

**Base : FAMPAT**

**SEARCH STRATEGY**

**SS Results**

|    |          |                                                                                                    |
|----|----------|----------------------------------------------------------------------------------------------------|
| 17 | 15       | 16 AND 6                                                                                           |
| 16 | 288      | 15 AND 4                                                                                           |
| 15 | 2003     | 14 AND 2                                                                                           |
| 14 | 12769    | 12 AND 13                                                                                          |
| 13 | 47634196 | PD<20141008                                                                                        |
| 12 | 15868    | ..SIMILARITY SS 11 RANKED 1                                                                        |
| 11 | 34       | 10 AND (COOL+ OR CHILL OR QUENCH OR DAMPEN)                                                        |
| 10 | 105      | 9 AND (HEAT+ OR HOT+ OR WARM+)                                                                     |
| 9  | 269      | 8 AND (PRES+ OR COMPRESSION)                                                                       |
| 8  | 274      | 7 AND (APPL+ OR ENFORCE OR PUT NEAR ON)                                                            |
| 7  | 397      | 6 AND (ASSEMB+ OR JOIN OR PUT NEAR TOGETHER)                                                       |
| 6  | 1031     | 5 AND (GLUI+ OR PAST+ OR STICK OR ATTACH)                                                          |
| 5  | 9464     | 3 AND 4                                                                                            |
| 4  | 4308144  | CLE+ OR WIPE OR WASH OR MOP                                                                        |
| 3  | 62828    | 1 AND 2                                                                                            |
| 2  | 1494582  | (ELASTOMER+ OR RUBBER OR CAOUTCHOUC)/BI/SA/IN/PA                                                   |
| 1  | 1003163  | (GAS-TIEGHT OR AIRTIGHT OR HERMETIC OR TIGHT<br>AIRPROOF)/TI/AB/IW/TX/CLMS/DESC/ODES/OBJ/ICLM/KEYW |

## 15 Documents

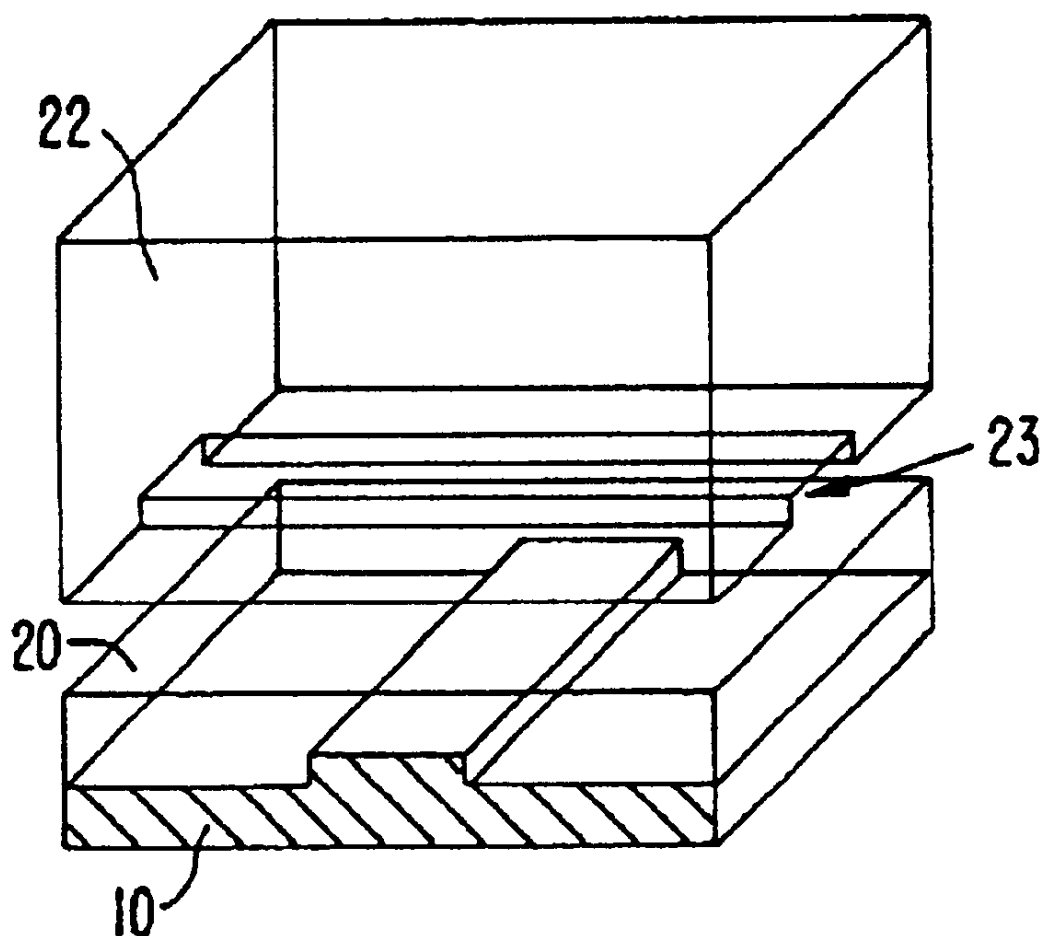
| Publication numbers             | Title                                                                                                        | Current assignees                                    |
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| <a href="#">WO9742897 A1</a>    | Carrier and method for containers to be sterilized by E-beams                                                | BRAUN MEDICAL                                        |
| <a href="#">WO2003106315 A1</a> | Device for gluing together two webs of packaging material                                                    | TETRA LAVAL HOLDINGS & FINANCE                       |
| <a href="#">CN1559318 A</a>     | Vacuum and fluid-pressure method for helmet construction                                                     | TAM CHIT HO, ...                                     |
| <a href="#">GB8400194 D0</a>    | Dimensionally recoverable article                                                                            | RAYCHEM                                              |
| <a href="#">BE-795542 A</a>     | Process and apparatus for testing the tightness of seam joints of synthetic resin sheets by means of vacuum  | DYNAMIT NOBEL                                        |
| <a href="#">WO201200526 A1</a>  | Sensor housing                                                                                               | PEPPERL & FUCHS                                      |
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| <a href="#">WO201200525 A1</a>  | Metal-plastic bond                                                                                           | PEPPERL & FUCHS                                      |

Family 1/15 - FAMPAT - ©Questel

**Title**

(EP2309130)

Microfabricated elastomeric valve and pump systems

**Images****Publication data including kind & date**

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**Abstract**

(EP2309130)

A method of fabricating an elastomeric structure, comprising: forming a first elastomeric layer on top of a first micromachined mold, the first micromachined mold having a first raised protrusion which forms a first recess extending along a bottom surface of the first elastomeric layer; forming a second elastomeric layer on top of a second micromachined mold, the second micromachined mold having a second raised protrusion which forms a second recess extending along a bottom surface of the second elastomeric layer, bonding the bottom surface of the second elastomeric layer onto a top surface of the first elastomeric layer such that a control channel forms in the second recess between the first and second elastomeric layers; and positioning the first elastomeric layer on top of a planar substrate such that a flow channel forms in the first recess between the first elastomeric layer and the planar substrate.

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**Publication dates**

2000-08-16

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2014-02-25

2014-09-30

2015-07-02

2015-10-01

2016-08-10

2017-01-05

2017-04-18

Family 2/15 - FAMPAT - ©Questel

Title

(EP2266522)

Carrier and method for containers to be sterilized by E-beams

Images

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ES2434940

T3 2013-12-18 ES2434940

**Abstract**

(EP2266522)

A method for forming a flexible container (10) for combined storage and administration is described. The method comprising the steps of sealing flexible front and rear sheets (12, 14) together at a common peripheral edge (16); heating the front and rear sheets (12, 14) in a first localised area to form a first peelable seal (24) extending between two sides of the common peripheral edge (16), the first peelable seal (24) separably joining the front and rear sheets (12, 14) to thereby form a first compartment (18) for containing a first product; and heating the front and rear sheets (12, 14) in a second localised area to form a second peelable seal (26) extending between the two sides of the common peripheral edge (16), the second peelable seal separably joining the front and rear sheets (12, 14) to thereby form an outlet compartment (22) and a second compartment (20) for containing a second product, the second compartment (20) being between the outlet compartment (22) and the first compartment (18). For ease of manufacture and filling first and second sacrificial ports (102, 104) are provided which are interposed between the front and rear sheets (12, 14) and are in communication with the first and second compartments (18, 20), respectively; with the first compartment (18) is filled with a first product through a respective sacrificial port (102); the second compartment (20) is filled with a second product through a respective sacrificial port (104); and the seal along the common peripheral edge (16) is completed and the sacrificial ports (102, 104) are removed from the container (10).

