internacional Y De La Opinión Escrita De La Administración Encargada De La Búsqueda Internacional, O De La Declaración.**
6. ☐ **Forma PCT/ISA/237. Opinión Escrita De La Administración Encargada De La Búsqueda Internacional.**
7. ☐ **Forma PCT/IB/304. Notification Concerning Submission Or Transmittal Of Priority Document.**
8. ☐ **Forma PCT/IB/306. Notification Of The Recoding Of A Change.**
Descripción De Modificación:

9. ☒ **Forma PCT/IB/308. Notice Informing The Applicant Of The Communication Of The International Application To The Designated Offices.**
10. ☐ **Forma PCT/IB/332. Information Concerning Elected Offices Notified Of Their Election.**
11. ☐ **Forma PCT/IPEA/401. PCT Demand**
12. ☐ **Forma PCT/IPEA/402. Notification Of Receipt Of Demand By Competent International Preliminary Examining Authority.**
13. ☐ **Forma PCT/IPEA/408. Written Opinion.**
14. ☐ **Forma PCT/IPEA/416. Notification Of Transmittal Of The International Preliminary Examination Report.**
15. ☐ **Forma PCT/IPEA/409. Informe Del Examen Preliminar Internacional.**
16. ☐ **Traducción Al Español Del Informe Del Examen Preliminar Internacional.**
17. ☐ **Traducción Al Español De Los Anexos Presentados Junto Con El Informe Del Examen Preliminar Internacional.**
18. ☒ **Extracto para la Publicación.**

CAVELIER
ABOGADOS
EDIFICIO SISKI
CARRERA 4a N° 72-35
BOGOTÁ, S - COLOMBIA

179 Representación y Poder con autenticación notarial y Apostille para patentes, modelos de utilidad, diseños industriales, marcas de fábrica, nombres comerciales, casacas, nombres de dominio, lemas comerciales, licencias.

Representation and Power-of Attorney with notarial authentication and Apostille for patents, utility models, industrial designs, trademarks, commercial names, trade emblems, domain names, slogans, licenses.

REPRESENTACION Y PODER

REPRESENTATION AND POWER-OF-ATTORNEY

Yo (nosotros), abajo firmado (s)/I (we), the undersigned

GUALA CLOSURES S.p.A.

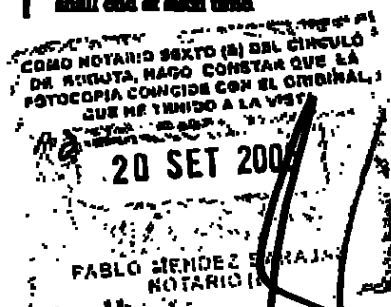
domiciliado (s) en/of Via San Giovanni Bosco 53/55

I-15100 ALESSANDRIA (Italy)

por el presente nombramos a EMILIO FERRERO, tpa. 31929; GONZALO PERDOMO, tpa. 831; LUZ CLEMENCIA DE PAEZ, tpa. 23555 y GERMAN CAVELIER, tpa. 832, domiciliados en la Carrera 4° N° 72-35, Bogotá, Colombia, en obediencia a lo dispuesto en el parágrafo 1o del Artículo 543 del Código de Comercio, el primero como principal y los demás como suplentes, en su orden, como nros (nuestras) representantes en todos los asuntos de propiedad industrial con facultad para recibir notificaciones y nombrar apoderados judiciales o extrajudiciales. El primer representante suplente reemplazará al principal en caso de ausencia o impedimento temporal o definitivo de aquél. La misma regla se aplicará cuando el segundo representante suplente haya de reemplazar al primero, o el tercero al segundo. En tales casos, el representante principal, o el primero, o segundo suplente, en su caso, o ambos, declararán su intención de no ejercer la representación mediante declaración autenticada por Notario Público en Colombia, o por Notario u otro Funcionario Público, o Cónsul de Colombia, en el extranjero; y si se tratare de impedimento, con el certificado respectivo. Si alguno de los nombrados faltare definitivamente, el siguiente tomará su lugar. Cuando cesare la ausencia o impedimento del representante principal, o de su primero o segundo suplente, en su caso, podrán ejercer la representación, en su orden, uno u otros según el caso, asumiéndola por el solo hecho de ejercerla, cesando en ese momento el ejercicio de la representación por el primero, segundo o tercer suplente en su caso.

In due compliance with the terms of paragraph 1st. of article 543 of the Commercial Code, do hereby appoint EMILIO FERRERO, tpa. 31929; GONZALO PERDOMO, tpa. 831; LUZ CLEMENCIA DE PAEZ, tpa. 23555 and GERMAN CAVELIER, tpa. 832, domiciled at Carrera 4° N° 72-35, Bogotá, Colombia, the first as principal and the others as alternates, in the order of their appointment, as our representatives for all industrial property matters with faculty to receive notifications and to appoint attorneys in and out of Court. The first alternate shall replace the principal in case of his absence or of temporal or definitive impediment. The same rule will apply when the second alternate representative is to replace the first one, or when the third is to replace the first or second alternates in their turn, or both of them, second. In such cases, the principal representative, or the first or second alternates in their turn, or both of them, shall state their intention not to act as representatives through a declaration given before a Notary Public in Colombia, or before a Notary or another Public Official or a Colombian Consular agent; and in case of impediment, the appropriate certificate shall suffice. If any of the appointees were to be definitely absent, the following alternate shall take his place. When the absence or impediment of the principal representative, or of the first or second alternate in their turn ceases, the representation can be taken again in their sequence, by the principal, the first or second alternate depending on case, and the mere fact or its exercise will suffice. The exercise of the representation by the first, second or third alternates in their turn shall end at such time.

CAVELIER ABOGADOS
WFFODE01-179 (MINUTA 12.1 1 2 5)



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COMO NOTARIO PUBLICO (E) DEL CIRCULO
DE LIMA, HAGO CONSTAR QUE LA
FOTOCOPIA COINCIDE CON EL ORIGINAL
QUE ME TENIAN A LA VISTA
20 SET 2005
FOLIO 10 DE 10
NOTA



Además, confiero (confirimos) poder a los abogados arriba nombrados, para obtener la protección de mi (nuestra) propiedad industrial y contra la competencia desleal, a cuyo efecto autorizo (amos) a los dichos apoderados para que me (nos) representen ante cualesquiera entidades o personas, ejerzan o no jurisdicción, especialmente ante las del orden administrativo, contencioso administrativo y judicial, así como los tribunales de arbitramento, en todo lo concerniente a los siguientes asuntos: a) Obtención de patentes de invención, modelos de utilidad, y diseños industriales; el registro de marcas de fábrica, colectivas, defensivas, de servicio, lemas comerciales, nombres comerciales, marcas, nombres de dominio, variedades vegetales y denominaciones de origen; su renovación, traspaso, cambio de nombre o domicilio, cancelación voluntaria; y el registro de licencias de uso de esos derechos; b) Las acciones de competencia desleal, protección del consumidor, oposiciones u observaciones, cancelación administrativa y judicial, nulidad, medidas cautelares, concesión de licencias, la tutela, la protección de secretos industriales, y en general los juicios civiles, penales, administrativos o contencioso administrativos relacionados con estos derechos; acciones y procesos que promovamos o se nos promuevan. Y para que en todos los asuntos arriba determinados, puedan sustituir este mandato, transigir, conciliar, admitir los hechos del proceso, desistír, cancelar, recibir, renunciar, y ratificar los actos de agentes oficiales.

In addition, we grant a Power of Attorney in favor of the above named attorneys at law so that they may obtain the protection of my (our) industrial property and against the unfair competition, for which purpose I (we) authorize the said attorneys to represent me (us) before any authorities or persons, with or without jurisdiction, specially those administrative, administrative contentious and judicial, as well as before Arbitration Court, in all matters concerning the following: a) Obtainment of patents, utility models and industrial designs; the registration of trademarks, collective, defensive and service marks, slogans, commercial names, trade emblems, domain names, vegetal varieties and denominations of origin; its renewal, assignment, change of name or domicile, voluntary cancellation; and the registration of licenses of use of the above rights; b) Actions of unfair competition, protection to the consumer, oppositions or observations, administrative or Court cancellation, nullity, infringement, granting of licenses, the action for writ mandamus, the protection of trade secrets, and in general the civil, penal, and administrative suits relating to those rights; actions and suits instituted by me (us) or against me (us). And that in all the above matters they may substitute this Power of Attorney, compromise, conciliate, admit the facts of the case, desist, cancel, receive, resign, and ratify acts done by representatives without a power of attorney.

Dado y firmado hoy/Given and signed this _____
en/in _____
por/by _____

Firma
Rero [Signature]

Signature

COMPROBANTE DE RECIBO DEL CIRCULO
DE BOGOTÁ MERO CONTESTAR LA
FOTOCOPIA QUE JACIDE CON EL ORIGINAL
SE ENTENDIÓ A LA VISTA
20 SET 2005
ABLAO MENHUEZ BARAJAS
NOTARIO (C)



AUTENTICACION NOTARIAL (SOCIEDAD)

El infrascrito Notario Certifica: Que la firma que antecede de
PIERO BATTEGAZZORE

es autentica; que el signatario desempeña actualmente el cargo
de RESPONSABILE MARCA E RAPPRESENTANTE

de la compañía GUALA CLOSURES S.p.A.

sociedad que actualmente existe y está organizada de acuerdo a
las leyes del ITALIA

que la dirección de dicha compañía es
Via San Giovanni Bosco, 53/55
I-15100 Alessandria
Italy

y que el signatario tiene facultad para otorgar este documento.

Todos los hechos anteriores le constan por haber examinado
los documentos respectivos y de todo ello da fe.

Dado y firmado en ALESSANDRIA

El 21-07-2005

NOTARIAL AUTHENTICATION (COMPANY)

The undersigned Notary certifies: That the preceding signature
of

PIERO BATTEGAZZORE

is authentic, that the signatory currently acts in the position
of RESPONSABILE MARCA E RAPPRESENTANTE

of the company GUALA CLOSURES S.p.A.

a company currently existing and organized under the laws of
ITALIA

that the address is
Via San Giovanni Bosco, 53/55
I-15100 Alessandria
Italy

and that the signatory has the power to grant this document.

The Notary Public is aware and attests to the above facts upon
examination of the corresponding documents.

Given and signed in ALESSANDRIA

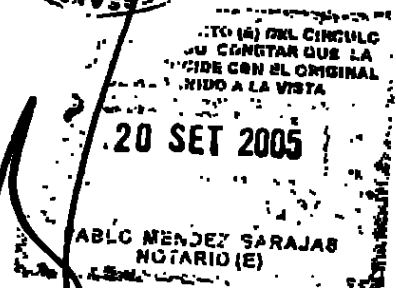
On 21-07-2005



LUCIANO MARIANO NOTAIO IN ALESSANDRIA

El Notario Público - The Notary Public
(Firma-sello) (Signature-seal)

Luciano Mariano



CAVELIER ABOGADOS
WTF0001-179 (MINUTA 121125)

APOSTILLE

[Convention de la Haje du 5 ottobre 1961]

REPUBBLICA ITALIANA

Il presente atto Autentico di Firma

In data 21-07-05 è stato sottoscritto da An.

Luciano Mariani agente in qualità di Notaio

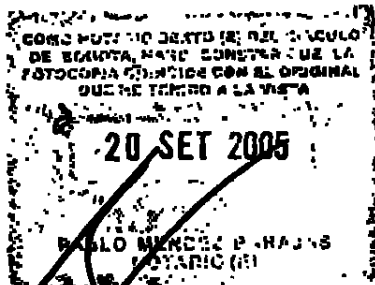
Alessandria è segnato dal rimbros del Notaio stesso.

ATTESTATO

Il Sost. Procuratore della Repubblica
(Dott.ssa Patrizia Nobile)
ad Alessandria il 22-07-05 da _____

Procuratore della Repubblica di Alessandria, sotto il n. 182

Il Sost. Procuratore della Repubblica
(Dott.ssa Patrizia Nobile)



2

TRADUCCIÓN OFICIAL N. 2031-IX, correspondiente a la apostilla que aparece en el documento de representación y poder otorgado por GUALA CLOSURES S.p.A., domiciliado en Via san Giovanni Bosco 53/55 I-15100 ALESSANDRIA (Italia); a Emilio Ferrero, tpa. 31929; Gonzalo Perdomo, tpa. 831; Luz Clemencia de Páez, tpa. 23555 y Germán Cavellier, tpa. 832; y; realizada por SANDRA MÓNICA BARRIGA BALMA traductora Oficial para los idiomas Español – Italiano - Español, RES. No. 735 del 20 de SEPTIEMBRE DE 2001 DEL MINISTERIO DEL INTERIOR Y DE JUSTICIA.

APOSTILLA

(Convención de la Haya del 05 de Octubre de 1961)

REPÚBLICA ITALIANA

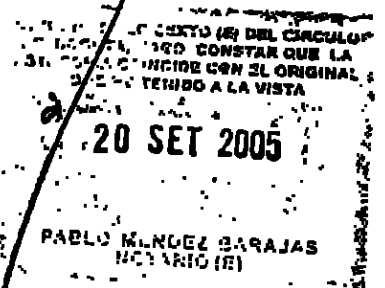
EL PRESENTE ACTO DE AUTENTICACIÓN DE FIRMA
DE FECHA 21-07-05, FUE SUSCRITO POR EL ABOGADO LUCIANO MARIANO
ACTUANDO EN CALIDAD DE NOTARIO EN ALESSANDRIA
Y ESTÁ MARCADO CON EL SELLO DEL MISMO NOTARIO.

CERTIFICADO

EN ALESSANDRIA, EL 22-07-05
POR EL PROCURADOR DE LA REPÚBLICA SUST. – DRA. PATRIZIA NOBILE
PROCURADOR DE LA REPÚBLICA DE ALESSANDRIA,
BAJO EL NÚMERO 182.

FIRMADO POR EL PROCURADOR DE LA REPÚBLICA SUST., DRA. PATRIZIA
NOBILE

SELLO REDONDO DE LA PROCURADURÍA DE LA REPÚBLICA EN EL
TRIBUNAL DE ALESSANDRIA.



NO SE ASUME
RESPONSABILIDAD DEL TEXTO

MINISTERIO DE RELACIONES
EXTERIORES

2005 SEP 19 P 12:20

mas
JEFE DE LEGALIZACIONES
SANTAFE DE BOGOTA D.C.