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BRAUN MEDICAL

**Publication dates**

1997-11-20

1997-11-20

1997-11-20

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1997-12-05

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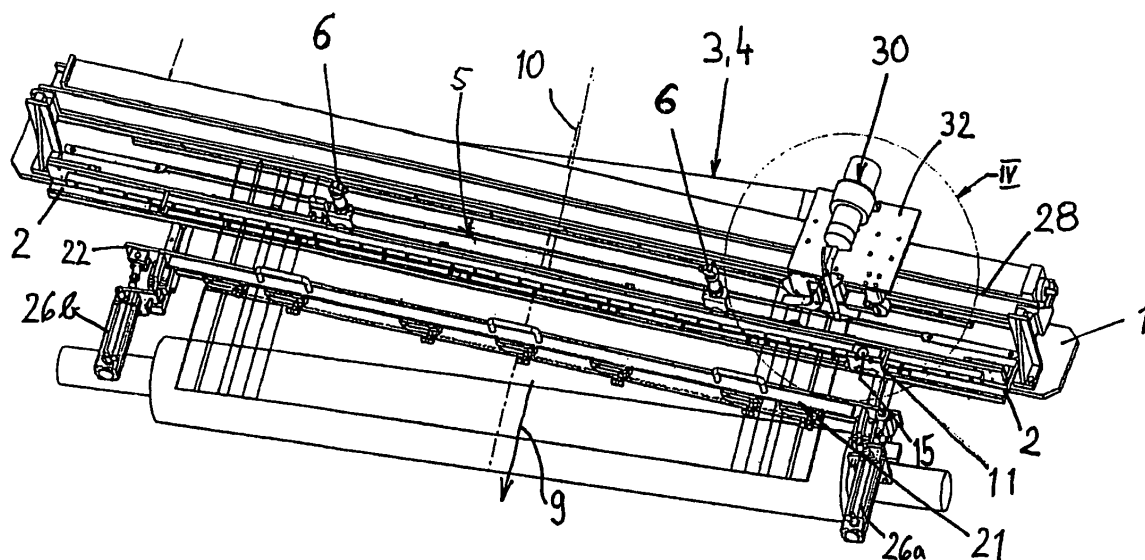
Family 3/15 - FAMPAT - ©Questel

**Title**

(WO2003106315)

Device for gluing together two webs of packaging material

**Images**



#### Publication data including kind & date

|                               |    |            |               |
|-------------------------------|----|------------|---------------|
| <a href="#">WO03106315</a>    | A1 | 2003-12-24 | WO2003106315  |
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| <a href="#">AU2003245918</a>  | A1 | 2003-12-31 | AU2003245918  |
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| <a href="#">CN1662437</a>     | A  | 2005-08-31 | CN1662437     |
| <a href="#">JP2005529012</a>  | A  | 2005-09-29 | JP2005529012  |
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| <a href="#">RU2005100771</a>  | A  | 2006-06-10 | RU2005100771  |
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| <a href="#">JP4339247</a>     | B2 | 2009-10-07 | JP4339247     |
| <a href="#">DE10226148</a>    | B4 | 2011-11-17 | DE10226148    |
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#### Abstract

(WO2003106315)

Disclosed is a device for gluing together two webs (3, 4) of packaging material used for producing liquid-tight packages, at least one face of each web (3, 4) being coated with a liquid-tight, heat-activated adhesive layer. Said device comprises means (5, 21, 27) for clamping the webs (3, 4) of material, a cutting mechanism (11) for making a diagonal cut that runs approximately perpendicular to the web (3, 4) of material, and a welding unit (30) applying heat and pressure for gluing together the webs (3, 4) of material along an adhesive strip. In order to provide the effective face of the web of material with an effective adhesive spot which is of sufficient quality and ensures improved and more reliable liquid tightness when an empty roll is replaced by a new, full roll, the welding unit (30) is provided with a carriage which is movable along a transverse rail (28) that runs approximately perpendicular to the direction of conveyance (9) of the web (3, 4) of material and on which a heater (32) and a pressing roller that is arranged behind said heater (32) in the moving direction are

disposed.

**Inventors**

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HEUN MICHAEL

MOELLER MATTHIAS

SCHEU FERDINAND

SPECHT KLAUS

**Latest standardized assignees - inventors removed**

TETRA LAVAL HOLDINGS & FINANCE

**Publication dates**

2003-12-24

2003-12-24

2003-12-31

2004-12-13

2004-12-13

2005-01-26

2005-03-09

2005-03-15

2005-03-15

2005-08-04

2005-08-31

2005-09-29

2005-12-20

2006-01-25

2006-06-10

2007-09-20

2008-02-19

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2009-10-07

2011-11-17

2012-05-29

2012-10-30

Family 4/15 - FAMPAT - ©Questel

**Title**

(US7247217)

Vacuum and fluid-pressure method for helmet construction

**Publication data including kind & date**

|                               |    |            |               |
|-------------------------------|----|------------|---------------|
| <a href="#">CN1559318</a>     | A  | 2005-01-05 | CN1559318     |
| <a href="#">CN1206953</a>     | C  | 2005-06-22 | CN1206953C    |
| <a href="#">US20050183812</a> | A1 | 2005-08-25 | US20050183812 |
| <a href="#">US7247217</a>     | B2 | 2007-07-24 | US7247217     |

**Abstract**

(US7247217)

A method for helmet construction by applying vacuum and fluid-pressure technologies is disclosed. Different types and sizes of exterior and interior helmet shells are press-formed from general engineering plastics. Conventional adhesive is applied on the inside surface of the exterior shell for fastening the interior and exterior shells together to form an integral shell unit. The shell unit is set on the base of a vacuuming apparatus moulded to adapt and to receive the inside surface contour of the interior shell. The vacuuming apparatus and the shell unit setting thereon are placed inside a conventional

plastic film bag for vacuuming clear of any air pockets in the space between the two shell layers. The vacuumed film bag containing the vacuuming apparatus and the shell unit is then submerged under heated fluid contained in an airtight and pressure-resistant vessel. Pressure is subsequently applied to the vessel to further pressurize and complete the fastening process of the interior and exterior shells. Helmet construction according to this method requires low operating temperature and low operating pressure, thus enabling the use of relatively inexpensive and easily sourced raw materials.

#### Inventors

TAM CHIT HO

#### Publication dates

2005-01-05

2005-06-22

2005-08-25

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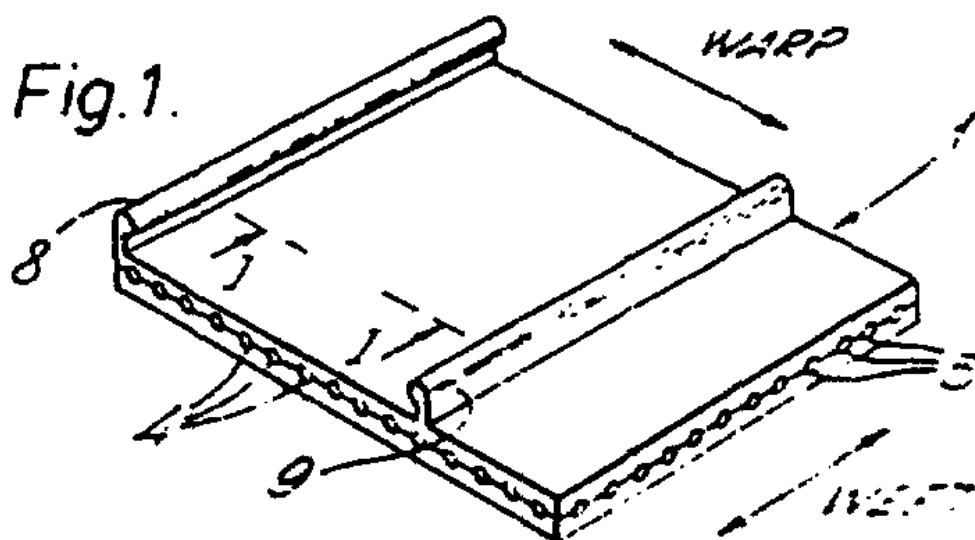
Family 5/15 - FAMPAT - ©Questel

#### Title

(EP-712715)

Dimensionally recoverable article

#### Images



#### Publication data including kind & date

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| <a href="#">BR8400032</a>   | A  | 1984-08-14 | BR8400032     |
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| GB2168648   | B  | 1987-03-11 | GB2168648   |    |    |    |    |
| GB2135632   | B  | 1987-03-18 | GB2135632   |    |    |    |    |
| IN159633    | B  | 1987-05-30 | IN-159633   |    |    |    |    |
| EP0243985   | A2 | 1987-11-04 | EP-243985   |    |    |    |    |
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| CA1232422   | A  | 1988-02-09 | CA1232422   |    |    |    |    |
| SG72487     | G  | 1988-03-04 | SG--72487   |    |    |    |    |
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| ES296530    | U  | 1988-12-16 | ES-296530U  |    |    |    |    |
| ES296530    | Y  | 1989-07-01 | ES-296530Y  |    |    |    |    |
| EP0270132   | A3 | 1989-07-19 | EP-270132   |    |    |    |    |
| EP0116393   | B1 | 1989-07-19 | EP-116393   |    |    |    |    |
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| HK82789     | A  | 1989-10-27 | HK8900827   |   |   |   |   |
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| JPH05254016 | A  | 1993-10-05 | JP05254016  |  |  |  |  |
| JPH0669721  | B2 | 1994-09-07 | JP94069721  |  |  |  |  |
| BRPI8400032 | A1 | 1995-03-21 | BRPI8400032 |  |  |  |  |
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| EP0712715   | A2 | 1996-05-22 | EP-712715   |  |  |  |  |
| EP0430377   | B1 | 1996-10-09 | EP-430377   |  |  |  |  |
| AT143851    | T  | 1996-10-15 | ATE143851   |  |  |  |  |
| DE3486439   | D1 | 1996-11-14 | DE3486439   |  |  |  |  |
| EP0712715   | A3 | 1996-11-27 | EP-712715   |  |  |  |  |
| DE3486439   | T2 | 1997-05-22 | DE3486439   |  |  |  |  |

### Abstract

(EP-712715)

A recoverable article comprising a composite structure is produced from a recoverable fabric and a polymeric matrix material. The structure is used for environmental protection of cables, pipes and other substrates. The recoverable fabric comprises a cross-linked recoverable polyolefin having a recovery stress of 1.5 to 5 mu Pa, and the matrix is cross-linked such that the recovery ratio available in the composite is at least 65% of that available in the free fabric, and the polymeric matrix material, per se, after irradiation has room temperature elongation of 400-700% measured at a strain rate of 300% per minute.

### Inventors

PITHOUSE KENNETH B

KRIDL THOMAS A

TRIPLETT JAMES T

**Latest standardized assignees - inventors removed**

RAYCHEM

**Publication dates**

1984-02-08

1984-08-14

1984-08-22

1984-09-05

1984-12-07

1985-06-01

1985-06-01

1985-11-06

1986-02-12

1986-02-12

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1988-06-08

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1989-10-27

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1992-03-25

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1996-05-22

1996-10-09

1996-10-15

1996-11-14

1996-11-27

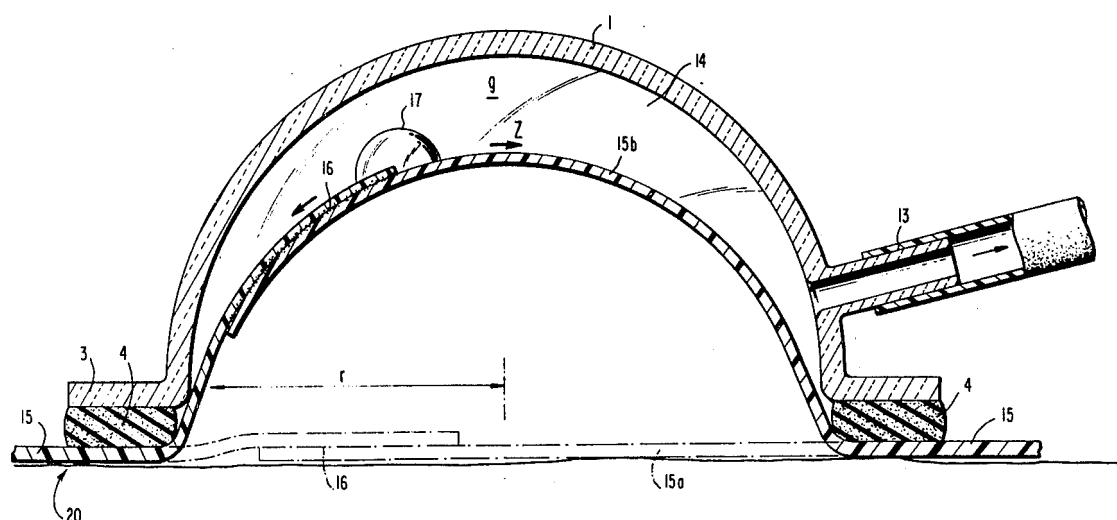
1997-05-22

Family 6/15 - FAMPAT - ©Questel

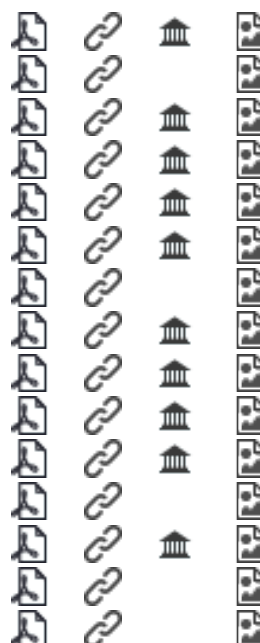
**Title**

(US4002055)

Process and apparatus for testing the tightness of seam joints of synthetic resin sheets by means of vacuum

**Images****Publication data including kind & date**

|                            |    |            |            |
|----------------------------|----|------------|------------|
| <a href="#">BE795542</a>   | A  | 1973-06-18 | BE-795542  |
| <a href="#">NL7302204</a>  | A  | 1973-08-21 | NL7302204  |
| <a href="#">DE2207648</a>  | A1 | 1973-08-30 | DE2207648  |
| <a href="#">FR2172321</a>  | A1 | 1973-09-28 | FR2172321  |
| <a href="#">JPS4890786</a> | A  | 1973-11-27 | JP48090786 |
| <a href="#">CH550396</a>   | A  | 1974-06-14 | CH-550396  |
| <a href="#">IT977390</a>   | B  | 1974-09-10 | IT-977390  |
| <a href="#">GB1384861</a>  | A  | 1975-02-26 | GB1384861  |
| <a href="#">DK133313</a>   | B  | 1976-04-26 | DK-133313  |
| <a href="#">DK133313</a>   | C  | 1976-09-27 | DK-133313C |
| <a href="#">US4002055</a>  | A  | 1977-01-11 | US4002055  |
| <a href="#">SE391033</a>   | B  | 1977-01-31 | SE-391033  |
| <a href="#">FR2172321</a>  | B1 | 1977-02-11 | FR2172321  |
| <a href="#">ATA138873</a>  | A  | 1977-05-15 | AT7301388  |
| <a href="#">AT341250</a>   | B  | 1978-01-25 | AT-341250  |

**Abstract**

(US4002055)

An apparatus for testing the strength and/or the leakproofness of seams or joints formed between synthetic resin sheets comprising a semicylindrical shell of transparent material having rounded closed-in portions and forming with its peripheral edges, sealing strip means surrounding said opening a continuous frame for engaging said strip means and a flexible

closure means operatively associated with said frame for sealing off the opening whereby a test chamber is formed and pump means connected to said chamber for applying a vacuum thereto.

#### Inventors

KOPS FRIEDRICH

#### Latest standardized assignees - inventors removed

DYNAMIT NOBEL

#### Publication dates

1973-06-18

1973-08-21

1973-08-30

1973-09-28

1973-11-27

1974-06-14

1974-09-10

1975-02-26

1976-04-26

1976-09-27

1977-01-11

1977-01-31

1977-02-11

1977-05-15

1978-01-25

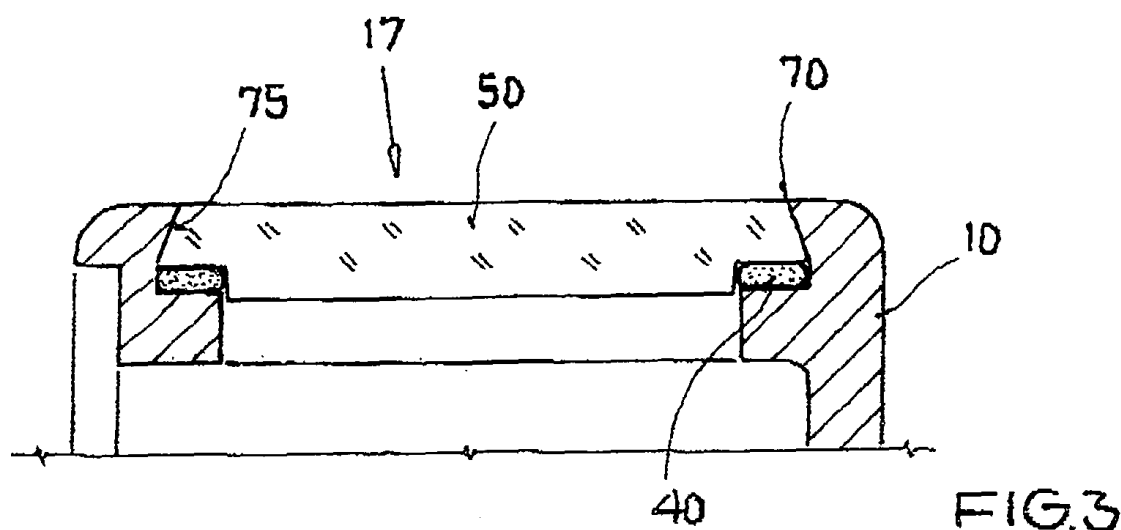
Family 7/15 - FAMPAT - ©Questel

#### Title

(WO201200526)