160361
Sandra Barmy
CUYA FIRMA APARECE EN EL
DOCUMENTO DESEMPEÑA
LAS FUNCIONES INDICADAS

INSTRUMENTO
NOTARIAL
CON EL ORIGINAL
CONCORDA A LA VISTA
20 SET 2005
FABLO MENDEZ EARRAJAS
NOTARIO (F)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 September 2004 (16.09.2004)

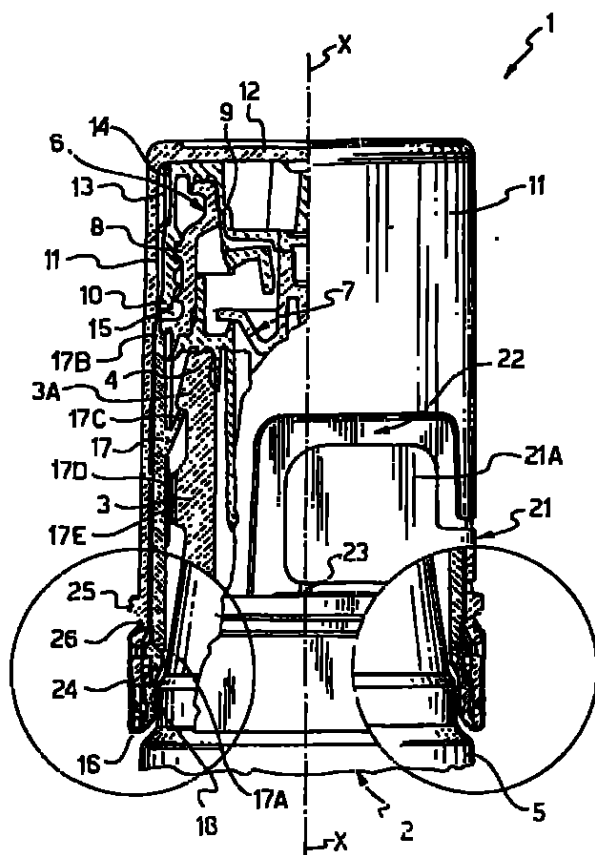
PCT

(10) International Publication Number
WO 2004/078612 A1

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- (25) Filing Language: Italian
- (26) Publication Language: English
- (71) Applicant (for all designated States except US): GUALA CLOSURES, S.P.A. [IT/IT]: Via San Giovanni Bosco, 53/55, I-15100 Alessandria (IT).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): BATTEGAZZORE, Piero [IT/IT]: Via Galileo Galilei, 74, I-15100 Alessandria (IT).
- (74) Agents: PERANI, Aurelio et al.; c/o Perani Mezzanotte & Partners, Piazza San Babila, 5, I-20122 Milano (IT).
- (81) Designated States (national): AE, AG, AI, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report

[Continued on next page]

(54) Title: TAMPER EVIDENT CLOSURE FOR BOTTLES, PARTICULARLY FOR BOTTLES CONTAINING VALUABLE DRINKS



(57) Abstract: The invention relates to a tamper evident closure for a bottle, particularly a bottle suitable for containing valuable drinks, having a neck (5, 34, 54) which extends axially along the longitudinal axis (X-X) from the body of the bottle (2, 31, 51), the neck (5, 34, 54) has an opening (7, 33, 56) at its free end and the closure comprises means of a threaded connection to a pouring device (6, 38, 55), the pouring device (6, 38, 55) is connected to a sleeve (17, 47, 65) arranged axially along the outer surface of said neck (5, 34, 54) having the characteristic of comprising annular means (18, 45, 70) arranged between the base of said neck (5, 34, 54) and the lower end of the sleeve (17A, 47B, 65B) and being connected by means of breakable connecting means (46, 64, 82) to said sleeve (17, 47, 65), the annular means (18, 45, 70) and said lower end (17A, 47B, 65B) of said sleeve (17, 47, 65) having respective surfaces (11A, 18E, 47C, 45I, 65C, 70D) facing towards each other and at least one of said facing surfaces (11A, 18E, 47C, 45I, 65C, 70D) of said annular means (18, 45, 70) and of said lower end (17A, 47B, 65B) being inclined relative to the longitudinal axis (X-X) of the neck (5, 34, 54), so that as a result of an axial movement of said annular means (18, 45, 70) towards said opening in said neck (5, 34, 54), breakage of said breakable means (46, 64, 82) occurs and consequent radial movement of at least one circumferential zone of said annular means (18, 45, 70).

WO 2004/078612 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Title: "Tamper evident closure for bottles, particularly for bottles containing valuable drinks"

The invention relates to a tamper evident closure
5 for a bottle suitable for containing valuable drinks in accordance with the preamble to claim 1.

There are known closures for bottles which give a visible indication of attempts to remove them forcibly for fraudulent reasons.

10 These closure devices are designed to prevent the original drink contained in the bottle from being replaced with another counterfeit drink.

To commit the fraud, the operations carried out by the counterfeiters consist, for example, in recovering
15 an empty bottle already used, fitted with the relevant closure with the seal broken, but with the internal valve components intact, refilling it with an equivalent but low-value drink and re-closing the bottle by reconstructing the seal.

20 In other cases, it has been found that to defraud the customer, attempts are sometimes made to remove the closure from the bottle without opening the closure itself so that the valuable product contained in the bottle can be replaced with another product of lesser
25 value.

In consideration of the points mentioned above, the purpose of the invention is to propose a closure for bottles which has still more effective tamper evident means compared with those offered by known
30 closures and which make the action of tampering as evident as possible and in an irreversible manner.

According to the invention, this purpose is achieved by means of a tamper evident closure for bottles, particularly for bottles containing valuable drinks according to the characterizing part of claim 1.

5 By means of the invention it is possible to produce a closure capable of giving an immediately visible indication of any attempt to break into the bottle where an attempt is made to remove or prize off the closure device.

10 The characteristics and advantages of the invention will become clear from the following detailed description of several forms of practical embodiment, illustrated purely by way of non-limiting example in the appended drawings, in which:

15 figure 1A shows a front view of a first form of embodiment, partly in section, of a closure for bottles according to the invention;

figure 1B shows a view at an enlarged scale of a first portion of the closure in figure 1A;

20 figure 1C shows a view at an enlarged scale of another portion of the closure in figure 1A;

figure 1D shows a perspective view of a component of the closure in figure 1A;

25 figure 2A shows a front view of a second form of embodiment, partly in section, of a closure for bottles according to the invention;

figure 2B shows a view at an enlarged scale of a portion of the closure in figure 2A;

30 figure 3A shows a front view of a third form of embodiment, partly in section, of a closure for bottles according to the invention;

figure 3B shows a view at an enlarged scale of a portion of the closure in figure 3A;

figure 4A shows a front view of a fourth form of embodiment, partly in section, of a closure for bottles
5 according to the invention;

figure 4B shows a view at an enlarged scale of a portion of the closure in figure 4A.

With reference to figures 1A-1D, the closure according to the invention is indicated by the number
10 1, while the bottle, the upper part only of which is shown, is indicated by the number 2.

The bottle 2, conventional in itself, comprises a neck 3, of substantially cylindrical shape and having a mouth 4 and a body 5 connected externally to the neck
15 3.

The closure 1 comprises a pouring unit 6 of known type and which will therefore not be described below in detail, but only in its basic parts.

In particular, the pouring unit 6 comprises
20 mechanisms 7, for example ball valve mechanisms, which are inserted inside the neck 3 of the bottle 2 so as to prevent fraudulent refilling of the bottle 2.

Above the valve means 7 is fitted the actual pourer body 8. Connected to this pourer body 8 by a
25 screw thread is a stopper 10 which encloses it externally and which performs the functions of a stopper 10 with its position 9 transverse to the axis X-X of the closure. All the components of the pouring unit 8 are integral with each other and advantageously
30 this pouring unit 8 is locked to the body 3 of the bottle 2 both axially and in rotation in a manner well

known to a person skilled in the art.

A tubular outer cap 11 is fitted above the stopper 10.

The cap 11 is made of plastics material, for example, and completely covers the stopper 10, and also the transverse portion 9 of this with the upper wall 12.

At said upper wall 12 of the cap 11, the stopper 10 and the cap 11 are locked in rotation by means of two respective knurled portions 13 and 14, one engaging in the other.

Moreover, still at the upper wall 12 of the cap 11, the stopper 10 and the cap 11 are locked axially by means of an internal annular projection 15 of the cap 11 which abuts against the lower part of the stopper 10.

Between the upper wall 12 and the lower end 16 of the cap 11 is fitted a breakable intermediate annular band 21.

This annular band 21 comprises a segment in the form of a tab 21A, which is accommodated in a cut away area 22 in the body of the cap 11.

The annular band 21 is connected to the lower portion 16 of the cap 11 solely by means of the bridging pieces 23.

Provision is also made for a metal band 24 to enclose the cap 11 tightly at the breakable annular band 21. To anchor the metal band 24 firmly to the cap 11, an annular projection 25 is provided and an annular depression made in the cap, and the metal band 24 is moulded to these in its upper part.

Locked to the pouring unit 8 is a sleeve 17 of tubular shape which externally encloses the neck 3 of the bottle 2.

At the bottom, the metal band 24 is wrapped internally around the lower end of the cap 11 and of the sleeve 17. This metal band 24 may be applied to the cap 11 by rolling.

The sleeve 17 has a portion 17B rigidly connected to the pourer 8 and a free end 17A facing towards the collar 18; moreover, the sleeve 17 has a projecting portion 17C which is seated in a groove 3A in the neck 3, so as to provide firm locking of the sleeve 17 axially and a pair of knurled areas 17D and 17E, one engaging in the other so as to lock the sleeve 17 in rotation.

The collar 18 is made integral in rotation with the cap 11 by means of annular knurled areas 19 and 20, one engaging in the other.

Therefore, in the present form of embodiment, the collar 18 is located at the bottom between the base of neck 3 of the bottle 2 and the free end part 17A of the sleeve 17.

In other words, the collar 18 is located in an axial direction, or parallel to the axis X-X, between the base of the neck of the bottle 2 and the end part of the sleeve 17, and in a longitudinal direction, or transversely to the axis X-X, between the outer cap 11 and the neck 3 of the bottle 2.

Moreover, axially, the collar 18 has a portion 18M of surface placed on top of the free end part 17A of the collar 17.

Because the metal band 24 and sleeve 17 are connected to each other, the result is that the collar 18 is firmly anchored to the sleeve 17 and therefore to the bottle 2.

5 Therefore the collar 18 is held in position by the cap 11, which secures said collar 18 against the free portion 17A of the sleeve 17.

In short, the cap 11 and the metal band 24 act as connecting means between the collar 18 and the sleeve
10 17.

With particular reference now to figure 1D, it may be noted how this collar 18 is made in the form of a ring, in particular a truncated cone-shaped ring.

In fact, this truncated cone-shaped ring 18 has an
15 inner surface 18A and an outer surface 18B, and said inner surface 18A has a first cylindrical zone 18C and a second cylindrical zone 18D, the latter concentric with the first and a third cylindrical zone 18I; said second cylindrical zone 18D has a smaller radius of
20 circumference compared with the first cylindrical zone 18C, while said third cylindrical zone 18I has a radius of intermediate value compared with said first cylindrical zone 18C and said second cylindrical zone 18D.

25 The first cylindrical zone 18C and the second cylindrical zone 18D are connected to each other by means of a first inclined plane 18E so as to create a slope for purposes and requirements which will be described in more detail below. Similarly, said second
30 cylindrical zone 18E is connected to said third cylindrical zone 18I by means of a second inclined

plane 18L.

Said first inclined plane 18E and second inclined plane 18L are angled relative to the axis X-X of the neck 3 of the bottle 2 at a predefined angle.

5 For example this angle may assume angular values of between 30° and 60°.

In fact, as can be seen from figures 1B and 1C, at the planes 18E, 18D and 18L the collar 18 assumes a trapezoidal cross-section.

10 Provision is also made for the free lower portion 17A of the sleeve 17 to have an inclined plane while the collar 18 has instead a plane substantially transverse to the axis X-X of the neck of the bottle. Alternatively, the free lower end of the sleeve 17A and
15 the collar 18 both have an inclined plane.

Referring once more to figure 1D, it will be noted that said inclined plane 18E has indicating means 18F which, in the specific form of embodiment, are in the form of a tooth having a flat upper surface 18G.

20 This tooth 18F faces towards the free portion 17A of the sleeve 17, or this tooth 18F abuts against the free end 17 of the sleeve 17.

The outer surface 18B provides indicating means 18H, which in the specific form of embodiment, are in
25 the form of a projection; this projection is useful in the operations of fitting the collar 18 in that ensures correct centring of the ring relative to the rest of the closure device 1.

When an attempt is made to remove the closure 1
30 fraudulently with tools which can be inserted between the base of the neck of the bottle and the lower

portion 16, such tools, for example a screwdriver, exert a thrust from the bottom upwards, or a thrust acting towards the mouth 4 of the neck 3 of the bottle 2.

5 The tools therefore impart a substantially axial movement to the closure 1.

Consequently, under the action of such tools, the collar 18 moves up onto the free end 17A of the sleeve 17, through the combined action of the tooth 18F
10 (figure 1D) and the ramp 18E.

In fact, the tooth 18F abuts against the free portion 17A of the sleeve 17 and therefore functions as a fulcrum for the ring 18, while the ramp 18E acts as a slope assisting in unseating the ring 18 with respect
15 to the sleeve 17.

In this way, the ring 18 partly moves up onto the sleeve 17.

In the present form of embodiment, where the cap 11 is present, this will be broken or visibly damaged
20 by the ring 18 which, being on top of the sleeve 17, acts as a wedge opening out the cap 11 until it breaks.

In this form of embodiment, the metal band 24 will also be broken by the wedge action applied by the ring 18.

25 In other words, the connection which is created between the ring 18, provided with the tooth 18F with a flat surface 18G, and the sleeve 17, causes the ring to move away from the centre once it is subjected to a thrust acting from the bottom upwards.

30 Moreover, the inclined ramp 18E assists the ring 18 in moving up onto the free portion 17A of the sleeve

17, so as to cause the cap 11 and the metal band 24 to break.

In fact, it should be noted, advantageously, that the sleeve 17 is produced from plastics materials having suitable deformation at the loads to which it is subjected, while the collar 18 is produced from plastics materials having a mechanical strength lower than that of the plastics materials of the sleeve 17.

In this way, by means of the invention, the user/purchaser will have an immediate visual indication of any attempt to tamper with the closure device.

Moreover, there is also the advantage that the closure 1 is even more difficult to reconstruct than known closures, since the cap 11 is split and reconstructing it would be impossible or at least more difficult and costly compared with reconstructing the tamper evident ring of closures known in the sector.

Referring to figure 2A, the number 30 indicates the closure according to the invention, while the bottle, the upper part only of which is shown, is indicated by the number 31.

The bottle 31, conventional in itself, comprises a neck 32 of substantially cylindrical shape and having a mouth 33 and a body 34 connected externally to the neck 32.

The closure 30 comprises a pouring unit 35 of known type and which will therefore not be described below in detail, but only in its basic parts as required for understanding the invention.

In particular, the pouring unit 35 comprises mechanisms 36, for example ball valve mechanisms, which

are positioned inside the neck 32 of the bottle 31 so as to prevent it from being fraudulently refilled.

The actual pourer body 37 is fitted above the valve means.

5 All the components of the pouring unit 35 are integral with each other and advantageously this pouring unit 35 is locked to the neck 32 of the bottle 31 both axially and in rotation in a manner well known to a person skilled in the art.

10 Screwed onto the body of the pourer 37, by means of a screw connection 38, is a stopper 40 the closure end wall of which is indicated by the number 39.

The lower portion 44 of the closure 30 has an annular band 45.

15 This annular band 45 in the upper portion 45A is connected to the pourer body 37 solely via an annular projection 46.

Locked to the pourer body 37 is a sleeve 47 of tubular shape which externally encloses the neck 32 of the bottle 31.

20 The sleeve 47 has a portion 47A rigidly connected to the pourer 37 and a free end 47B facing towards the base of the neck 32 of the bottle 31. In the present form of embodiment, this free end has a flat surface 47C substantially transverse to the axis X-X.

The sleeve 47 is locked in rotation to the neck 32 by means of annular knurled areas 48A and 48B, one engaging in the other, and is locked axially to the neck 32 of the bottle 31 by means of a groove 48C present in the neck 32 of the bottle 31.

30 With particular reference now to figure 2B, it

will be noted that the annular band 45 has on its end portion 45B an inner surface 45C and an outer surface 45D. This inner surface 45C has a first cylindrical zone 45E and a second cylindrical zone 45F, the latter
5 concentric with the first, and also a third cylindrical zone 45G. Said second cylindrical zone 45F has a smaller radius compared with that of the first cylindrical zone 45E and said third cylindrical zone 45G has a radius of intermediate value between that of
10 said first cylindrical zone 45E and that of the second cylindrical zone 45F.

The first cylindrical zone 45E and the second cylindrical zone 45F are connected to each other by means of a first inclined plane 45H so as to create a
15 slope, just as said second cylindrical zone 45F is connected to said third cylindrical zone 45G by means of a second inclined plane 45I.

Said first inclined plane 45H and second inclined plane 45I are placed at a predefined angle relative to
20 the axis X-X of the neck 32.

For example, this angle may assume values of between 30° and 60°.

Provision is also made for the free lower portion 47B of the sleeve 47 to have an inclined plane while
25 the annular band 45 may instead have a plane substantially transverse to the axis X-X of the neck 32 of the bottle 31.

Alternatively, the free lower end of the sleeve 47B and of the annular band 45 both have an inclined plane.

The sleeve 47 is therefore located axially, or
5 parallel to the axis X-X, between the base of the neck of the bottle 31 and the inclined plane 45H of the end part 45B of the annular band 45 while in a radial direction, or transversely to the axis X-X, it is located between the annular band 45 and the neck 32 of
10 the bottle 31.

When an attempt is made to remove the closure 30 from the neck of the bottle fraudulently with tools which can be inserted between the base of the neck of the bottle and the lower portion 44, such tools, for
15 example a screwdriver, exert a thrust from the bottom upwards, or a thrust directed towards the mouth 33 of the neck 32 of the bottle 31.