Sensor housing

#### Images



#### Publication data including kind & date

|                              |    |            |              |
|------------------------------|----|------------|--------------|
| <a href="#">WO2012000526</a> | A1 | 2012-01-05 | WO201200526  |
| <a href="#">CN103038021</a>  | A  | 2013-04-10 | CN103038021  |
| <a href="#">JP2013532074</a> | A  | 2013-08-15 | JP2013532074 |
| <a href="#">JP5642273</a>    | B2 | 2014-12-17 | JP5642273    |
| <a href="#">CN103038021</a>  | B  | 2015-05-06 | CN103038021B |



#### Abstract

(WO201200526)

According to the subject matter of the invention, a process for inserting a plastics body into an opening of a sensor housing is provided, wherein the opening has a side surface with an edge, in which a collar-like bead is formed on the edge and a shoulder-like protrusion for supporting the plastics body is formed on the side surface, a strip-like seal is incorporated on the protrusion before the plastics body is placed thereon, the plastics body is placed onto the protrusion of the side surface in such a manner that a side surface of the plastics body is arranged alongside the side surface of the sensor housing such that they impact against one another, and a form-fitting, elastically supported bond is produced by means of deformation between at least one part of the side surface of the sensor housing and a part of the side surface of the plastics body, such as to form a substantially jointless and substantially step-free transition between the sensor housing and the plastics body at the bonding site on the top side of the sensor housing and of the plastics body.

**Inventors**

LANGER CHRISTIAN

TAEUBERT SEBASTIAN

GEIPEL JOERG

**Latest standardized assignees - inventors removed**

PEPPERL & FUCHS

**Publication dates**

2012-01-05

2013-04-10

2013-08-15

2014-12-17

2015-05-06

Family 8/15 - FAMPAT - ©Questel

**Title**

(FR1293932)

Method of making hollow plastic articles produced by this method and objects

**Publication data including kind & date**

[FR1293932](#) A 1962-05-18 FR1293932

**Latest standardized assignees - inventors removed**

FAULTLESS RUBBER

**Publication dates**

1962-05-18

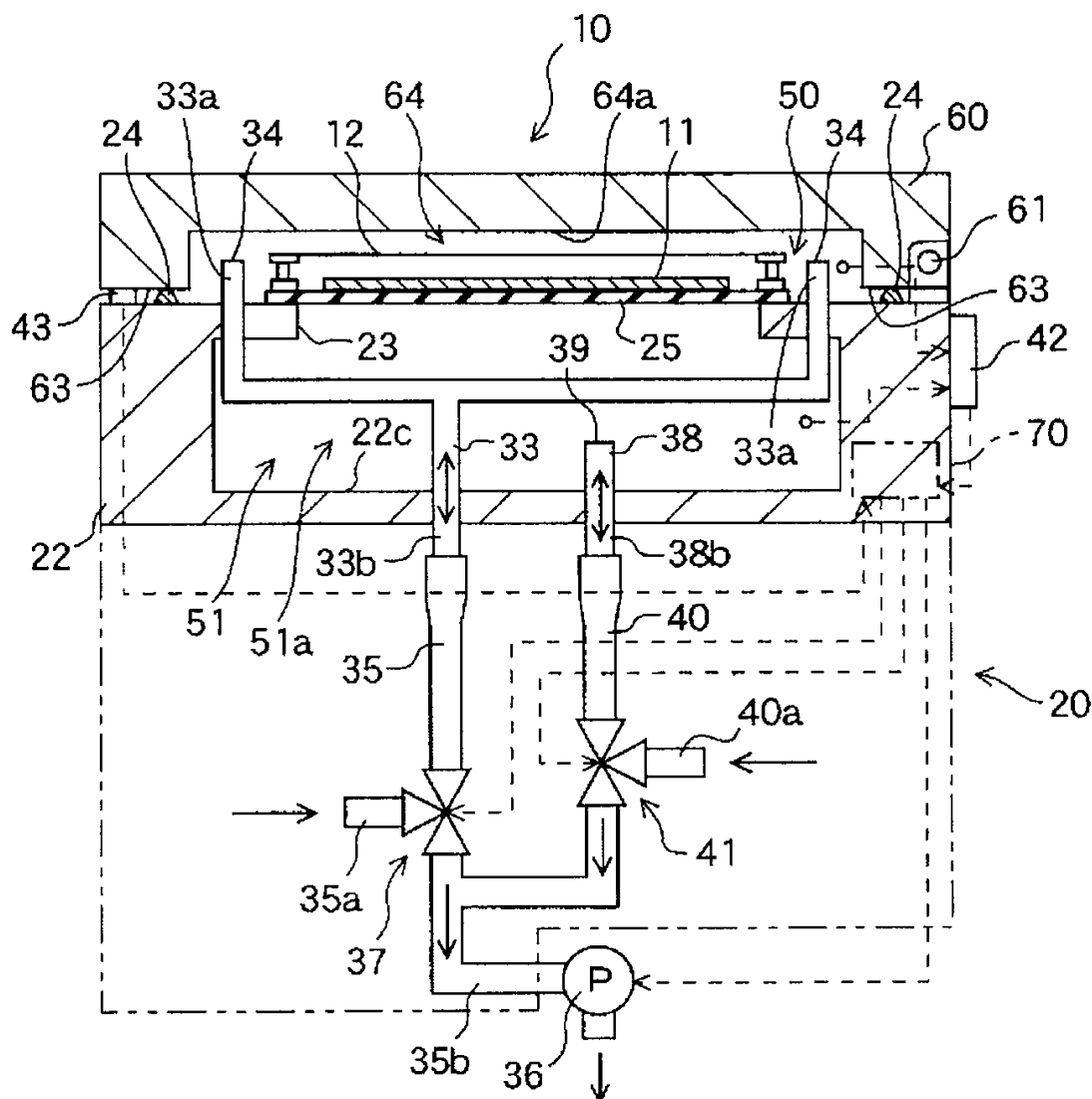
Family 9/15 - FAMPAT - ©Questel

**Title**

(WO2005117098)

Tape bonder, tape bonding method, and process for manufacturing electronic component

**Images**



#### Publication data including kind & date

|                               |    |            |               |
|-------------------------------|----|------------|---------------|
| <a href="#">JP2005093987</a>  | A  | 2005-04-07 | JP2005093987  |
| <a href="#">WO2005117098</a>  | A1 | 2005-12-08 | WO2005117098  |
| <a href="#">CN1954419</a>     | A  | 2007-04-25 | CN1954419     |
| <a href="#">US20080011403</a> | A1 | 2008-01-17 | US20080011403 |
| <a href="#">CN100440474</a>   | C  | 2008-12-03 | CN100440474C  |
| <a href="#">CN101335196</a>   | A  | 2008-12-31 | CN101335196   |
| <a href="#">US7594977</a>     | B2 | 2009-09-29 | US7594977     |
| <a href="#">JP2010272881</a>  | A  | 2010-12-02 | JP2010272881  |
| <a href="#">CN101335196</a>   | B  | 2011-04-13 | CN101335196B  |
| <a href="#">JP4738758</a>     | B2 | 2011-08-03 | JP4738758     |
| <a href="#">JP5313973</a>     | B2 | 2013-10-09 | JP5313973     |



#### Abstract

(WO2005117098)

A tape bonder (10) for bonding a tape member (12) to a work (11) comprising a rubber sheet (25) on the upper surface of which is mounted the work (11), a first vacuum chamber (50) located above the rubber sheet (25), a second vacuum chamber (51) located below the rubber sheet (25), a holding member (26) for holding the rubber sheet (25) without conducting air between the first and second vacuum chambers (50, 51), a tape-holding means (28) for holding the tape member (12) in a stretched state and locating the tape member (12) above the work (11), a first suction means (36) for evacuating the first vacuum chamber (50), a first air introduction means (37) for introducing air into the first vacuum chamber (50), a second suction means (36) for evacuating the second vacuum chamber (51), and a second air introduction

means (41) for introducing air into the second vacuum chamber (51).