The tools therefore impart to the closure 30 a substantially axial movement and therefore under the
20 action of such tools, the annular band 45 moves up onto the free end 47B of the sleeve 47, by means of the inclined plane 45H, which causes radial movement of the band.

In the present form of embodiment, the annular
25 connection 46 of the annular band 45 will be broken and also the annular band itself will be broken or visibly damaged.

In this way, by means of the invention, the user/purchaser will have an immediate visual indication
30 of any attempt to tamper with the closure device.

Moreover, there is also the advantage that the

closure 30 is even more difficult to reconstruct than known closures, since the annular band 45 remains split and reconstructing it would be impossible or at least more difficult and costly compared with reconstructing the tamper evident ring of previous closures.

Now, considering in particular the form of embodiment shown in figures 3A-3B, it will be noted that the closure according to the invention, indicated as a whole by the number 50, is placed on a bottle, only the upper part 51 of which is shown, having a neck 52, of substantially cylindrical shape. The bottle has a mouth 53 and a base area 54 of the neck 52.

The closure 50 also comprises a pouring unit 55 of known type and which will therefore not be described below in detail, but only in its basic parts.

In particular, the pouring unit 55 comprises valve components 56 of the ball type, inserted inside the neck 52 so as to prevent fraudulent refilling of the bottle 51.

The actual pourer body 57 is fitted above the valve means 56. Connected to this pourer body 57, by threaded means, known in themselves, is a stopper 58. All the components of the pouring unit 55 are integral with each other and advantageously the pourer body 57 is locked to the neck 52 of the bottle 51 both axially and in rotation in a manner well known to a person skilled in the art.

A cap 59, produced for example from plastics material, entirely covers the stopper 58.

At its transverse wall 60, the cap 59 and the stopper 58 are locked in rotation by means of

respective knurled portions 61, one engaging in the other, known in themselves.

Moreover, still at the upper wall 60 of the cap 59, the stopper 58 and the cap 59 are locked axially by means of internal annular projections 62, known in themselves.

The closure 50 also has a lower portion 63 which comprises a tubular band 64 capable of tightly enclosing a sleeve 65 underneath it, the sleeve being of tubular shape, connected in a known manner to the pourer body 57.

The sleeve 65 externally encloses the neck 52 of the bottle 51 and is locked in rotation to the neck 52 by means of annular knurled areas 66 and 67 (figure 3B), one engaging in the other. The sleeve 65 is locked axially by means of an annular lip 68 which is seated in a groove 69 in the neck 52.

The sleeve 65 also has an upper portion 65A rigidly connected to the tubular band 64 and to the pourer body 57. A free end 65B faces towards anti-prizing means 70. In the present form of embodiment, this free end has a flat surface 65C placed substantially in a position transversely to the axis X-X.

The tubular band 64 is therefore anchored to the sleeve 65 by means of a first fold 64A made at the upper end of the band 64.

This fold 64A is obtained, for example, by means of a rolling operation.

The tubular band 64, preferably of metal sheet, is folded at the bottom over the lower end of said anti-

prizing means 70 by means of a second fold 64B.

In the present form of embodiment, too, the anti-prizing means 70 are positioned at the bottom between the base of the neck 52 of the bottle 51 and the end
5 portion 65B of the sleeve 65.

These anti-prizing means 70 are made in the form of a ring and have an inner surface 70A and an outer surface 70B, where said inner surface 70A has a cylindrical zone 70C connected to the upper end of the
10 anti-prizing means 70 by means of an inclined plane 70D, so as to create an inclined plane for purposes and requirements which will be described in more detail below.

The inclined plane 70D is positioned at a
15 predefined angle relative to the axis X-X of the neck 52 of the bottle 51.

For example, this angle may assume values of between 30° and 60°.

When an attempt is made to remove the closure 50
20 fraudulently with tools which can be inserted at the base of the neck of the bottle, under the fold 64B of the band 64, such tools, for example a screwdriver, exert a thrust from the bottom upwards, or impart a substantially axial movement to the closure 50.

25 Therefore under the action of such tools, the anti-prizing means 70 move up onto the end portion 65B of the sleeve 65, owing to the presence of the inclined plane 70D.

In the present form of embodiment, where the
30 tubular band 64 is present, the latter will be broken or visibly damaged by the ring 70 which, once it is on

top of the sleeve 65, acts as a wedge opening out the sleeve 65 and the tubular band 64 until the latter breaks.

In this way, by means of the invention, the user/purchaser will have an immediate visual indication of any attempt to tamper with the closure.

Referring now to the form of embodiment shown in figures 4A-4B, in which the elements already described have been assigned identical numbers, it will be noted that the closure according to the invention is indicated as a whole by the number 80, while the bottle, the upper part only of which is shown, is indicated by the number 51.

The closure 80 is such that its lower portion 63 comprises a sleeve 65 of tubular shape, connected to the pourer body 57.

The sleeve 65 moreover externally encloses the neck 52 of the bottle 51.

The sleeve 65 is also locked in rotation to the neck 52 of the bottle 51 by means of the annular knurled areas 66 and 67, one engaging in the other, while it is locked axially by means of the annular lip 68 which is seated in the groove 69 in the neck 52.

The sleeve 65 has its upper portion 65A connected to the pourer body 57 and also has its free end 65B facing towards anti-prizing means 70.

It should be noted that in the present form of embodiment, the anti-prizing means 70 are located at the bottom between the base 54 of the neck 52 of the bottle 51 and the end portion 65B of the sleeve 65.

In this form of embodiment, too, the anti-prizing

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means 70 are made in the form of a ring and have the inner surface 70A and an outer surface 70B, where said inner surface 70A has a cylindrical zone 70C connected to the upper end of the anti-prizing means 70 by means
5 of an inclined plane 70D, so as to create a slope for purposes and requirements which will be described in more detail below.

The inclined plane 70D is positioned relative to the axis X-X of the neck 52 of the bottle 51 at a
10 predefined angle.

For example, this angle may assume values of between 30° and 60°.

It should be noted that in the present form of embodiment, the anti-prizing means 70 are located
15 axially, or parallel to the axis X-X, between the base 54 of the neck of the bottle and the end part of the sleeve 65.

In this form of embodiment, the anti-prizing means 70 are held in the position described above by
20 connecting elements 81, which function as connecting means between the sleeve 65 and the anti-prizing means 70. In particular, the connecting elements 81 may be spot welds or may be constituted by adhesive strips which are broken when the anti-prizing means 70 move up
25 onto the sleeve 65.

Therefore, when an attempt is made to remove the closure 80 fraudulently with tools which can be inserted between the base of the neck of the bottle, these tools, for example a screwdriver, exert a thrust
30 from the bottom upwards, or impart to the closure 80 a substantially axial movement. Consequently, under the

action of such tools, the anti-prizing means 70 move up onto the end portion 65B of the sleeve 65, owing to the presence of the inclined plane 70D.

In this way, by means of the invention, the
5 user/purchaser will have an immediate visual indication of any attempt to tamper with the closure device.

From what has been described, it is concluded that all closures produced in accordance with the invention are difficult to reconstruct since, after they have
10 been tampered with, there are visible breaks of many component parts.

Clearly, a person skilled in the art, for the purpose of meeting incidental and specific requirements, will be able to make numerous changes and
15 produce numerous variants to the closures described above, without thereby departing from the scope of the invention as defined in the following claims.

CLAIMS

1. A tamper evident closure for a bottle, particularly for a bottle suitable for containing valuable drinks,

5 - said bottle (2, 31, 51) having a neck (5, 34, 54) which extends axially along the longitudinal axis (X-X) of the bottle (2, 31, 51) from its base by which it is connected to the body of the bottle;

- said neck (5, 34, 54) having an opening (7, 33, 10 55) at its free end;

- said closure comprising means of stoppering (11, 39, 59) said opening of said neck (5, 34, 54) and being connected by means of a threaded connection to a pouring unit (6, 38, 55);

15 - said pouring unit (6, 38, 55) being connected to a sleeve (17, 47, 65) arranged axially along the outer surface of said neck (5, 34, 54);

characterised in that it also comprises:

- annular means (18, 45, 70) arranged between the 20 base of said neck (5, 34, 54) and the lower end of the sleeve (17A, 47B, 65B) and being connected by breakable connecting means (46, 64, 81) to said sleeve (17, 47, 65);

- said annular means (18, 45, 70) and said lower 25 end (17A, 47B, 65B) of said sleeve (17, 47, 65) having respective surfaces (11A, 18E; 47C, 45I; 65C, 70D) facing towards each other;

- at least one of said facing surfaces (11A, 18E; 47C, 45I; 65C, 70D) of said annular means (18, 45, 70) 30 and of said lower end (17A, 47B, 65B) being inclined relative to the longitudinal axis (X-X) of the neck (5,

34, 54), so that, as a result of an axial movement of said annular means (18, 45, 70) towards said opening in said neck (5, 34, 54), breakage of said breakable means (46, 64, 82) occurs and a consequent radial movement of
5 at least one circumferential zone of said annular means (18, 45, 70).

2. A tamper evident closure according to claim 1, characterised in that at least one of said surfaces (11A, 18E; 47C, 45I; 65C, 70D) is inclined relative to
10 the longitudinal axis (X-X) by angular values within a range of between 30° and 60°.

3. A tamper evident closure according to claim 1, characterised in that said breakable connecting means (46, 64, 81) are an annular band.

15 4. A tamper evident closure for bottles according to claim 1, characterised in that said breakable connecting means (46, 64, 81) are an adhesive.

5. A tamper evident closure for bottles according to claims 3 and 4, characterised in that said annular
20 means (18, 45, 70) have a trapezoidal cross-section.

6. A tamper evident closure for bottles according to claim 1, characterised in that said breakable connecting means (46, 64, 81) are an annular projection.

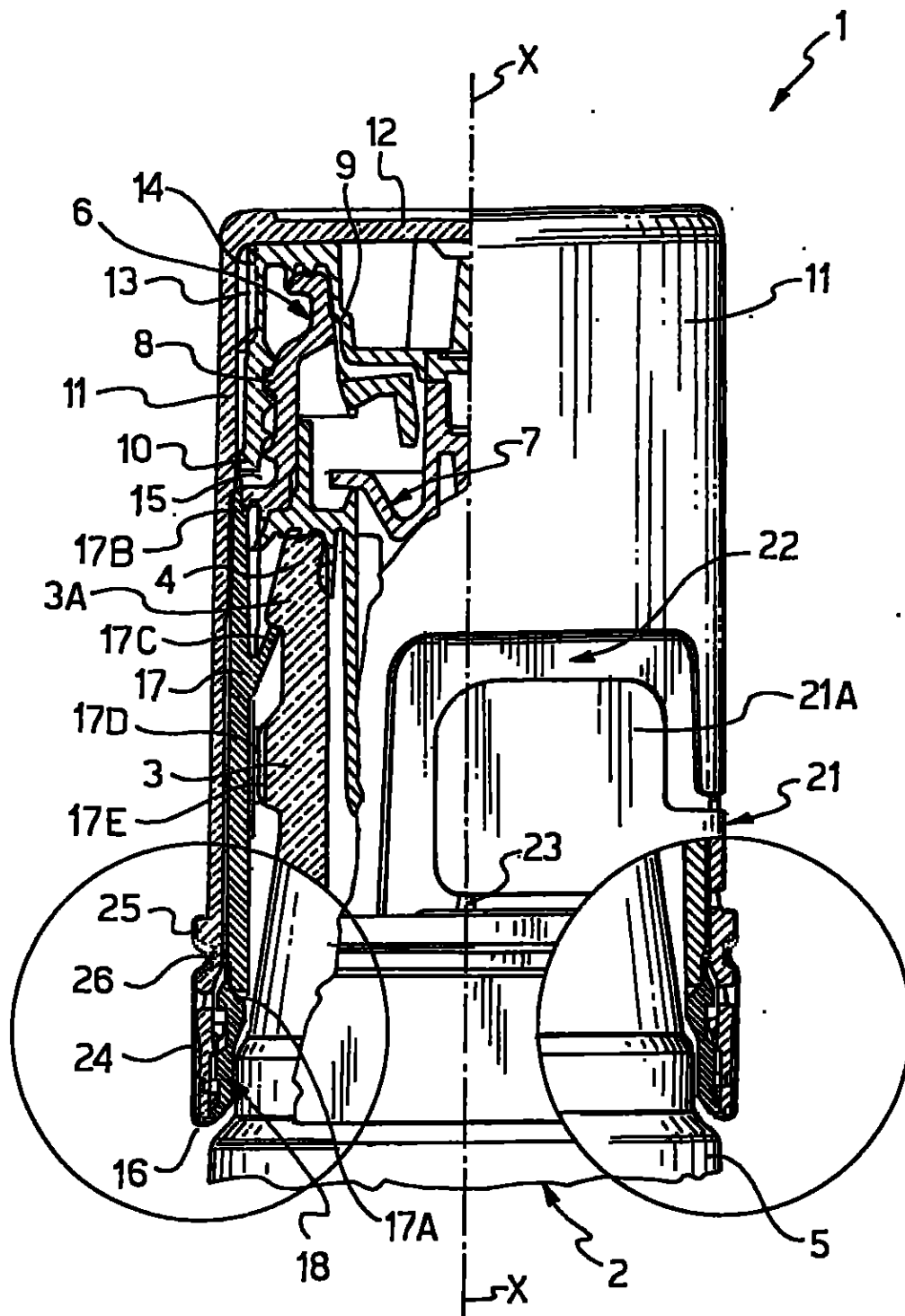
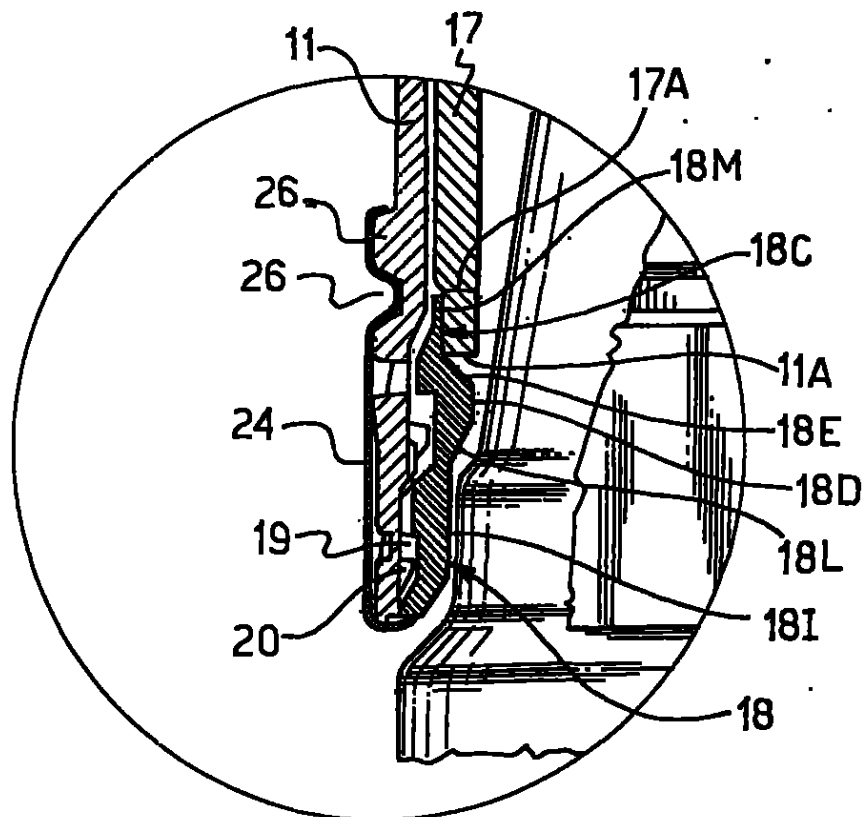
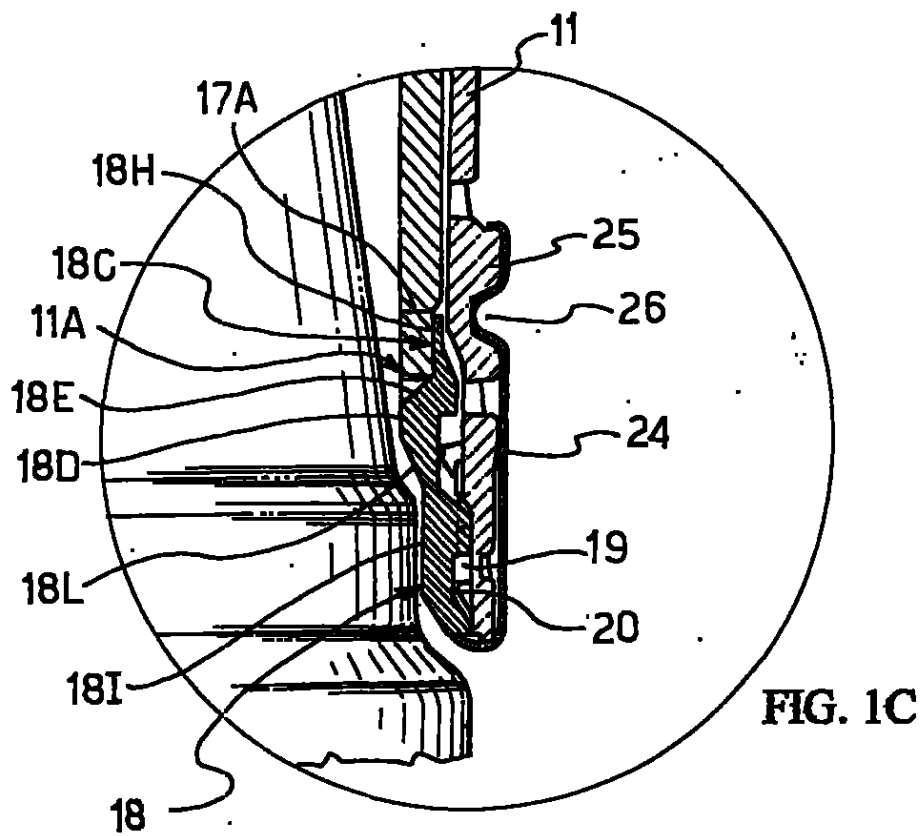