**Inventors**

SAITO KIMIKAZU

SUZUKI TETSUSHI

**Latest standardized assignees - inventors removed**

TSUBAKI SEIKO

**Publication dates**

2005-04-07

2005-12-08

2007-04-25

2008-01-17

2008-12-03

2008-12-31

2009-09-29

2010-12-02

2011-04-13

2011-08-03

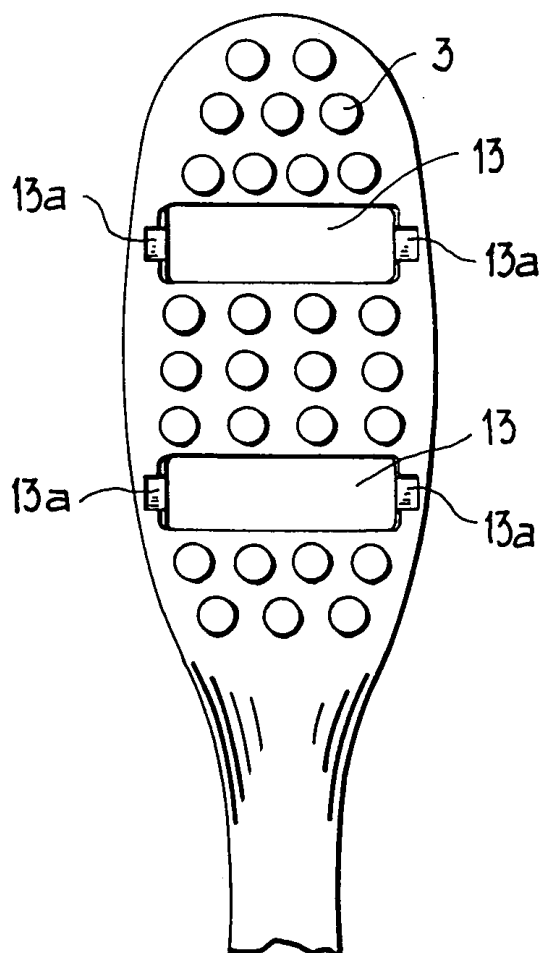
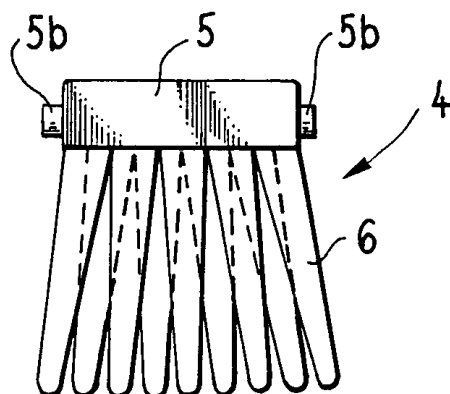
2013-10-09

Family 10/15 - FAMPAT - ©Questel

**Title**

(EP2842456)

Holder element for a toothbrush and method for the production of such a holder element

**Images**

|                   |    |            |                |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------|----|------------|----------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
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| CA2724109         | A1 | 2003-07-10 | CA2724109      |    |    |    |    |
| CA2724100         | A1 | 2003-07-10 | CA2724100      |    |    |    |    |
| CA2468340         | A1 | 2003-07-10 | CA2468340      |    |    |    |    |
| AU2002347125      | A1 | 2003-07-15 | AU2002347125   |    |    |    |    |
| DE10164336        | A1 | 2003-07-17 | DE10164336     |    |    |    |    |
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| NO20043193        | A  | 2004-07-27 | NO200403193    |    |    |    |    |
| KR20040071753     | A  | 2004-08-12 | KR20040071753  |    |    |    |    |
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| MXPA04006236      | A  | 2004-11-01 | MX2004PA006236 |    |    |                                                                                       |    |
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| VN9982            | A  | 2004-12-27 | VN---9982      |    |    |                                                                                       |    |
| ZA200403827       | B  | 2005-03-30 | ZA200403827    |    |    |                                                                                       |    |
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| RU2004123212      | A  | 2005-06-27 | RU2004123212   |    |    |                                                                                       |    |
| JP2005518829      | A  | 2005-06-30 | JP2005518829   |   |   |   |   |
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| EP1458261         | B1 | 2006-08-02 | EP1458261      |  |  |  |  |
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| ES2269779         | T3 | 2007-04-01 | ES2269779      |  |  |  |  |
| AU2007202870      | A1 | 2007-07-12 | AU2007202870   |  |  |  |  |
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| CN101081123       | A  | 2007-12-05 | CN101081123    |  |  |  |  |
| KR20080003464     | A  | 2008-01-07 | KR20080003464  |  |  |  |  |
| CN100377678       | C  | 2008-04-02 | CN100377678C   |  |  |  |  |
| US7354112         | B2 | 2008-04-08 | US7354112      |  |  |  |  |
| US20080127440     | A1 | 2008-06-05 | US20080127440  |  |  |  |  |
| US20080127439     | A1 | 2008-06-05 | US20080127439  |  |  |  |  |
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| HK1074981         | A1 | 2009-01-23 | HK1074981      |  |  |                                                                                       |  |
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| AT422312          | T  | 2009-02-15 | ATE422312      |  |  |                                                                                       |  |
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|-----------------------------------|----|------------|----------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
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| <a href="#">US7520571</a>         | B2 | 2009-04-21 | US7520571      |    |    |    |    |
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| <a href="#">ES2321124</a>         | T3 | 2009-06-02 | ES2321124      |    |    |    |    |
| <a href="#">US20090178220</a>     | A1 | 2009-07-16 | US20090178220  |    |    |    |    |
| <a href="#">JP4335686</a>         | B2 | 2009-09-30 | JP4335686      |    |    |    |    |
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| <a href="#">BRPI0216032</a>       | A2 | 2010-12-14 | BR200216032    |    |    |    |    |
| <a href="#">KR101004783</a>       | B1 | 2011-01-04 | KR101004783    |    |    |    |    |
| <a href="#">IN4656/CHENP/2010</a> | A  | 2011-02-04 | IN2010CN04656  |    |    |    |    |
| <a href="#">CA2468340</a>         | C  | 2011-02-08 | CA2468340      |    |    |    |    |
| <a href="#">KR101022855</a>       | B1 | 2011-03-17 | KR101022855    |    |    |    |    |
| <a href="#">EP2335520</a>         | A1 | 2011-06-22 | EP2335520      |    |    |    |    |
| <a href="#">EP2335519</a>         | A1 | 2011-06-22 | EP2335519      |    |    |    |    |
| <a href="#">EP2338377</a>         | A1 | 2011-06-29 | EP2338377      |    |    |    |    |
| <a href="#">US7988238</a>         | B2 | 2011-08-02 | US7988238      |    |    |    |    |
| <a href="#">RU2427302</a>         | C2 | 2011-08-27 | RU2427302      |   |   |   |   |
| <a href="#">USRE42985</a>         | E1 | 2011-12-06 | USRE42985      |  |  |  |  |
| <a href="#">NO331360</a>          | B1 | 2011-12-12 | NO-331360      |  |  |  |  |
| <a href="#">BRPI0215354</a>       | A2 | 2011-12-27 | BR200215354    |  |  |  |  |
| <a href="#">IN253035</a>          | B  | 2012-06-22 | IN-253035      |  |  |  |  |
| <a href="#">EP2338377</a>         | B1 | 2012-09-19 | EP2338377      |  |  |  |  |
| <a href="#">EP2335519</a>         | B1 | 2012-09-19 | EP2335519      |  |  |  |  |
| <a href="#">ES2391538</a>         | T3 | 2012-11-27 | ES2391538      |  |  |  |  |
| <a href="#">ES2392328</a>         | T3 | 2012-12-07 | ES2392328      |  |  |  |  |
| <a href="#">EP2060201</a>         | B1 | 2013-02-13 | EP2060201      |  |  |  |  |
| <a href="#">ES2404050</a>         | T3 | 2013-05-23 | ES2404050      |  |  |  |  |
| <a href="#">USRE44346</a>         | E1 | 2013-07-09 | USRE44346      |  |  |  |  |
| <a href="#">CA2724100</a>         | C  | 2013-08-06 | CA2724100      |  |  |  |  |
| <a href="#">BR122012007440</a>    | A2 | 2013-10-08 | BR122012007440 |  |  |  |  |
| <a href="#">CA2724120</a>         | C  | 2014-02-18 | CA2724120      |  |  |  |  |
| <a href="#">CA2724109</a>         | C  | 2014-02-18 | CA2724109      |  |  |  |  |
| <a href="#">CN101081123</a>       | B  | 2014-02-26 | CN101081123B   |  |  |  |  |
| <a href="#">HK1115724</a>         | A1 | 2014-08-15 | HK1115724      |  |  |  |  |
| <a href="#">CN101254047</a>       | B  | 2014-09-17 | CN101254047B   |  |  |  |  |
| <a href="#">USRE45141</a>         | E1 | 2014-09-23 | USRE45141      |  |  |  |  |
| <a href="#">EP2335520</a>         | B1 | 2014-11-05 | EP2335520      |  |  |  |  |
| <a href="#">EP2842456</a>         | A1 | 2015-03-04 | EP2842456      |  |  |  |  |
| <a href="#">CN101228993</a>       | B  | 2015-04-15 | CN101228993B   |  |  |  |  |
| <a href="#">BR122012007440</a>    | B1 | 2015-09-08 | BR122012007440 |  |  |  |  |
| <a href="#">BRPI0216032</a>       | B1 | 2017-04-11 | BRPI0216032    |  |  |  |  |
| <a href="#">BRPI0216032</a>       | B1 | 2017-04-11 | BR200216032    |  |  |  |  |
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| <a href="#">VN0018741</a>         | B  | 2018-04-25 | VN--18741B     |  |  |                                                                                       |  |

(EP2842456)

The toothbrush is composed of a handle (2), a head section (1) with bristle filaments (3), and at least one soft elastic cleaner (6) of natural or synthetic rubber. The cleaner is mounted at a carrier (5) of a hard material, which is durably bonded to the head section by a clamp, snap clip, rivet, adhesive, welding, ultrasonic welding or through heat. The toothbrush is composed of a handle (2), a head section (1) with bristle filaments (3), and at least one soft elastic cleaner (6) of natural or synthetic rubber. The cleaner is mounted at a carrier (5) of a hard material, which is durably bonded to the head section by a clamp, snap clip, rivet, adhesive, welding, ultrasonic welding or through heat. The cleaner and its carrier are produced by injection molding using two or more material components.