FIG. 1A

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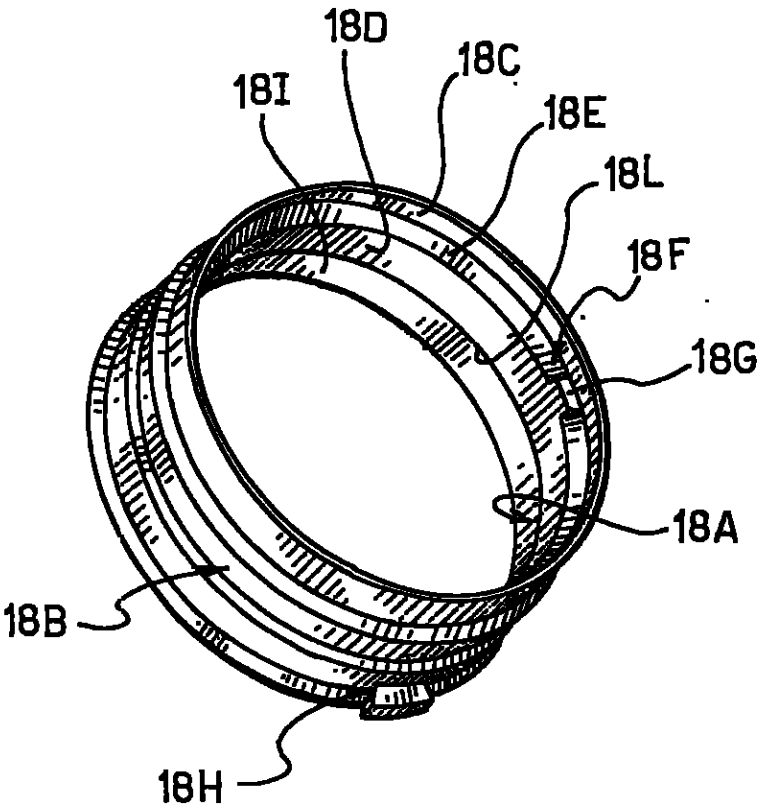


FIG. 1D

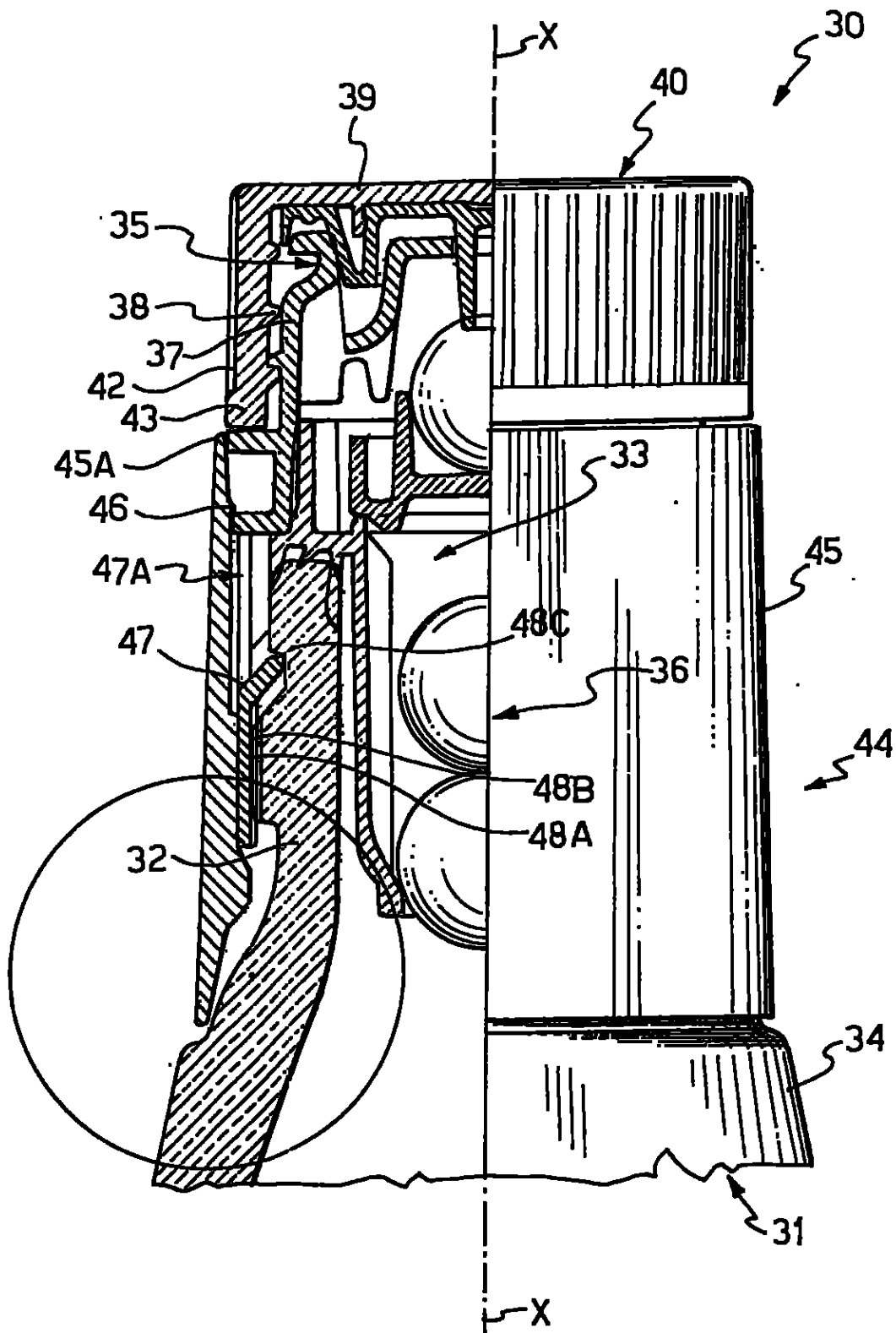


FIG. 2A

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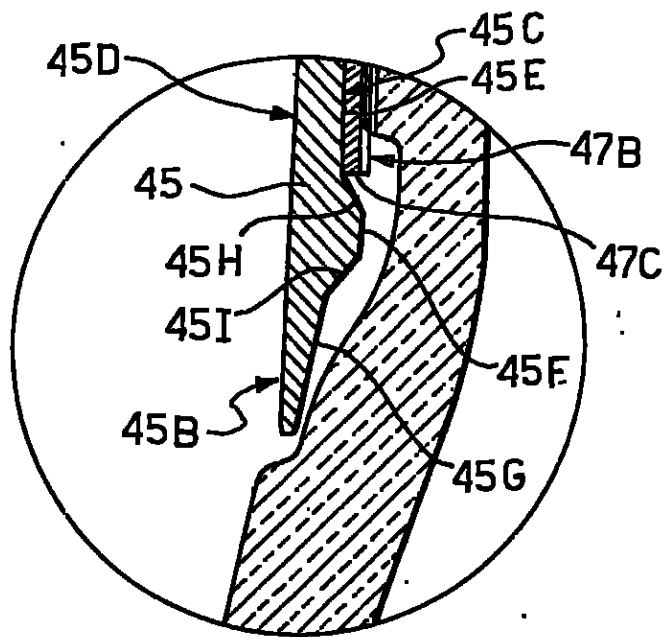


FIG. 2B

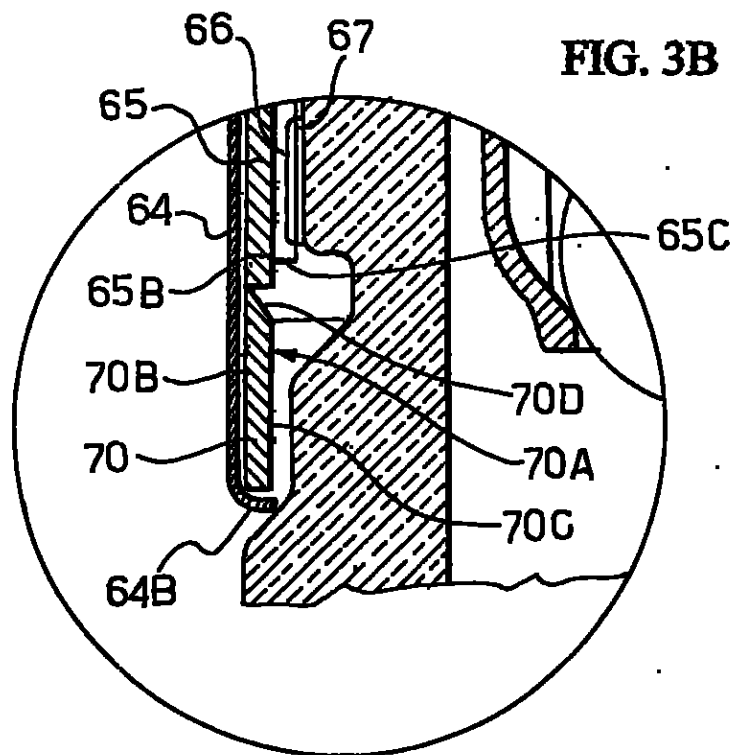


FIG. 3B

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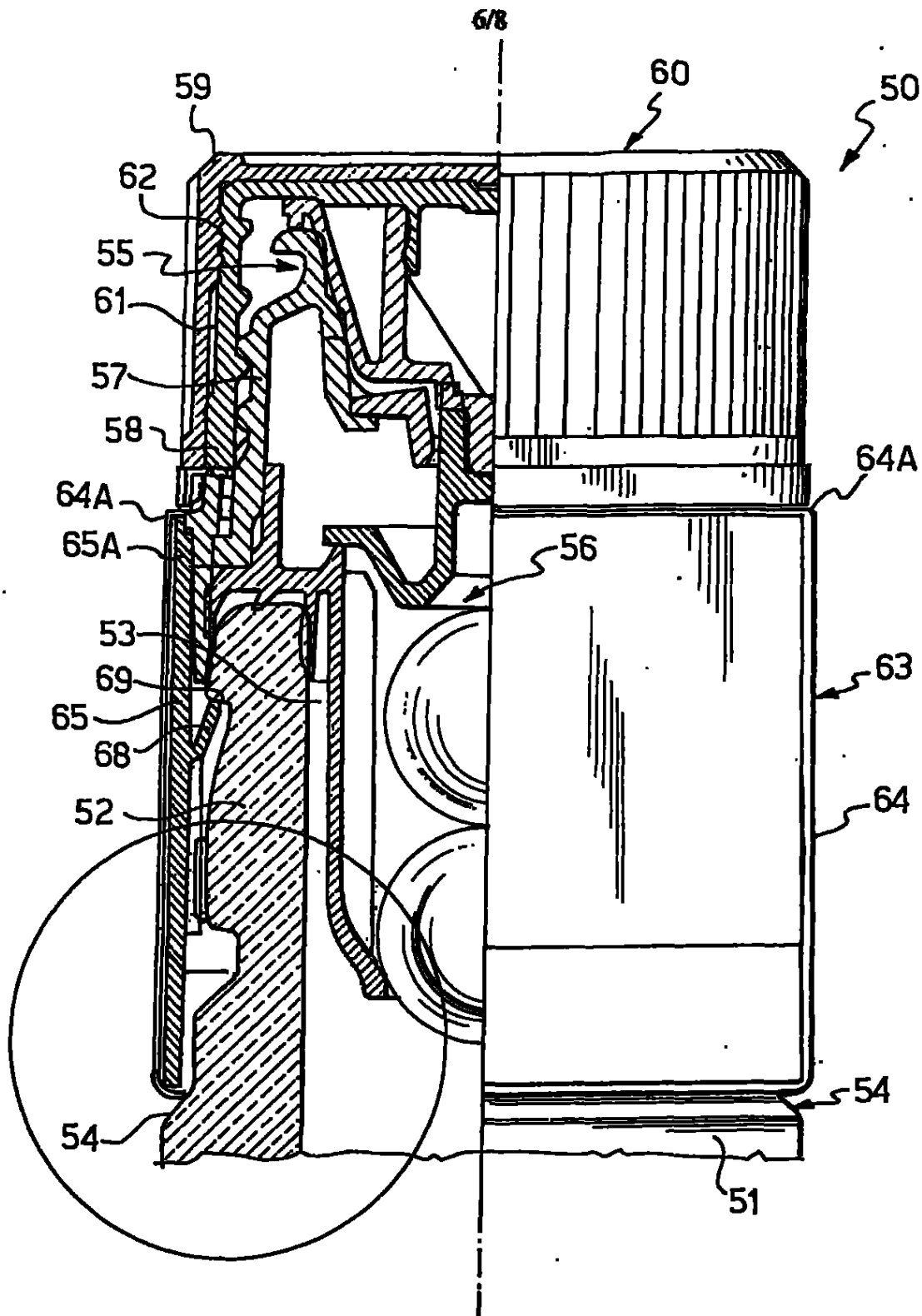


FIG. 3A

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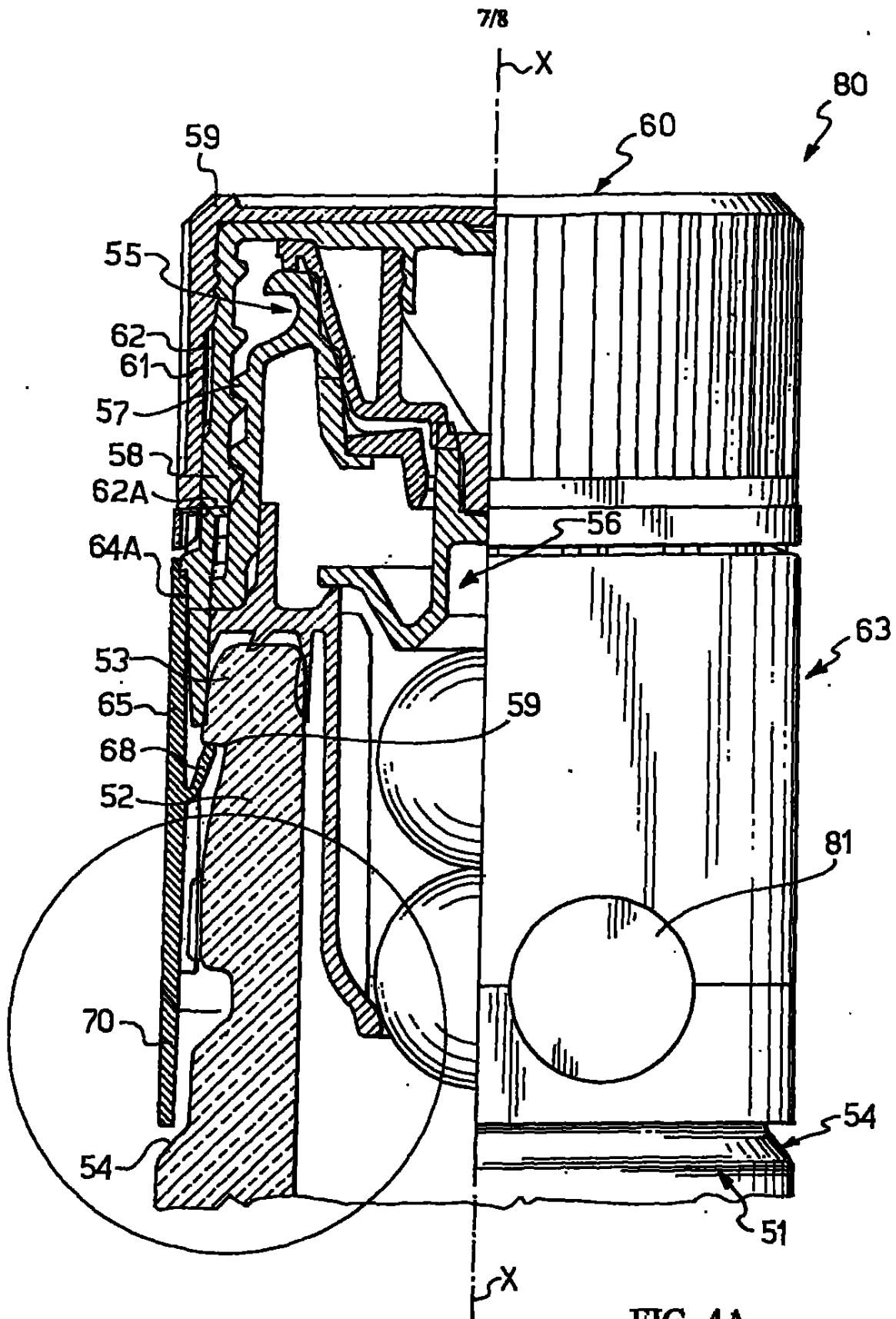


FIG. 4A

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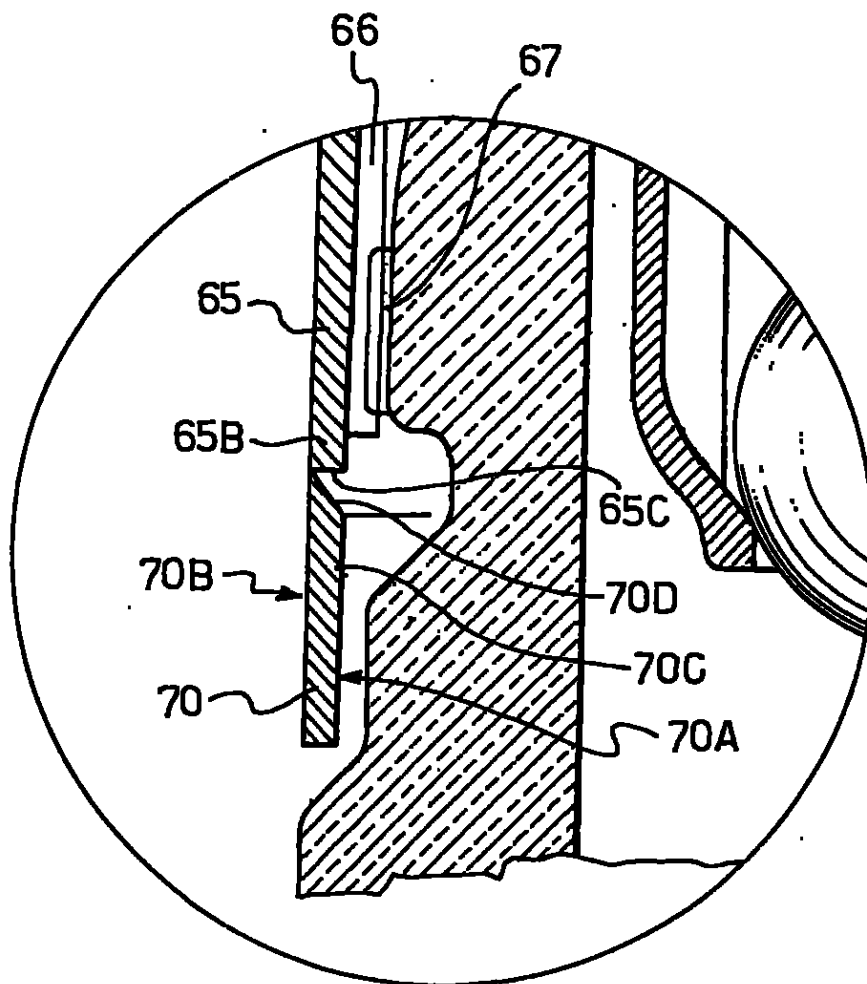


FIG. 4B

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CIERRE PARA BOTELLAS QUE EVIDENCIA ALTERACIONES,
PARTICULARMENTE PARA BOTELLAS QUE CONTIENEN BEBIDAS VALIOSAS

Descripción de la invención

5 La invención se refiere a un cierre que evidencia alteraciones para una botella adecuada para contener bebidas valiosas de conformidad con el preámbulo de la reivindicación 1.

 Se conocen los cierres para botellas que dan una indicación visible de intentos por retirarlos en forma
10 forzada por razones fraudulentas.

 Estos dispositivos de cierre están diseñados para evitar que la bebida original contenida en la botella sea reemplazada con otra bebida falsa.

 Para cometer el fraude, las operaciones llevadas a
15 cabo por los falsificadores consisten, por ejemplo, en recuperar una botella vacía ya usada, equipada con el cierre relevante con el sello roto, pero con los componentes de válvula internos intactos, rellenarla con una bebida equivalente pero de bajo valor y volver a cerrar la botella
20 al reconstruir el sello.

 En otros casos, se ha encontrado que para defraudar al cliente, se hacen algunas veces intentos por retirar el cierre de la botella sin abrir el propio cierre, para que el producto valioso contenido en la botella pueda ser
25 reemplazado con otro producto de menor valor.

En consideración de los puntos mencionados arriba, el propósito de la invención es proponer un cierre para botellas que tenga un medio de evidencia de alteraciones aún más efectivo en comparación con aquellos ofrecidos por los
5 cierres conocidos y el cual haga a la acción de alteración lo más evidente posible y de una manera irreversible.

De acuerdo con la invención, este propósito se logra por medio de un cierre de evidencia de alteraciones para botellas, particularmente para botellas que contienen
10 bebidas valiosas de acuerdo con la parte caracterizadora de la reivindicación 1.

Por medio de la invención es posible producir un cierre capaz de dar una indicación inmediatamente visible de cualquier intento por tener acceso a la botella cuando se haga un
15 intento por remover o arrancar el dispositivo de cierre.

Las características y ventajas de la invención se harán claras a partir de la siguiente descripción detallada de varias formas de modalidades prácticas, ilustradas simplemente a manera de un ejemplo no limitativo en las
20 figuras anexas, en las cuales:

La figura 1A muestra una vista frontal de una primera forma de modalidad, particularmente en sección, de un cierre para botellas de acuerdo con la invención.

La figura 1B muestra una vista a una escala
25 ampliada de una primera porción del cierre de la figura 1A.

La figura 1C muestra una vista a una escala ampliada de otra porción del cierre de la figura 1A.

La figura 1D muestra una vista en perspectiva de un componente del cierre de la figura 1A.

5 La figura 2A muestra una vista frontal de una segunda forma de modalidad, parcialmente en sección, de un cierre para botellas de acuerdo con la invención.

La figura 2B muestra una vista a una escala ampliada de una porción del cierre de la figura 2A.

10 La figura 3A muestra una vista frontal de una tercera forma de modalidad, parcialmente en sección, de un cierre para botellas de acuerdo con la invención.

La figura 3B muestra una vista a una escala ampliada de una porción del cierre de la figura 3A.

15 La figura 4A muestra una vista frontal de una cuarta forma de modalidad, parcialmente en sección, de un cierre para botellas de acuerdo con la invención.

La figura 4B muestra una vista a una escala ampliada de una porción del cierre de la figura 4A.

20 Con referencia a las figuras 1A-1D, el cierre de acuerdo con la invención se indica por el número 1, mientras que la botella, de la cual sólo se muestra la parte superior, se indica por el número 2.

La botella 2, convencional en sí misma, comprende
25 un cuello 3, de forma sustancialmente cilíndrica y que tiene

una boca 4 y un cuerpo 5 conectado externamente al cuello 3.

El cierre 1 comprende una unidad de vertido 6 de tipo conocido y la cual por lo tanto no se describirá abajo 5 en detalle, sino sólo en sus partes básicas.

En particular, la unidad de vertido 6 comprende mecanismos 7, por ejemplo mecanismos de válvula de bola, los cuales son insertados dentro del cuello 3 de la botella 2 para de esta manera evitar el rellenado fraudulento de la 10 botella 2.

Sobre el medio de válvula 7 está equipado el cuerpo de vertido real 8. Conectado a este cuerpo de vertido 8 por una rosca de tornillo está un tapón 10 que lo encierra externamente y que lleva a cabo las funciones de un tapón 10 15 con su posición 9 transversal al eje X-X del cierre. Todos los componentes de la unidad de vertido 8 son integrales uno con otro y adecuadamente esta unidad de vertido 8 es asegurada al cuerpo 3 de la botella 2 tanto axialmente como en rotación de una manera bien conocida por una persona 20 capacitada en la técnica.

Una tapa exterior tubular 11 está equipada sobre el tapón 10.

La tapa 11 está hecha de material plástico, por ejemplo, y cubre completamente al tapón 10, y también la 25 porción transversal 9 de éste con la pared superior 12.

En la pared superior 12 de la tapa 11, el tapón 10 y la tapa 11 son asegurados en rotación por medio de dos porciones rizadas respectivas 13 y 14, una acoplando a la otra.

Además, aún en la pared superior 12 de la tapa 11, 5 el tapón 10 y la tapa 11 son asegurados axialmente por medio de una proyección anular interna 15 de la tapa 11 que se empalma contra la parte inferior del tapón 10.

Entre la pared superior 12 y el extremo inferior 16 de la tapa 11 está equipada una banda anular intermedia 10 rompible 21.

Esta banda anular 21 comprende un segmento en forma de una lengüeta 21A, la cual es recibida en un área abierta 22 en el cuerpo de la tapa 11.

La banda anular 21 está conectada a la porción 15 inferior 16 de la tapa 11 solamente por medio de las piezas de puenteo 23.

También se proporciona una banda metálica 24 para encerrar la tapa 11 herméticamente en la banda anular rompible 21. Para anclar la banda metálica 24 firmemente a 20 la tapa 11, se proporciona una proyección anular 25 y una depresión anular que está hecha en la tapa, y la banda metálica 24 es moldeada a éstos en su parte superior.

Asegurado a la unidad de vertido 8 está un manguito 17 de forma tubular, el cual encierra externamente el cuello 25 3 de la botella 2.

En el fondo, la banda metálica 24 es envuelta internamente alrededor del extremo inferior de la tapa 11 y del manguito 17. Esta banda metálica 24 puede aplicarse a la tapa 11 mediante laminado.

5 El manguito 17 tiene una porción 17B conectada rígidamente a la unidad de vertido 8 y un extremo libre 17A que mira hacia el collar 18; más aún, el manguito 17 tiene una porción proyectante 17C que está asentada en una ranura 3A en el cuello 3, para proporcionar así un firme aseguramiento del manguito 17 axialmente, y
10 un par de áreas rizadas 17D y 17E, una acoplándose en la otra para de esta manera asegurar al manguito 17 en rotación.

El collar 18 se hace integral en rotación con la tapa 11 por medio de áreas rizadas anulares 19 y 20, una acoplándose en la otra.

15 Por lo tanto, en la presente forma de modalidad, el collar 18 está localizado en el fondo entre la base del cuello 3 de la botella 2 y la parte extrema libre 17A del manguito 17.

En otras palabras, el collar 18 se localiza en una dirección axial, o paralela al eje X-X, entre la base del
20 cuello de la botella 2 y la parte extrema del manguito 17, y en una dirección longitudinal, o transversalmente al eje X-X, entre la tapa exterior 11 y el cuello 3 de la botella 2.

Más aún, axialmente, el collar 18 tiene una porción 18M de superficie colocada sobre la parte extrema libre 17A
25 del collar 17.

Ya que la banda metálica 24 y el manguito 17 están conectados uno al otro, el resultado es que el collar 18 es anclado firmemente al manguito 17 y por lo tanto a la botella 2.

5 Por lo tanto el collar 18 se mantiene en posición por la tapa 11, la cual asegura al collar 18 contra la porción libre 17A del manguito 17.

En breve, la tapa 11 y la banda metálica 24 actúan como medios conectores entre el collar 18 y el manguito 17.

10 Con particular referencia ahora a la figura 1D, se puede notar cómo este collar 18 se hace en forma de un anillo, en particular un anillo en forma de cono truncado.

De hecho, este anillo en forma de cono truncado 18 tiene una superficie interior 18A y una superficie exterior 18B, y la superficie interior 18A tiene una primera zona cilíndrica 18C y una segunda zona cilíndrica 18D, ésta última concéntrica con la primera, y una tercera zona cilíndrica 18I; la segunda zona cilíndrica 18D tiene un radio de circunferencia más pequeño en comparación con la primera zona cilíndrica 18C, mientras que la tercera zona cilíndrica 18I tiene un radio de valor intermedio en comparación con la primera zona cilíndrica 18C y la segunda zona cilíndrica 18D.

La primera zona cilíndrica 18C y la segunda zona cilíndrica 18D están conectadas una a otra por medio de un primer plano inclinado 18E para crear así una pendiente para

los propósitos y requerimientos que se describirán en más detalle abajo. Similarmente, la segunda zona cilíndrica 18E está conectada a la tercera zona cilíndrica 18I por medio de un segundo plano inclinado 18L.

5 El primer plano inclinado 18E y el segundo plano inclinado 18L están angulados en relación al eje X-X del cuello 3 de la botella 2A un ángulo predefinido.

Por ejemplo, este ángulo puede asumir valores angulares de entre 30° y 60°.

10 De hecho, como se puede observar de las figuras 1B y 1C, en los planos 18E, 18D y 18L el collar 18 asume un corte transversal trapezoidal.

También se proporciona que la porción inferior libre 17A del manguito 17 tenga un plano inclinado mientras
15 que el collar 18 tenga en lugar de ello un plano sustancialmente transversal al eje X-X del cuello de la botella. Como alternativa, el extremo inferior libre del manguito 17A y el collar 18 tienen ambos un plano inclinado.

En referencia una vez más a la figura 1D, se notará
20 que el plano inclinado 18E tiene medios indicadores 18F los cuales, en la forma de modalidad específica, están en forma de un diente que tiene una superficie superior plana 18G.

Este diente 18F mira hacia la porción libre 17A del manguito 17, o este diente 18F se empalma contra el extremo
25 libre 17 del manguito 17.

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La superficie exterior 18B proporciona medios indicadores 18H, los cuales en la forma de modalidad específica, están en forma de una proyección; esta proyección es útil en las operaciones de ajustar el collar 18 toda vez
5 que asegura un centrado correcto del anillo en relación con el resto del dispositivo de cierre 1.

Cuando se hace un intento por retirar el cierre 1 fraudulentamente con herramientas que pueden ser insertadas entre la base del cuello de la botella y la porción inferior
10 16, estas herramientas, por ejemplo un destornillador, ejercen un empuje desde el fondo hacia arriba, o un empuje que actúa hacia la boca 4 del cuello 3 de la botella 2.

Las herramientas por lo tanto imparten un movimiento sustancialmente axial al cierre 1.

15 En consecuencia, bajo la acción de estas herramientas, el collar 18 se mueve hacia arriba sobre el extremo libre 17A del manguito 17, a través de la acción combinada del diente 18F (figura 1D) y la rampa 18E.