(From EP1661487 A1)

#### **Inventors**

FISCHER FRANZ

STRÄHLER RETO

#### **Latest standardized assignees - inventors removed**

TRISA

#### **Publication dates**

2003-07-10

2003-07-10

2003-07-10

2003-07-10

2003-07-10

2003-07-15

2003-07-17

2003-08-28

2004-07-27

2004-08-12

2004-09-22

2004-11-01

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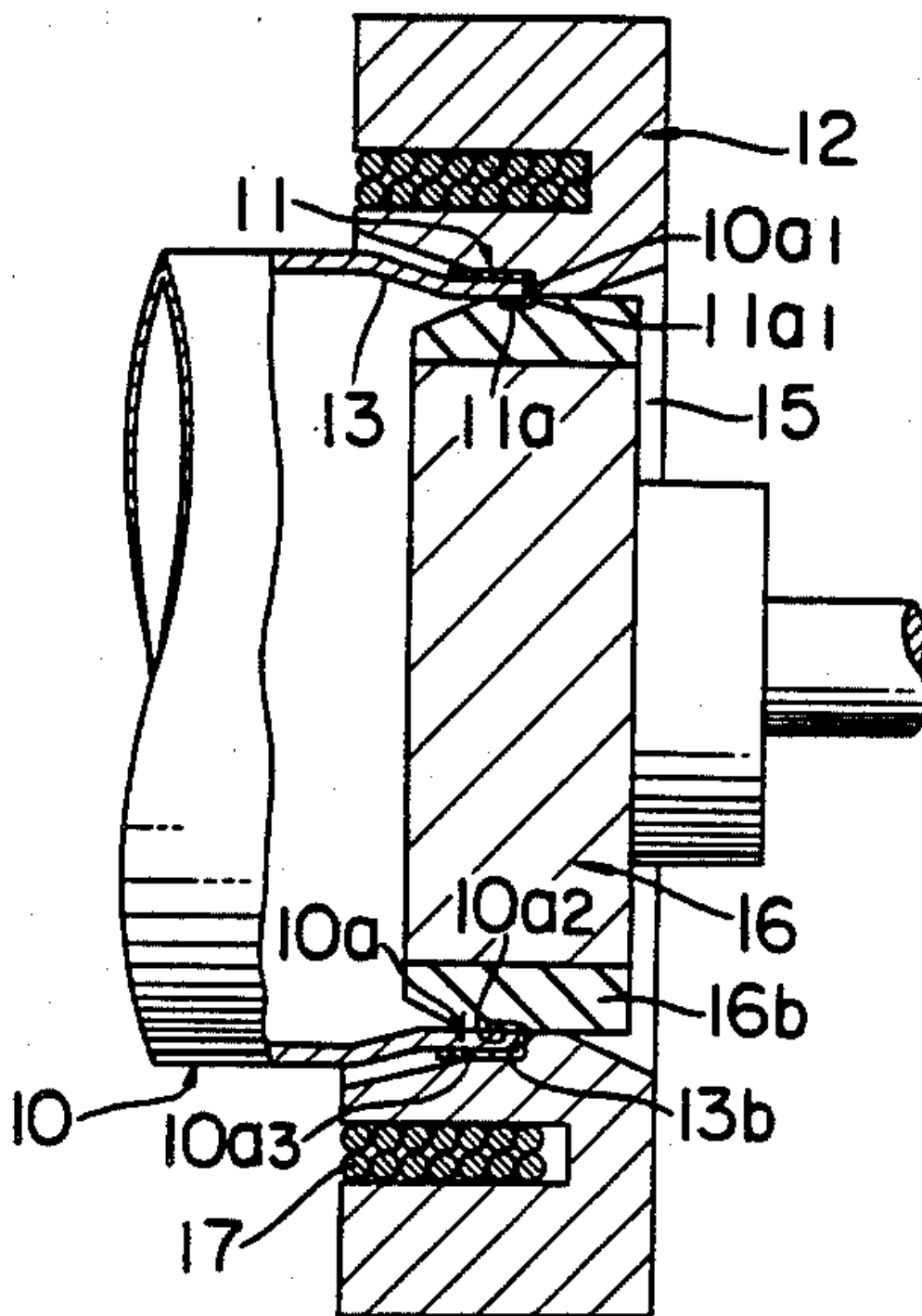
Family 11/15 - FAMPAT - ©Questel

**Title**

(EP-103027)

Method and apparatus for manufacturing metal can

**Images**



### Publication data including kind & date

|             |    |            |               |
|-------------|----|------------|---------------|
| JPS58152082 | A  | 1983-09-09 | JP58152082    |
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| JP1473684   | C  | 1988-12-27 | JP1473684   |
| KR890002489 | B1 | 1989-07-10 | KR890002489 |



### Abstract

(EP-103027)

Method and apparatus for manufacturing a metal can with an excellent corrosion resistance which comprises the steps of coating the opening ends and periphery of a can body with an adhesive to prevent damage, wrinkles and corrosion, thermally bonding a thermally-bondable plastic tape piece (11) around the outer peripheral surface (10a3 ) of a reduced diameter opening end (10a), except for an extended part (11a) thereof, by an adhesive roller (215) via a supply roller (218) rotating intermittently at the same speed to provide a first can body (10), engaging the body (10) with a die (12), bending the extended part inward then folding it to bring it into contact with the inner peripheral surface (10a2 ) side by a core (16), heating the opening end under the pressure of the core to form an adhesive layer (4), then engaging the opening end in a die (45) into the opening end (2a) of a second can body (2), and then heating the engaged part (44), thereby bonding the first and second can bodies together.

### Inventors

IMATANI, TSUNEO  
YASUMURO, HISAKAZU  
WATANABE, MICHIO  
KURASHIMA, HIDEO  
ISHIBASHI, KAZUHISA

### Latest standardized assignees - inventors removed

TOYO SEIKAN KAISHA

### Publication dates

1983-09-09  
1983-09-15  
1983-09-22  
1983-10-11  
1983-10-18  
1984-03-21  
1984-10-06  
1985-08-20  
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1986-12-05  
1987-01-13  
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1988-04-27  
1988-12-27  
1989-07-10

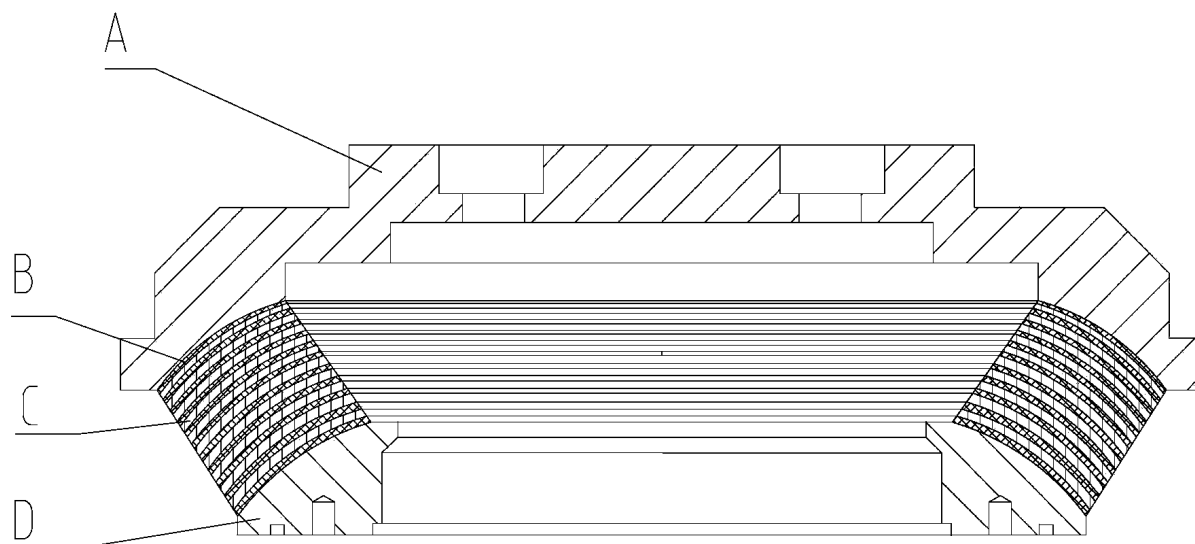
Family 12/15 - FAMPAT - ©Questel

### Title

(CN102748160B)