De hecho, el diente 18F se empalma contra la
20 porción libre 17A del manguito 17 y por lo tanto funciona como un fulcro para el anillo 18, mientras que la rampa 18E actúa como una pendiente que ayuda a desasentar el anillo 18 con respecto al manguito 17.

De esta manera, el anillo 18 se mueve parcialmente
25 hacia arriba sobre el manguito 17.

En la presente forma de modalidad, cuando la tapa 11 está presente, ésta será rota o dañada visiblemente por el anillo 18 el cual, al estar sobre el manguito 17, actúa como una cuña que se abre fuera de la tapa 11 hasta que se rompe.

5 En esta forma de modalidad, la banda metálica 24 también será rota por la acción de cuña aplicada por el anillo 18.

En otras palabras, la conexión que se crea entre el anillo 18, provisto con el diente 18F con una superficie
10 plana 18G, y el manguito 17, causa que el anillo se mueva lejos del centro una vez que es sometido a un empuje que actúa desde el fondo hacia arriba.

Más aún, la rampa inclinada 18E ayuda a que el anillo 18 se mueva hacia arriba sobre la porción libre 17A
15 del manguito 17, para de esta manera causar que la tapa 11 y la banda metálica 24 se rompan.

De hecho, se debe notar, adecuadamente, que el manguito 17 se produce a partir de materiales plásticos que tienen deformación adecuada a las cargas a las cuales se
20 someten, mientras que el collar 18 se produce a partir de materiales plásticos que tienen una resistencia mecánica más baja que aquella de los materiales plásticos del manguito 17.

De esta manera, por medio de la invención, el usuario/comprador tendrá una indicación visual inmediata de
25 cualquier intento por alterar el dispositivo de cierre.

Además, también está la ventaja de que el cierre 1 es aún más difícil de reconstruir que los cierres conocidos, toda vez que la tapa 11 es dividida y reconstruirla sería imposible o por lo menos más difícil y costoso en comparación con reconstruir el anillo evidente de alteraciones de cierres conocidos en el sector.

En referencia a la figura 2A, el número 30 indica el cierre de acuerdo con la invención, mientras que la botella, de la cual sólo se muestra la parte superior, se indica por el número 31.

La botella 31, convencional en sí misma, comprende un cuello 32 de forma sustancialmente cilíndrica y que tiene una boca 33 y un cuerpo 34 conectado externamente al cuello 32.

El cierre 30 comprende una unidad de vertido 35 de tipo conocido y la cual por lo tanto no será descrita abajo en detalle, sino sólo en sus partes básicas según se requiera para entender la invención.

En particular, la unidad de vertido 35 comprende mecanismos 36, por ejemplo mecanismos de válvula de bola, los cuales están colocados dentro del cuello 32 de la botella 31 para de esta manera evitar que sea rellena fraudulentamente.

El cuerpo de vertido real 37 está equipado sobre el medio de válvula.

Todos los componentes de la unidad de vertido 35 son integrales uno con otro y adecuadamente esta unidad de vertido 35 es asegurada al cuello 32 de la botella 31 tanto axialmente como en rotación de una manera bien conocida por una persona capacitada en la técnica.

Sobre el cuerpo de la unidad de vertido 37, por medio de una conexión de tornillo 38, está atornillado un tapón 40 del cual la pared extrema de cierre se indica con el número 39.

La porción inferior 44 del cierre 30 tiene una banda anular 45.

Esta banda anular 45 en la porción superior 45A está conectada al cuerpo de vertido 37 solamente por medio de una proyección anular 46.

Un manguito 47 de forma tubular está asegurado al cuerpo de vertido 37, el cual encierra externamente el cuello 32 de la botella 31.

El manguito 47 tiene una porción 47A conectada rígidamente al cuerpo de vertido 37 y un extremo libre 47B que mira hacia la base del cuello 32 de la botella 31. En la presente forma de modalidad, este extremo libre tiene una superficie plana 47C sustancialmente transversal al eje X-X.

El manguito 47 es asegurado en rotación al cuello 32 por medio de áreas rizadas anulares 48A y 48B, una acoplándose en la otra, y es asegurado axialmente al cuello

32 de la botella 31 por medio de una ranura 48C presente en el cuello 32 de la botella 31.

Con particular referencia ahora a la figura 2B, se notará que la banda anular 45 tiene sobre su porción extrema 5 45B una superficie interior 45C y una superficie exterior 45D. Esta superficie interior 45C tiene una primera zona cilíndrica 45E y una segunda zona cilíndrica 45F, esta última concéntrica con la primera, y también una tercera zona cilíndrica 45G. La segunda zona cilíndrica 45F tiene un 10 radio más pequeño en comparación con la primera zona cilíndrica 45E, y la tercera zona cilíndrica 45G tiene un radio de valor intermedio entre el de la primera zona cilíndrica 45E y el de la segunda zona cilíndrica 45F.

La primera zona cilíndrica 45E y la segunda zona 15 cilíndrica 45F están conectadas una a otra por medio de un primer plano inclinado 45H para crear así una pendiente, al igual que la segunda zona cilíndrica 45F es conectada a la tercera zona cilíndrica 45G por medio de un segundo plano inclinado 45I.

El primer plano inclinado 45H y el segundo plano 20 inclinado 45I están puestos a un ángulo predefinido en relación al eje X-X del cuello 32.

Por ejemplo, este ángulo puede asumir valores de entre 30° y 60°.

También se proporciona que la porción inferior 25 libre 47B del manguito 47 tenga un plano inclinado mientras



que la banda anular 45 puede en lugar de ello tener un plano sustancialmente transversal al eje X-X del cuello 32 de la botella 31.

Como alternativa, el extremo inferior libre del manguito 47B y de la banda anular 45 tienen ambos un plano inclinado.

El manguito 47 se localiza por lo tanto axialmente, o paralelo al eje X-X, entre la base del cuello de la botella 31 y el plano inclinado 45H de la parte extrema 45B de la banda anular 45 mientras está en una dirección radial, o transversalmente al eje X-X, se localiza entre la banda anular 45 y el cuello 32 de la botella 31.

Cuando se hace un intento por retirar el cierre 30 del cuello de la botella fraudulentamente con herramientas que pueden ser insertadas entre la base del cuello de la botella y la porción inferior 44, estas herramientas, por ejemplo un destornillador, ejercen un empuje desde el fondo hacia arriba, o un empuje dirigido hacia la boca 33 del cuello 32 de la botella 31.

Las herramientas imparten por lo tanto al cierre 30 un movimiento sustancialmente axial y por lo tanto bajo la acción de estas herramientas, la banda anular 45 se mueve hacia arriba sobre el extremo libre 47B del manguito 47, por medio del plano inclinado 45H, lo cual ocasiona el movimiento radial de la banda.

En la presente modalidad, la conexión anular 46 de la banda anular 45 será rota y también la propia banda anular será rota o visiblemente dañada.

De esta manera, por medio de la invención, el
5 usuario/comprador tendrá una indicación visual inmediata de cualquier intento por alterar el dispositivo de cierre.

Más aún, existe también la ventaja de que el cierre
30 es aún todavía más difícil de reconstruir que los cierres conocidos, ya que la banda anular 45 permanece dividida y
10 reconstruirla sería imposible o por lo menos más difícil y costoso en comparación con la reconstrucción del anillo de evidencia de alteraciones de cierres anteriores.

Ahora, considerando en particular la forma de modalidad mostrada en las figuras 3A-3B, se notará que el
15 cierre de acuerdo con la invención, indicado completamente por el número 50, está colocado sobre una botella, de la cual sólo se muestra la parte superior 51, teniendo un cuello 52, de forma sustancialmente cilíndrica. La botella tiene una boca 53 y un área de base 54 del cuello 52.

20 El cierre 50 comprende también una unidad de vertido 55 de tipo conocido y la cual por lo tanto no será descrita abajo en detalle, sino sólo en sus partes básicas.

En particular, la unidad de vertido 55 comprende componentes de válvula 56 del tipo bola, insertados dentro del cuello
25 52 para prevenir así un rellenado fraudulento de la botella 51.

El cuerpo de vertido real 57 está equipado sobre el medio de válvula 56. Conectado a este cuerpo de vertido 57 por medios roscados, conocidos por sí mismos, está un tapón 58. Todos los componentes de la unidad de vertido 55 son 5 integrales uno con otro y adecuadamente el cuerpo de vertido 57 es asegurado al cuello 52 de la botella 51 tanto axialmente como en rotación de una manera bien conocida por una persona capacitada en la técnica.

Una tapa 59, producida por ejemplo a partir de 10 material plástico, cubre completamente el tapón 58.

En su pared transversal 60, la tapa 59 y el tapón 58 son asegurados en rotación por medio de porciones rizadas respectivas 61, una acoplándose en la otra, conocidas por sí mismas.

15 Además, aún en la pared superior 60 de la tapa 59, el tapón 58 y la tapa 59 son asegurados axialmente por medio de proyecciones anulares internas 62, conocidas en sí mismas.

El cierre 50 tiene también una porción inferior 63 la cual comprende una banda tubular 64 capaz de encerrar 20 estrechamente un manguito 65 debajo de ésta, el manguito siendo de forma tubular, conectado de una manera conocida al cuerpo de vertido 57.

El manguito 65 encierra externamente el cuello 52 de la botella 51 y es asegurado en rotación al cuello 52 por 25 medio de áreas rizadas anulares 66 y 67 (figura 3B), una

1/3
2/3
3/3

acoplándose en la otra. El manguito 65 es asegurado axialmente por medio de un reborde anular 68 que es asentado en una ranura 69 en el cuello 52.

El manguito 65 tiene también una porción superior 5 65A conectada rígidamente a la banda tubular 64 y al cuerpo de vertido 57. Un extremo libre 65B mira hacia un medio contra alteraciones 70. En la presente forma de modalidad, este extremo libre tiene una superficie plana 65C colocada sustancialmente en una posición transversal al eje X-X.

10 La banda tubular 64 es por lo tanto anclada al manguito 65 por medio de un primer doblez 64A hecho en el extremo superior de la banda 64.

Este doblez 64A se obtiene, por ejemplo, por medio de una operación de laminado.

15 La banda tubular 64, de preferencia de hoja metálica, está doblada en el fondo sobre el extremo inferior dlos medios contra alteraciones 70 por medio de un segundo doblez 64B.

En la presente forma de modalidad, también, los 20 medios contra alteraciones 70 está colocado en el fondo entre la base del cuello 52 de la botella 51 y la porción extrema 65 del manguito 65.

Este medio contra alteraciones 70 está hecho en forma de un anillo y tiene una superficie interior 70A y una 25 superficie exterior 70B, en donde la superficie interior 70A

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tiene una zona cilíndrica 70C conectada al extremo superior de los medios contra alteraciones 70 por medio de un plano inclinado 70D, para crear así un plano inclinado para los propósitos y requerimientos que se describirán en más detalle abajo.

5 El plano inclinado 70D se coloca a un ángulo predefinido en relación al eje X-X del cuello 52 de la botella 51.

Por ejemplo, este ángulo puede asumir valores de entre 30° y 60°.

10 Cuando se hace un intento por retirar el cierre 50 fraudulentamente con herramientas que pueden ser insertadas en la base del cuello de la botella, bajo el doblez 64B de la banda 64, estas herramientas, por ejemplo un destornillador, ejercen un empuje desde el fondo hacia arriba, o un imparten
15 un movimiento sustancialmente axial al cierre 50.

Por lo tanto bajo la acción de estas herramientas, los medios contra alteraciones 70 se mueve hacia arriba sobre la porción extrema 65B del manguito 65, debido a la presencia del plano inclinado 70D.

20 En la presente forma de modalidad, cuando la banda tubular 64 está presente, ésta última será rota o visiblemente dañada por el anillo 70 el cual, una vez que está sobre la parte superior del manguito 65, actúa como una cuña abriéndose hacia afuera el manguito 65 y la banda
25 tubular 64 hasta que ésta última se rompa.

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De esta manera, por medio de la invención, el usuario/comprador tendrá una indicación visual inmediata de cualquier intento por alterar el cierre.

En referencia ahora a la forma de modalidad mostrada en las figuras 4A-4B, en la cual a los elementos ya descritos les han sido asignados números idénticos, se notará que el cierre de acuerdo con la invención se indica completamente por el número 80, mientras que la botella, de la cual solamente se muestra la parte superior, se indica por el número 51.

10 El cierre 80 es tal que su porción inferior 63 comprende un manguito 65 de forma tubular, conectado al cuerpo de vertido 57.

El manguito 65 encierra además externamente al cuello 52 de la botella 51.

15 El manguito 65 es también asegurado en rotación al cuello 52 de la botella 51 por medio de las áreas rizadas anulares 66 y 67, una acoplándose en la otra, mientras es asegurado axialmente por medio del reborde anular 68 el cual es asentado en la ranura 69 en el cuello 52.

20 El manguito 65 tiene su porción superior 65A conectada al cuerpo de vertido 57 y también tiene su extremo libre 65B mirando hacia los medios contra alteraciones 70.

Se debe notar que en la presente forma de modalidad, los medios contra alteraciones 70 se localizan en el fondo entre la base 55 del cuello 52 de la botella 51 y la
25 porción extrema 65B del manguito 65.

En esta forma de modalidad, también, los medios contra alteraciones está hecho en forma de un anillo y tiene la superficie interior 70A y una superficie exterior 70B, en donde la superficie interior 70A tiene una zona cilíndrica 5 70C conectada al extremo superior dlos medios contra alteraciones 70 por medio de un plano inclinado 70D, para crear así una pendiente para los propósitos y requerimientos que se describirán en más detalle abajo.

El plano inclinado 70D está colocado en relación al eje X-X 10 del cuello 52 de la botella 51 a un ángulo predefinido.

Por ejemplo, este ángulo puede asumir valores de entre 30° y 60°.

Se debe notar que en la presente forma de modalidad, los medios contra alteraciones 70 se localizan axialmente, o paralelo al 15 eje X-X, entre la base 54 del cuello de la botella y la parte extrema del manguito 65.

En esta forma de modalidad, los medios contra alteraciones 70 se mantienen en la posición descrita arriba por elementos conectores 81, los cuales funcionan como medios conectores entre el manguito 65 y 20 los medios contra alteraciones 70. En particular, los elementos conectores 81 pueden ser soldaduras por puntos o pueden constituirse por tiras adhesivas que sean rotas cuando los medios contra alteraciones 70 se mueva hacia arriba sobre el manguito 65.

Por lo tanto, cuando se haga un intento por retirar 25 el cierre 80 fraudulentamente con herramientas que pueden ser

insertadas entre la base del cuello de la botella, estas herramientas, por ejemplo un destornillador, ejercen un empuje desde el fondo hacia arriba, o imparten al cierre 80 un movimiento sustancialmente axial. En consecuencia, bajo la acción de estas herramientas, los medios
5 contra alteraciones 70 se mueve hacia arriba sobre la porción extrema 65B del manguito 65, gracias a la presencia del plano inclinado 70D.

De esta manera, por medio de la invención, el usuario/comprador tendrá una inmediata indicación visual de cualquier intento de alteración del dispositivo de cierre.

10 A partir de lo que se ha descrito, se concluye que todos los cierres producidos de acuerdo con la invención son difíciles de reconstruir toda vez que, después de que han sido alterados, son visibles las rupturas de muchas partes componentes.

Claramente, una persona capacitada en la técnica,
15 con el propósito de satisfacer requerimientos incidentales y específicos, será capaz de hacer numerosos cambios y producir numerosas variantes de los cierres descritos arriba, sin de esta manera alejarse del alcance de la invención como el definido en las siguientes reivindicaciones.

REIVINDICACIONES

1. Un cierre que evidencia alteraciones para una botella, particularmente para una botella adecuada para
5 contener bebidas valiosas,

- la botella tiene un cuello que se extiende axialmente a lo largo del eje longitudinal de la botella desde su base mediante el cual es conectado al cuerpo de la botella;

- el cuello tiene una abertura en su extremo libre;
- 10 - el cierre comprende medios de taponado de la abertura del cuello y es conectado por medio de una conexión roscada a una unidad de vertido;

- la unidad de vertido está conectada a un manguito dispuesto axialmente a lo largo de la superficie exterior del cuello;
- 15 caracterizado porque además comprende:

- medios anulares dispuestos entre la base del cuello y el extremo inferior del manguito y que son conectados por medios conectores rompibles al manguito;

- los medios anulares y el extremo inferior del
20 manguito tienen superficies respectivas que miran unas a otras;

- al menos una de las superficies que miran de los medios anulares y del extremo inferior están inclinadas en relación al eje longitudinal del cuello, para que, como resultado de un movimiento
25 axial de los medios anulares hacia la abertura en el cuello, ocurra la

ruptura de los medios rompibles y un movimiento radial consecuente de al menos una zona circunferencial de los medios anulares.

2. El cierre que evidencia alteraciones de conformidad con la reivindicación 1, caracterizado además porque al menos una de las superficies es inclinada en relación al eje longitudinal por valores angulares dentro de una escala de entre 30° y 60°.

3. El cierre que evidencia alteraciones de conformidad con la reivindicación 1, caracterizado además porque los medios conectores rompibles son una banda anular.

10 4. El cierre para botellas que evidencia alteraciones de conformidad con la reivindicación 1, caracterizado además porque los medios conectores rompibles son un adhesivo.

15 5. El cierre para botellas que evidencia alteraciones de conformidad con las reivindicaciones 3 y 4, caracterizado además porque los medios anulares tienen un corte transversal trapezoidal.

20 6. El cierre para botellas que evidencia alteraciones de conformidad con la reivindicación 1, caracterizado además porque los medios conectores rompibles son una proyección anular.

RESUMEN DE LA INVENCION

La invención se refiere a un cierre que evidencia alteraciones para una botella, particularmente una botella adecuada para contener bebidas valiosas, que tiene un cuello (5, 34, 54) que se extiende axialmente a lo largo del eje longitudinal (X-X) desde el cuerpo de la botella (2, 31, 51), el cuello (5, 34, 54) tiene una abertura (7, 33, 56) en su extremo libre y el cierre comprende medios de una conexión roscada a un dispositivo de vertido (6, 38, 55), el dispositivo de vertido (6, 38, 55) está conectado a un manguito (17, 47, 65) dispuesto axialmente a lo largo de la superficie exterior del cuello (5, 34, 54) que tiene la característica de comprender medios anulares (18, 45, 70) dispuestos entre la base del cuello (5, 34, 54) y el extremo inferior del manguito (17A, 47B, 65B) y que son conectados por medio de medios conectores rompibles (46, 64, 82) al manguito (17, 47, 65), los medios anulares (18, 45, 70) y el extremo inferior (17A, 47B, 65B) del manguito (17, 47, 65) tienen superficies respectivas (11A, 18E, 47C, 45I, 65C, 70D) que miran unas a otras y al menos una de las superficies que miran (11A, 18E, 47C, 45I, 65C, 70D) de los medios anulares (18, 45, 70) y del extremo inferior (17A, 47B, 65B) están inclinadas en relación al eje longitudinal (X-X) del cuello (5, 34, 54), para que como resultado de un movimiento axial

de los medios anulares (18, 45, 70) hacia la abertura en el cuello (5, 34, 54), ocurra la ruptura de los medios rompibles (46, 64, 82) y un movimiento radial consecuente de al menos una zona circunferencial de los medios anulares (18, 45, 70).

PCT

REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

International Application No.

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference
(if desired) (12 characters maximum) P02113/PCT

Box No. I TITLE OF INVENTION

"Tamper evident closure for bottles, particularly for bottles containing valuable drinks"

Box No. II APPLICANT

☐ This person is also inventor

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

GUALA CLOSURES S.p.A.
Via San Giovanni Bosco, 53/55
I-15100 Alessandria
Italy

Telephone No.

Facsimile No.

Teleprinter No.

Applicant's registration No. with the Office

State (that is, country) of nationality:

IT

State (that is, country) of residence:

IT

This person is applicant for the purposes of:

☐ all designated States

☒ all designated States except the United States of America

☐ the United States of America only

☐ the States indicated in the Supplemental Box

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

BATTEGAZZORE, Piero
Via Galileo Galilei, 74
I-15100 Alessandria
Italy

This person is:

☐ applicant only

☒ applicant and inventor

☐ inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

IT

State (that is, country) of residence:

IT

This person is applicant for the purposes of:

☐ all designated States

☐ all designated States except the United States of America

☒ the United States of America only

☐ the States indicated in the Supplemental Box

☒ Further applicants and/or (further) inventors are indicated on a continuation sheet.

Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:

☒ agent

☐ common representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

PERANI Aurelio; SIMINO Massimo; FALCETTI Carlo;
c/o Perani Mezzanotte & Partners
Piazza San Babila, 5
20122 MILANO MI
Italy

Telephone No.

+39 (02) 76316161

Facsimile No.

+39 (02) 76317619

Teleprinter No.

Agent's registration No. with the Office

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

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Box No. V DESIGNATION OF STATES

Mark the applicable check-boxes below; at least one must be marked.

The following designations are hereby made under Rule 4.9(a):

Regional Patent

- ☒ AP ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozambique, SD Sudan, SL Sierra Leone, SZ Swaziland, TZ United Republic of Tanzania, UG Uganda, ZM Zambia, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT (if other kind of protection or treatment desired, specify on dotted line)
- ☒ EA Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT
- ☒ EP European Patent: AT Austria, BE Belgium, BG Bulgaria, CH & LI Switzerland and Liechtenstein, CY Cyprus, CZ Czech Republic, DE Germany, DK Denmark, EE Estonia, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, SK Slovakia, TR Turkey, and any other State which is a Contracting State of the European Patent Convention and of the PCT
- ☒ OA OAPI Patent: BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, GQ Equatorial Guinea, GW Guinea-Bissau, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (if other kind of protection or treatment desired, specify on dotted line)

National Patent (if other kind of protection or treatment desired, specify on dotted line):

- | | | |
|---|--|--|
| ☒ AE United Arab Emirates | ☒ GM Gambia | ☒ NZ New Zealand |
| ☒ AG Antigua and Barbuda | ☒ HR Croatia | ☒ OM Oman |
| ☒ AL Albania | ☒ HU Hungary | ☒ PH Philippines |
| ☒ AM Armenia | ☒ ID Indonesia | ☒ PL Poland |
| ☒ AT Austria | ☒ IL Israel | ☒ PT Portugal |
| ☒ AU Australia | ☒ IN India | ☒ RO Romania |
| ☒ AZ Azerbaijan | ☒ IS Iceland | ☒ RU Russian Federation |
| ☒ BA Bosnia and Herzegovina | ☒ JP Japan | |
| ☒ BB Barbados | ☒ KE Kenya | ☒ SD Sudan |
| ☒ BG Bulgaria | ☒ KG Kyrgyzstan | ☒ SE Sweden |
| ☒ BR Brazil | ☒ KP Democratic People's Republic of Korea | ☒ SG Singapore |
| ☒ BY Belarus | ☒ KR Republic of Korea | ☒ SI Slovenia (C.P.A.) |
| ☒ BZ Belize | ☒ KZ Kazakhstan | ☒ SK Slovakia |
| ☒ CA Canada | ☒ LC Saint Lucia | ☒ SL Sierra Leone |
| ☒ CH & LI Switzerland and Liechtenstein | ☒ LK Sri Lanka | ☒ TJ Tajikistan |
| ☒ CN China | ☒ LR Liberia | ☒ TM Turkmenistan |
| ☒ CO Colombia | ☒ LS Lesotho | ☒ TN Tunisia |
| ☒ CR Costa Rica | ☒ LT Lithuania | ☒ TR Turkey |
| ☒ CU Cuba | ☒ LU Luxembourg | ☒ TT Trinidad and Tobago |
| ☒ CZ Czech Republic | ☒ LV Latvia | |
| ☒ DE Germany | ☒ MA Morocco | ☒ TZ United Republic of Tanzania |
| ☒ DK Denmark | ☒ MD Republic of Moldova | ☒ UA Ukraine |
| ☒ DM Dominica | ☒ MG Madagascar | ☒ UG Uganda |
| ☒ DZ Algeria | ☒ MK The former Yugoslav Republic of Macedonia | ☒ US United States of America |
| ☒ EC Ecuador | ☒ MN Mongolia | ☒ UZ Uzbekistan |
| ☒ EE Estonia | ☒ MW Malawi | ☒ VN Viet Nam |
| ☒ ES Spain | ☒ MX Mexico | ☒ YU Yugoslavia |
| ☒ FI Finland | ☒ MZ Mozambique | ☒ ZA South Africa |
| ☒ GB United Kingdom | ☒ NO Norway | ☒ ZM Zambia |
| ☒ GD Grenada | | ☒ ZW Zimbabwe |
| ☒ GE Georgia | | |
| ☒ GH Ghana | | |

Check-boxes below reserved for designating States which have become party to the PCT after issuance of this sheet:

- ☒ NI Nicaragua
- ☒ VG Saint Vincent and the Grenadines
- ☒ SC Seychelles
- ☐
- ☐

Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation (including fees) must reach the receiving Office within the 15-month time limit.)

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Box No. VI PRIORITY CLAIM

The priority of the following earlier application(s) is hereby claimed:

Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country or Member of WTO	regional application: * regional Office	international application: receiving Office
item (1)				
item (2)				
item (3)				
item (4)				
item (5)				

☐ Further priority claims are indicated in the Supplemental Box.

The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of this international application is the receiving Office) identified above as:

☐ all items ☐ item (1) ☐ item (2) ☐ item (3) ☐ item (4) ☐ item (5) ☐ other, see Supplemental Box

* Where the earlier application is an ARIPO application, indicate at least one country party to the Paris Convention for the Protection of Industrial Property or one Member of the World Trade Organization for which that earlier application was filed (Rule 4.10(b)(ii)):

Box No. VII INTERNATIONAL SEARCHING AUTHORITY

Choice of International Searching Authority (ISA) (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):

ISA / EP

Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority):

Date (day/month/year) Number Country (or regional Office)

Box No. VIII DECLARATIONS

The following declarations are contained in Boxes Nos. VIII (i) to (v) (mark the applicable check-boxes below and indicate in the right column the number of each type of declaration):

Number of declarations

- | | | |
|---|--|---|
| ☐ Box No. VIII (i) | Declaration as to the identity of the inventor | : |
| ☐ Box No. VIII (ii) | Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent | : |
| ☐ Box No. VIII (iii) | Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application | : |
| ☐ Box No. VIII (iv) | Declaration of inventorship (only for the purposes of the designation of the United States of America) | : |
| ☐ Box No. VIII (v) | Declaration as to non-prejudicial disclosures or exceptions to lack of novelty | : |

Box No. IX CHECK LIST; LANGUAGE OF FILING

This international application contains:

(a) the following number of sheets in paper form:

request (including declaration sheets) : 4

description (excluding sequence listing part) : 19

claims : 2

abstract : 2

drawings : 8

Sub-total number of sheets : 35

sequence listing part of description (actual number of sheets if filed in paper form, whether or not also filed in computer readable form; see (b) below) : /

Total number of sheets : 35

(b) sequence listing part of description filed in computer readable form

(i) ☐ only (under Section 801(a)(i))

(ii) ☐ in addition to being filed in paper form (under Section 801(a)(ii))

Type and number of carriers (diskette, CD-ROM, CD-R or other) on which the sequence listing part is contained (additional copies to be indicated under item 9(ii), in right column):

This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):

1. ☒ fee calculation sheet : 1
2. ☐ original separate power of attorney :
3. ☐ original general power of attorney :
4. ☐ copy of general power of attorney; reference number, if any: :
5. ☐ statement explaining lack of signature :
6. ☐ priority document(s) identified in Box No. VI as item(s): :
7. ☐ translation of international application into (language): :
8. ☐ separate indications concerning deposited microorganism or other biological material :
9. ☐ sequence listing in computer readable form (indicate also type and number of carriers (diskette, CD-ROM, CD-R or other))
 - (i) ☐ copy submitted for the purposes of international search under Rule 13ter only (and not as part of the international application) :
 - (ii) ☐ (only where check-box (b)(i) or (b)(ii) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Rule 13ter :
 - (iii) ☐ together with relevant statement as to the identity of the copy or copies with the sequence listing part mentioned in left column :
10. ☐ other (specify): :

Number of items

Figure of the drawings which should accompany the abstract: 1A

Language of filing of the international application: Italian

Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).



Aurelio PERANI

For receiving Office use only

1. Date of actual receipt of the purported international application:	2. Drawings: ☐ received: ☐ not received:
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:	
4. Date of timely receipt of the required corrections under PCT Article 11(2):	
5. International Searching Authority (if two or more are competent): ISA /	6. ☐ Transmittal of search copy delayed until search fee is paid

For International Bureau use only

Date of receipt of the record copy by the International Bureau:

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PCT

FEE CALCULATION SHEET Annex to the Request

For receiving Office use only

International Application No.

Date stamp of the receiving Office

Applicant's or agent's
file reference

P02113/PCT

Applicant

GUALA CLOSURES S.p.A. et al.

CALCULATION OF PRESCRIBED FEES

1. TRANSMITTAL FEE 30.99 T

2. SEARCH FEE 945 S
International search to be carried out by, EP
(If two or more International Searching Authorities are competent to carry out the international search, indicate the name of the Authority which is chosen to carry out the international search.)

3. INTERNATIONAL FEE

Basic Fee

Where item (b) of Box No. DX applies, enter Sub-total number of sheets } 35
Where item (b) of Box No. DX does not apply, enter Total number of sheets }

b1 first 30 sheets 444 b1

b2 5 x 10 = 50 b2
number of sheets in excess of 30 fee per sheet

b3 additional component (only if sequence listing part of description is filed in computer readable form under Section 801(a)(i), or both in that form and on paper, under Section 801(a)(ii)):

400 x = b3
fee per sheet

Add amounts entered at b1, b2 and b3 and enter total at B 494 B

Designation Fees

The international application contains 118 designations.

number of designation fees payable (maximum 5) x amount of designation fee = D

Add amounts entered at B and D and enter total at I 494 I
(Applicants from certain States are entitled to a reduction of 75% of the international fee. Where the applicant is (or all applicants are) so entitled, the total to be entered at I is 25% of the sum of the amounts entered at B and D.)

4. FEE FOR PRIORITY DOCUMENT (if applicable) P

5. TOTAL FEES PAYABLE 1.469,99 EUR
Add amounts entered at T, S, I and P, and enter total in the TOTAL box

TOTAL

☒ The designation fees are not paid at this time.

MODE OF PAYMENT

☐ authorization to charge deposit account (see below) ☒ postal money order ☐ cash ☐ coupons
☐ cheque ☐ bank draft ☐ revenue stamps ☒ other (specify): bank transfer

AUTHORIZATION TO CHARGE (OR CREDIT) DEPOSIT ACCOUNT (This mode of payment may not be available at all receiving Offices)

☐ Authorization to charge the total fees indicated above.
☐ (This check-box may be marked only if the conditions for deposit accounts of the receiving Office so permit) Authorization to charge any deficiency or credit any overpayment in the total fees indicated above.
☐ Authorization to charge the fee for priority document.

Receiving Office: RO/
Deposit Account No.:
Date:
Name:
Signature:

PATENT COOPERATION TREATY

From the RECEIVING OFFICE

PCT

To:

PERANI, Aurelio
PERANI MEZZANOTTE & PARTNERS
PIAZZA SAN BABILA 5
I-20122 MILANO
ITALY

**NOTIFICATION OF RECEIPT OF PAPERS
PURPORTING TO BE AN INTERNATIONAL
APPLICATION**

(PCT Administrative Instructions, Section 301)

Date of mailing
(day/month/year)

13 MAR 2003

Applicant's or agent's file reference

P02113/PCT

IMPORTANT NOTIFICATION

International application No.

PCT/IT03/00141

Date of receipt (day/month/year)

07 March 2003 (07.03.03)

Applicant

GUALA CLOSURES S.p.A. BATTEGAZZORE, Piero

Title of the invention Tamper evident closure for bottles, particularly for bottles containing valuable drinks

1. The applicant is hereby notified that this receiving Office has received papers purporting to be an international application on the date of receipt indicated above.
2. The applicant's attention is drawn to the fact that these papers have not yet been checked by this receiving Office in respect of their compliance with the requirements of Article 11(1), that is, whether these papers meet the requirements necessary for the according of an international filing date.
3. As soon as this receiving Office has checked these papers, it will inform the applicant accordingly.
4. These papers have provisionally been given the international application number indicated above. The applicant is hereby requested to make reference to that number in all correspondence with this receiving Office.