Flexible connector assembly for flexible spraying pipe of solid rocket engine and manufacture method thereof

## Images



### Publication data including kind & date

|                             |   |            |              |
|-----------------------------|---|------------|--------------|
| <a href="#">CN102748160</a> | A | 2012-10-24 | CN102748160  |
| <a href="#">CN102748160</a> | B | 2014-07-23 | CN102748160B |



### Abstract

(CN102748160B)

The invention discloses a flexible connector assembly for a flexible spraying pipe of a solid rocket engine and a manufacture method thereof. The flexible connector assembly comprises a front flange body and a back flange body which are connected through an elastic piece group and a reinforcing piece group. The elastic piece group is formed by  $n+1$  layers of homocentric sphere annular elastic slices which are matched. The reinforcing piece group is formed by  $n$  layers of homocentric sphere annular rigid slices, and  $n$  is a natural number. The  $n+1$  layers of homocentric sphere annular elastic slices and the  $n$  layers of homocentric sphere annular rigid slices are of an interactive interval bonding structure and are subjected to heat vulcanization bonding with the back flange body to form a heat bonding composite body. The heat bonding composite body and the front flange body are bonded through a cold adhesive to form a sphere homocentric connection body. The flexible connector assembly is high in bonding force, good in sealing performance, simple in manufacture method and operation, good in usability and low in cost.

### Inventors

WAN DEFEN

YU TIANXIONG

YAN SHULIANG

YANG JIANGBO

ZHU XINGTAO

### Latest standardized assignees - inventors removed

HUBEI SANJIANG SPACE JIANGBEI MECHANICAL ENGINEERING

### Publication dates

2012-10-24

2014-07-23

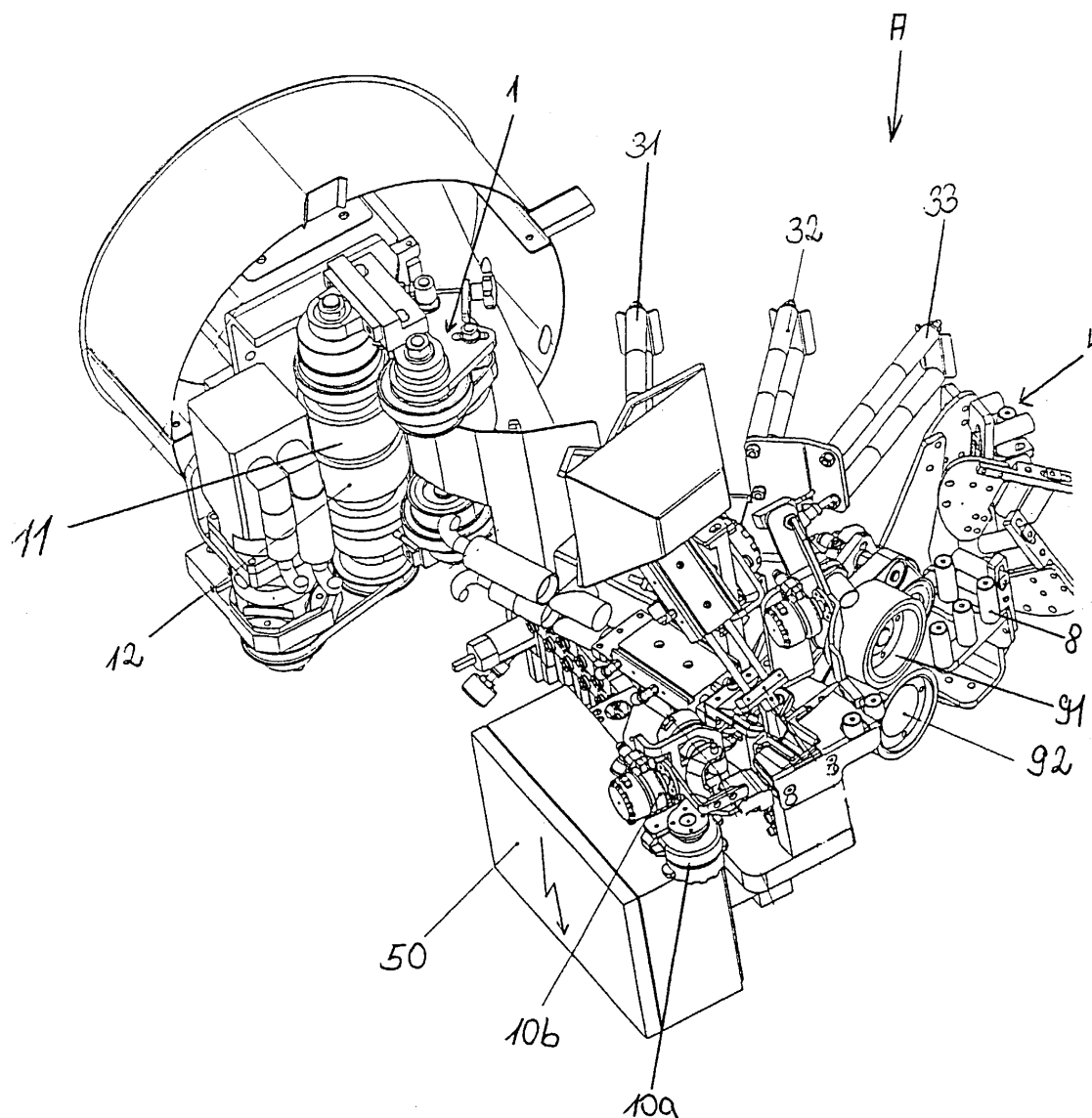
Family 13/15 - FAMPAT - ©Questel

### Title

(EP1528214)

Method and apparatus for the assembly of insulating glazing

## Images



#### Publication data including kind & date

|                               |    |            |               |
|-------------------------------|----|------------|---------------|
| <a href="#">EP1347142</a>     | A2 | 2003-09-24 | EP1347142     |
| <a href="#">US20030178127</a> | A1 | 2003-09-25 | US20030178127 |
| <a href="#">CN1445429</a>     | A  | 2003-10-01 | CN1445429     |
| <a href="#">DE10212359</a>    | A1 | 2003-10-09 | DE10212359    |
| <a href="#">EP1347142</a>     | A3 | 2004-07-28 | EP1347142     |
| <a href="#">EP1528214</a>     | A1 | 2005-05-04 | EP1528214     |
| <a href="#">WO2005040539</a>  | A1 | 2005-05-06 | WO200540539   |
| <a href="#">CA2511663</a>     | A1 | 2005-05-06 | CA2511663     |
| <a href="#">DE10350312</a>    | A1 | 2005-06-16 | DE10350312    |
| <a href="#">DE10212359</a>    | B4 | 2005-10-06 | DE10212359    |
| <a href="#">US20050247392</a> | A1 | 2005-11-10 | US20050247392 |
| <a href="#">DE10350312</a>    | B4 | 2005-12-01 | DE10350312    |
| <a href="#">BRPI0406506</a>   | A  | 2005-12-06 | BR200406506   |
| <a href="#">BRPI0406506</a>   | A1 | 2005-12-06 | BRPI0406506   |
| <a href="#">RU2005122405</a>  | A  | 2006-01-20 | RU2005122405  |
| <a href="#">CN1239805</a>     | C  | 2006-02-01 | CN1239805C    |
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| <a href="#">CA2511663</a>     | C  | 2008-06-10 | CA2511663     |  |  |  |  |
| <a href="#">US7523776</a>     | B2 | 2009-04-28 | US7523776     |  |  |  |  |
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| <a href="#">ES2262912</a>     | T5 | 2012-03-07 | ES2262912     |  |  |  |  |
| <a href="#">BRPI0406506</a>   | A2 | 2012-05-22 | BR200406506   |  |  |  |  |

**Abstract**

(EP1528214)

The method for producing an insulating glass pane unit with at least two glass panes includes extraction of an elastoplastic strip from a storage reel and coating its side surfaces with a glue preventing diffusion of water vapor. Coating of the side surfaces is carried out shortly before the strip is used as a distance and sealing element between the two glass panes. An independent claim is also included for an installation for implementation of the proposed method.