Name and mailing address of the receiving Office
Ministero delle Attività Produttive
Dipartimento per lo sviluppo produttivo e la competitività
UFFICIO ITALIANO BREVETTI EUROPEI
Facsimile No.

Authorized Officer

Telephone No.

seri 06/47053043

From the INTERNATIONAL SEARCHING AUTHORITY

PCTNOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT
OR THE DECLARATION

(PCT Rule 44.1)

To:
PERANI MEZZANOTTE & PARTNERS
Attn. Perani, Aurelio
Piazza San Babila, 5
20122 Milano MI
ITALY

Date of mailing
(day/month/year) 20/10/2003

Applicant's or agent's file reference
P02113/PCT

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.
PCT/IT 03/00141

International filing date
(day/month/year) 07/03/2003

Applicant

GUALA CLOSURES, S.P.A.

1. ☒ The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.

Filing of amendments and statement under Article 18:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland
Facsimile No.: (41-22) 740.14.35

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. Further action(s): The applicant is reminded of the following:

Shortly after 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

Within 19 months from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within 20 months from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the International Searching Authority



European Patent Office, P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Maria Zinburgova

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NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the letter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

(P)

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 48.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequences if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequences with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P02113/PCT	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/IT 03/ 00141	International filing date (day/month/year) 07/03/2003	(Earliest) Priority Date (day/month/year)
Applicant GUALA CLOSURES, S.P.A.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

4. With regard to the title,

the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the abstract,

the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.

1a



None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IT 03/00141

62

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B65D49/04 B65D55/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2 723 773 A (EDGEWORTH GREENE) 15 November 1955 (1955-11-15) column 3, line 48 - line 63 column 4, line 22 - line 27 column 4, line 37 - line 38; figure 5	1-4, 6 5
Y	EP 1 238 919 A (OBSHESTVO S OGRANICHENNOI OTV) 11 September 2002 (2002-09-11) abstract; figures 1,2	1-4, 6
A	GB 2 302 867 A (GUALA SPA) 5 February 1997 (1997-02-05) page 6, paragraph 7 -page 7, paragraph 3; figure 3	1-3
A	FR 2 179 622 A (BOUCHAGE MECANIQUE) 23 November 1973 (1973-11-23) page 4, line 39 -page 5, line 3; figure 1	1,5

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

Z document member of the same patent family

Date of the actual completion of the international search

10 October 2003

Date of mailing of the international search report

20/10/2003

Name and mailing address of the ISA

European Patent Office, P.B. 6818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx. 31 651 apo nl,
Fax (+31-70) 340-3018

Authorized officer

Appelt, L

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IT 03/00141

63

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2723773	A	15-11-1955	NONE	
EP 1238919	A	11-09-2002	RU 2175303 C1 EA 3596 B1 EP 1238919 A1	27-10-2001 26-06-2003 11-09-2002
GB 2302867	A	05-02-1997	IT MI951448 A1 BR 9602992 A CN 1150106 A ,B ES 2133063 A1 PL 315093 A1 RU 2150417 C1	07-01-1997 28-04-1998 21-05-1997 16-08-1999 20-01-1997 10-06-2000
FR 2179622	A	23-11-1973	FR 2179622 A1	23-11-1973

PATENT COOPERATION TREATY

PCT/IT2003/000141

From the INTERNATIONAL BUREAU

PCTNOTICE INFORMING THE APPLICANT OF THE
COMMUNICATION OF THE INTERNATIONAL
APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

To:

PERANI, Aurelio
c/o Perani Mezzanotte & Partners
Piazza San Babila, 5
I-20122 Milano
ITALIE

Date of mailing (day/month/year) 16 September 2004 (16.09.2004)		IMPORTANT NOTICE
Applicant's or agent's file reference P02113/PCT		
International application No. PCT/IT2003/000141	International filing date (day/month/year) 07 March 2003 (07.03.2003)	Priority date (day/month/year)
Applicant GUALA CLOSURES, S.P.A. et al		

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this notice:

AU, AZ, BY, CH, CN, CO, DZ, EP, HU, JP, KG, KP, KR, MD, MK, MZ, RU, TM, US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AE, AG, AL, AM, AP, AT, BA, BB, BG, BR, BZ, CA, CR, CU, CZ, DE, DK, DM, EA, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, ID, IL, IN, IS, KE, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MG, MN, MW, MX, NI, NO, NZ, OA, OM, PH, PL, PT, RO, SC, SD, SE, SG, SK, SL, TJ, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this notice is a copy of the international application as published by the International Bureau on 16 September 2004 (16.09.2004) under No. WO 2004/078612

4. **TIME LIMITS** for filing a demand for international preliminary examination and for entry into the national phase

The applicable time limit for entering the national phase will, subject to what is said in the following paragraph, be 30 MONTHS from the priority date, not only in respect of any elected Office if a demand for international preliminary examination is filed before the expiration of 19 months from the priority date, but also in respect of any designated Office, in the absence of filing of such demand, where Article 22(1) as modified with effect from 1 April 2002 applies in respect of that designated Office. For further details, see *PCT Gazette* No. 44/2001 of 1 November 2001, pages 19926, 19932 and 19934, as well as the *PCT Newsletter*, October and November 2001 and February 2002 issues.

In practice, time limits other than the 30-month time limit will continue to apply, for various periods of time, in respect of certain designated or elected Offices. For regular updates on the applicable time limits (20, 21, 30 or 31 months, or other time limit), Office by Office, refer to the *PCT Gazette*, the *PCT Newsletter* and the *PCT Applicant's Guide*, Volume II, National Chapters, all available from WIPO's Internet site, at <http://www.wipo.int/pct/en/index.html>.

For filing a demand for international preliminary examination, see the *PCT Applicant's Guide*, Volume I/A, Chapter IX. Only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination (at present, all PCT Contracting States are bound by Chapter II).

It is the applicant's sole responsibility to monitor all these time limits.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Simin Baharlou
Facsimile No.+41 22 740 14 35	Facsimile No.+41 22 338 71 30

FORMATO DE DIGITALIZACION
RELACION DE ANEXOS



Royal
Technologies S.A.
Servicio de Digitalización y Archivo

65.

Expediente No		05102643	No de Follo
Item		No de unidades	
1	CD		
2	DVD		
3	REVISTA		
4	LIBRO		
5	PERIODICO		
6	DISQUETES		
7	SOBRE DE MANILA		
8	SOBRE BLANCO TAMAÑO CARTA		
9	SOBRE BLANCO TAMAÑO OFICIO	X	1.
10	OTROS:		

Observaciones: Un sobre que contiene Arte Final

CESION

Yo, (nosotros) abajo firmado (s)
Piero BATTEGAZZORE

domiciliado(s) en Via Galileo Galilei 74, 15100
Alessandria, Italia

declaro(amos) bajo juramento ser único(s) y verdadero(s) inventor(es)
de la invención: CIERRE PARA BOTELLAS QUE
EVIDENCIA ALTERACIONES, PARTICULARMENTE
PARA BOTELLAS QUE CONTIENEN BEBIDAS
VALIOSAS

declaro(amos) así mismo que cedo(cedemos) y transfiero(transferimos), sin
limitación a favor de la sociedad GUALA CLOSURES
S.P.A.

constituida y existente de conformidad con las leyes de
Italia

domiciliada en Via San Giovanni Bosco, 53/55, 15100
Alessandria, Italia

todos los derechos inherentes a dicha invención y que la citada
Compañía queda facultada para solicitar en su nombre la patente de
invención correspondiente en la República de Colombia

ASSIGNMENT

I (we), the undersigned
Piero BATTEGAZZORE

of Via Galileo Galilei 74, 15100 Alessandria,
Italy

state(s) under oath to be sole and true inventor(s) of the invention:
TAMPER EVIDENT CLOSURE FOR BOTTLES,
PARTICULARLY FOR BOTTLES CONTAINING
VALUABLE DRINKS

state as well, that assign, without reservations or limitations in favour
of GUALA CLOSURES S.P.A.

a corporation constituted and existing in conformity with the laws of
Italy

domiciled in Via San Giovanni Bosco, 53/55, 15100
Alessandria, Italy

all rights inherent in said invention and that the above mentioned
company hereby is enabled to apply in its name for the corresponding
patent invention, in the Republic of Colombia

Dado y firmado hoy/ Given and signed this
on/in

per/by

Firma/Signature

Piero Batteggazzore



CERTIFICACIÓN NOTARIAL (INDIVIDUO)

A las 20 días del mes de SETTEMBRE

de 2005 Ante mí, Notario Público de

ALESSANDRIA (ITALIA)

compareció(aron) personalmente

PIERO BATTEGAZZORE

a quien(ue) doy fe de conocer y me consta que es(son) la(s)
persona(s) firmante(s) del documento que precede y quien(es)
tiene(n) capacidad legal para otorgarlo

NOTARIAL CERTIFICATE N (INDIVIDUAL)

On this 20 day of SETTEMBRE

2005 before me, a Notary Public of

ALESSANDRIA (ITALIA)

personally appeared

PIERO BATTEGAZZORE

to me known, and known to me to be the person(s) who executed
that foregoing document, and who has(have) legal capacity to
execute it

NOTARIO PÚBLICO-NOTARY PUBLIC

f.to LUCIANO MARIANO NOTAIO



APOSTILLE

[Convention de la Haie du 5 octobre 1961]

REPUBBLICA ITALIANA

Il presente atto Autentico di Firma

In data 20-09-05 è stato sottoscritto da Dottor

Luciano Mariano agente in qualità di Notaio

in Alessandria è segnato dal timbro del Notaio stesso.

ATTESTATO

ad Alessandria il 26-09-05 da Il Sost. Procuratore della Repubblica
(Dott.ssa Patrizia Nobile)

Procuratore della Repubblica di Alessandria, sotto il n. 259

Il Sost. Procuratore della Repubblica
(Dott.ssa Patrizia Nobile)



TRADUCCIÓN OFICIAL No. 2049 - I, correspondiente a la apostilla que aparece en el documento mediante el cual Piero Battagazzore cede los derechos de la invención CIERRE PARA BOTELLAS QUE EVIDENCIA ALTERACIONES, PARTICULARMENTE PARA BOTELLAS QUE CONTIENEN BEBIDAS VALIOSAS a GUALA CLOSURES, S.P.A.; realizada por SANDRA MÓNICA BARRIGA BALMA traductora Oficial para los idiomas Español – Italiano - Español, RES. No. 735 del 20 de SEPTIEMBRE DE 2001 DEL MINISTERIO DEL INTERIOR Y DE JUSTICIA.

APOSTILLA

Convención de la Haya del 5 de octubre 1961

REPÚBLICA ITALIANA

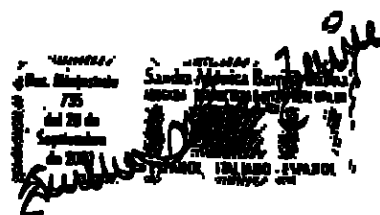
EL PRESENTE ACTO: AUTENTICACIÓN DE FIRMA, CON FECHA 20-09-05, FUE SUSCRITO POR EL DOCTOR LUCIANO MARIANO ACTUANDO EN CALIDAD DE NOTARIO DE ALESSANDRIA FUE MARCADO CON EL SELLO NOTARIAL

CERTIFICADO

EN ALLESANDRIA EL 26 DE SEPTIEMBRE 2005

FIRMADO POR LA DRA. PATRIZIA NOBILE, SUST. PROCURADOR DE LA REPÚBLICA. BAJO EL NÚMERO 259

SELLO REDONDO DE LA PROCURADURÍA DE LA REPÚBLICA - ALESSANDRIA



MINISTERIO DE RELACIONES
EXTERIORES

NO SE ASUME
RESPONSABILIDAD DEL TEXTO

166779
Sandra Ramirez
CUYA FIRMA APARECE EN EL
DOCUMENTO DESEMPEÑA
LAS FUNCIONES INDICADAS

2005 OCT -7 P 1:30

1103
JEFE DE LEGALIZACIONES
SANTAFE DE BOGOTA D.C.

70
69

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO

NIT : 800176089-2

RECIBO OFICIAL DE CAJA : 05 - 75,976
FECHA : OCTUBRE 3 DE 2005

SUPERINTENDENCIA Y COMERCIO
Radicación : 15102-43 00000028 Folio : 7
Fecha (FEB): 2005-10-07 17:21:11
Trámite : 011 PCT-PRI-INT 378 'ASE' MCI 411 PCT-SEM-PC
Dependencia: 2029 DIVISION DE NUEVAS INVENCIONES

***** CONSIGNACION *****

DEPOSITANTE	TIPO PAGO	BANCO	CUENTA	No. PAGO	FECHA PGO	Vr. PAGO
CAVELIER ABOGADOS	CONSIGNACION	BANCO POPULAR	050-00110-6	31556028	03/10/2005	58,956,360.00

***** CONCEPTO *****

CANT.	RENTISTICO	CONCEPTO	TOTAL CONCEPTO
1	50005-01-01 SOLICITUDES	1 TRAMITES DE SOL. DE PATENTE DE IN	443,000.00
		TOTAL :	\$ 443,000.00

SON: CUATROCIENTOS CUARENTA Y TRES MIL PESOS

RESPONSABLE : _____

RECIBO DE CAJA APLICADO AL EXPEDIENTE No. _____

Pdo 13464-841-001-4

SE-EXHIBICION Y ULTIMO
Radicator : 0012643 0022020 Folios : 70
Fecha (FOLIO) : 2020-10-07 17:31:11
Tramite : 011 DCI-PAIENI 3/8 FASE MP. 421 10000000
Presidencia: 2020 DIVISION DE NUEVAS ORIENTACIONES

REQUISITOS NECESARIOS PARA PRESENTACION Y AGILIZACION DEL
TRAMITE

	USUARIO	RADICADOR
PATENTE DE INVENCION ✓	()	()
MODELO DE UTILIDAD	()	()
- Indicación de que se solicita la concesión de una patente.	()	()
- Datos de identificación del solicitante o de la persona que se presenta la solicitud.	()	()
- Descripción de la invención.	()	()
- Dibujos de ser estos pertinentes.	()	()
- Comprobante de Pago de las tasas establecidas.	()	()
COMPLETA ()	INCOMPLETA ()	()
DISEÑO INDUSTRIAL ()		
- Indicación de que se solicita el registro de Diseño Industrial	()	()
- Datos de identificación del solicitante o de la persona que presenta la solicitud.	()	()
- Representación gráfica o fotográfica del Diseño Industrial o muestra del Material que incorpora el diseño.	()	()
- Comprobante de pago de las tasas establecidas	()	()
COMPLETA ()	INCOMPLETA ()	()
ESQUEMA DE TRAZADO ()		
- Indicación de que solicita el registro de un Esquema de trazado.	()	()
- Datos de identificación del solicitante o de la persona que presenta la solicitud.	()	()
- Representación gráfica del esquema de trazado	()	()
- Comprobante de pago de las tasas establecidas.	()	()
COMPLETA ()	INCOMPLETA ()	()

Firma Responsable: 

Fecha:

Folio _____

2020
Bogotá DC

Doctor
EMILIO FERRERO
Apoderado
GUALA CLOSURES S.P.A.

REFERENCIA:	Radicación No.	05-102643
	Solicitud Internacional	PCT/IT2003/000141
	Fecha inicio fase nacional	07-10-2005
	Trámite	011
	Evento	378
	Actuación	416
	Oficio No.	874
	Folios	001

Teniendo en cuenta que la solicitud de privilegio de patente que se tramita bajo el expediente indicado en la referencia, reúne los requisitos de forma establecidos en la Decisión 486 de la Comisión de la Comunidad Andina, el Tratado de Cooperación en Materia de Patentes (PCT), el Reglamento y la Circular Única de la Superintendencia de Industria y Comercio, se envía el extracto de la solicitud a la Oficina de Comunicaciones para efecto de su publicación en la Gaceta de Propiedad Industrial.

Cúmplase
Dado en Bogotá DC

09 NOV. 2005



ALIX CARMENZA CÉSPEDES DE VERGEL
Jefe de la División de Nuevas Creaciones

202030