**Inventors**

LISEC PETER

**Latest standardized assignees - inventors removed**

TECNOPAT

**Publication dates**

2003-09-24

2003-09-25

2003-10-01

2003-10-09

2004-07-28

2005-05-04

2005-05-06

2005-05-06

2005-06-16

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2005-11-10

2005-12-01

2005-12-06

2005-12-06

2006-01-20

2006-02-01

2006-02-22

2006-03-07

2006-04-13

2006-05-03

2006-06-08

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2008-06-10

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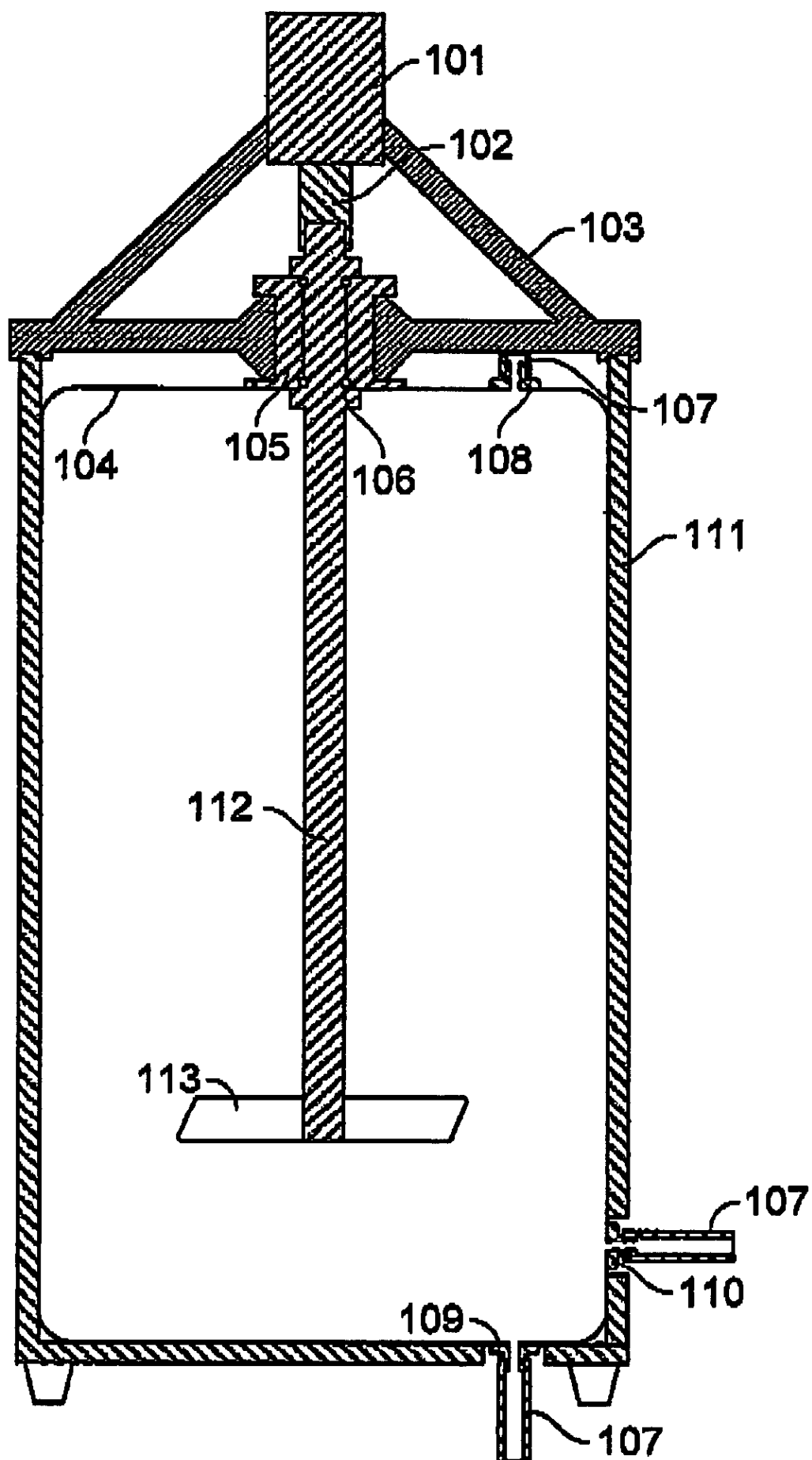
Family 14/15 - FAMPAT - ©Questel

**Title**

(EP3006549)

Gas spargers and related container systems

**Images**

**FIG. 1**

**Publication data including kind & date**

|                   |    |            |                |
|-------------------|----|------------|----------------|
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| JP5265345     | B2 | 2013-08-14 | JP5265345     |  |  |  |  |
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| IN258956      | B  | 2014-02-21 | IN-258956     |  |  |  |  |
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| US20140106453 | A1 | 2014-04-17 | US20140106453 |  |  |  |  |
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| US9005971     | B2 | 2015-04-14 | US9005971     |  |  |  |  |
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| DK1871513     | T3 | 2016-01-11 | DK1871513T    |  |  |  |  |
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| US20160158711 | A1 | 2016-06-09 | US20160158711 |  |  |  |  |
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|-------------------------------|----|------------|---------------|
| <a href="#">US20170088806</a> | A1 | 2017-03-30 | US20170088806 |
| <a href="#">US9682353</a>     | B2 | 2017-06-20 | US9682353     |
| <a href="#">US20170246603</a> | A1 | 2017-08-31 | US20170246603 |

**Abstract**

(EP3006549)

A sparger 34 includes a body 62 bounding a compartment. A tubular port or tube 66 is coupled with the body. The tubular port or tube bounds a passage 76 that communicates with the compartment of the body. At least a portion of the body includes of a first sparging sheet 64. The first sparging sheet includes a flexible sheet of a gas permeable material such that a gas passing into the compartment of the body through the passage can exit the compartment by permeating through the first sparging sheet.

**Inventors**

GOODWIN MICHAEL E

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LARSEN JEREMY K

**Latest standardized assignees - inventors removed**

LIFE TECHNOLOGIES

BAXALTA

**Publication dates**

2005-09-09

2005-10-27

2005-10-27

2005-11-10

2005-11-10

2005-11-10

2005-11-17

2005-11-17

2005-11-17

2005-12-15

2006-01-12

2006-01-19

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 2017-08-31

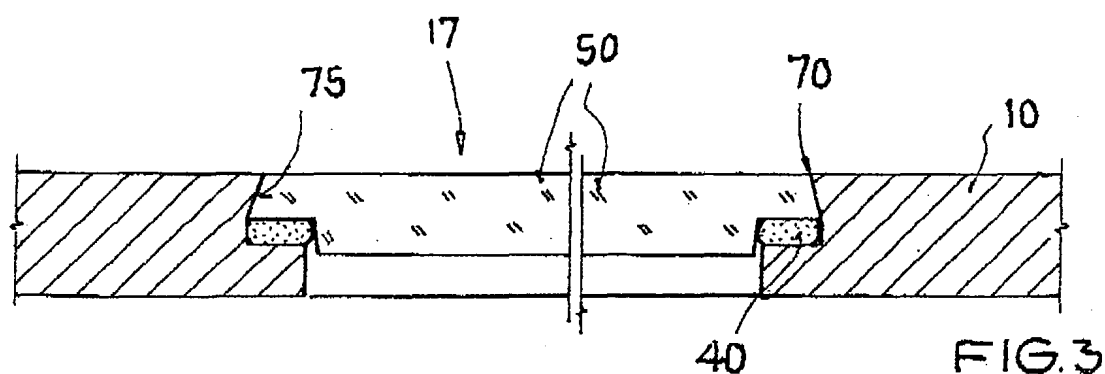
Family 15/15 - FAMPAT - ©Questel

#### Title

(WO201200525)

Metal-plastic bond

#### Images



#### Publication data including kind & date

|                              |    |            |              |
|------------------------------|----|------------|--------------|
| <a href="#">WO2012000525</a> | A1 | 2012-01-05 | WO201200525  |
| <a href="#">CN103003023</a>  | A  | 2013-03-27 | CN103003023  |
| <a href="#">JP2013530073</a> | A  | 2013-07-25 | JP2013530073 |
| <a href="#">JP5583273</a>    | B2 | 2014-09-03 | JP5583273    |
| <a href="#">CN103003023</a>  | B  | 2015-05-06 | CN103003023B |



#### Abstract

(WO201200525)

A process for creating a bond between a metal surface and a plastic surface, in which a collar-like bead is formed on at least one edge of the metal surface and a side surface having a shoulder-like protrusion for supporting the plastic surface is formed on the metal surface, a strip-like seal is incorporated on the protrusion before the plastic surface is placed thereon,

the plastic surface is placed onto the protrusion of the side surface in such a manner that a side surface of the plastic surface is arranged alongside the side surface of the metal surface such that they impact against one another, and a form-fitting, elastically supported bond is produced by means of deformation between at least one part of the side surface of the metal surface and a part of the side surface of the plastic surface, such as to form a substantially jointless and substantially step-free transition between the metal surface and the plastic surface at the bonding site on the top side of the metal surface and of the plastic surface.

**Inventors**

LANGER CHRISTIAN

TAEUBERT SEBASTIAN

GEIPEL JOERG

**Latest standardized assignees - inventors removed**

PEPPERL &amp; FUCHS

**Publication dates**

2012-01-05

2013-03-27

2013-07-25

2014-09-03

2015-05-06