

Description

2
The present invention relates to a process for
5 producing a sachet made of flexible synthetic material
and containing a liquid, equipped with a supporting and
stiffening means, the said sachet being obtained from a
liquid-filled cushion, the said cushion itself being made
continuously from a sheath of synthetic film wound on a
10 vertical former, the said grasping and stiffening means
consisting essentially of a rigid or semi-rigid handle
(known from the document U.S.-A-2,259,866).

The invention also relates to an apparatus for
producing such a sachet.

15 Sachets obtained by means of processes with essen-
tially vertical progression are well known per se. The
aim of most of them is to produce, at a particular time
in the process, a simple cushion closed by means of three
lateral welds and filled with a liquid. The problem pre-
20 sented involves giving this cushion a shape and stability
allowing it to be grasped and used, especially for pouring
its content.

Most of the apparatuses proposed hitherto make
use of welds and specific and complex cutouts in the
25 lower part of the intermediate cushion intended to be con-
verted into a sachet.

U.S. Patent 2,259,866 has already proposed a pro-
cess of this type, in which reinforcing elements are
attached to the film itself, before it is structured in
30 the form of a sheath.

This process requires very accurate positioning
of the reinforcements and also an additional device for
laying the reinforcements in place by means of an element
forming a countersupport.

35 Likewise, French certificate of addition 87,269
describes an apparatus for shaping a sachet, but with an
inner reinforcement, and this cannot be used for an
aseptic package and cannot, under any circumstances,
provide sufficient rigidity.

There is therefore a need for sachets obtained by means of a vertical-progression process, which can be equipped with effective and inexpensive grasping and stiffening means.

5 According to the invention, this result is obtained by means of a process for the formation of a sachet of flexible synthetic material containing a liquid, equipped with a supporting and stiffening means, the said sachet being obtained from a liquid-filled cushion, the said
10 cushion itself being made continuously from a sheath of synthetic film wound on a vertical former, the said grasping and stiffening means consisting essentially of a rigid or semi-rigid handle, characterized in that the handle is attached to the sheath when the latter is on
15 the former of the shaping machine.

 According to an advantageous embodiment of the invention, the handle can be in the form of a rigid strip having many possible cross-sections. The strip will be laid continuously on the sheath, when the latter is on the
20 former of a vertical machine. Machines of this type are described, for example, in French Patent 2,071,075. They will not be described in more detail.

 The process according to the invention can be carried out either from a magazine for the preparation
25 and storage of the handles ready to be used or by means of an apparatus incorporated in the packaging machine and delivering the handles from a reel, with the formation and successive cutting-out of these. These various processes will be explained below.

30 According to another embodiment of the process according to the invention, the handles or stiffening elements are taken by suction from a supply magazine by a rotary arm comprising a suction cup and welding means, and the said rotary arm, after rotation, applies the said
35 handle or stiffening element against the tubular sheath positioned on the former, the handle or stiffening element being fixed to the said sheath by welding means.

 The invention also relates to an apparatus for

carrying out this process. According to an advantageous embodiment, each handle or stiffening element made, for example, of cardboard will have associated with it, in the region of the supply magazine, a sheet of synthetic material perforated with one or more holes, allowing the simultaneous suction and take-up by the rotary arm of the handle and sheet associated with it, the handle subsequently being fixed to the sheath by means of the said sheet.

The scope of this embodiment would not be exceeded if the handle or stiffening element were more directly weldable to the sheath from the outset.

The invention will be understood better from the following description made with reference to the accompanying drawings which are given by way of nonlimiting example and in which:

- Figure 1 is a perspective view of a cushion according to the invention, equipped with a handle,
- Figures 2a, 2b, 2c, 2d, 2e, 2f and 2g are sections along the line A-A of Figure 1, according to several alternative embodiments,
- Figure 3 illustrates diagrammatically the process for the vertical shaping of a sheath.
- Figure 4 is a cross-sectional view, along the line B-B, in the region of the former of the shaping machine, explaining the principle of the process according to the invention,
- Figure 5 is a diagrammatic representation of a first method of carrying out the process according to the invention, using a magazine containing the prepared handles,
- Figure 6 is a diagrammatic representation of a second method of carrying out the process according to the invention, using a reel,
- Figure 7 illustrates a subsequent operating phase for reinforcing the handle,
- Figure 8A is a diagrammatic plan view of the phase of the take-up of the handle or stiffening element by the rotary arm from the supply magazine, according to a third embodiment of the invention,

- Figure 8B is a diagrammatic plan view of the phase of laying the handle or stiffening element on the tubular sheath by means of the rotary arm.

Reference will first be made to Figure 1 which shows the cushion (1) equipped with handles (2), which is to be obtained. It can subsequently be used, if appropriate, as it is as a sachet or undergo subsequent treatment, in particular to shape the upper corner (3) in a suitable way, as well as the lower corner (4) opposite the handle (2).

The cushion (1) is made of a flexible synthetic material known per se.

In all the following, the handle (2) can equally well be of any composition, namely cardboard, plastic, etc., and of any structure, corrugated, solid, embossed, etc.

The handle (2) can have various cross-sections:

- flat (5), in Figure 2a,
- enveloping with angles greater than 90° (6), in Figure 2b,
- enveloping with right angles (7), in Figure 2c,
- enveloping with right angles having turned-down edges (8), in Figure 2d,
- with central nipping (9), in Figure 2e,
- flat with ends turned down outwards at right angles (10), in Figure 2f,
- flat with turned-down ends inclined outwards (11), in Figure 2g.

It will be appreciated that these cross-sections are given merely by way of nonlimiting example.

Figure 3 illustrates the process for producing a tubular sheath intended to be filled with liquid and delivered in the form of cushion units.

A film (12) supplied continuously from a reel (not shown) passes over a so-called swan-neck structure which makes it possible to bring together the two ends (13, 14) of the film which are subsequently welded along a continuous line (15) round a vertical former (16), in order to produce a sheath (17).

According to the invention, at this stage, the handle (2) is applied continuously to the sheath (17) when the latter is still on the former (16) which serves as a support.

5 Advantageously, the former will have a specific cross-section matching each handle (2) which will have a suitable adhesive on its face opposite the sheath (17), or will be welded.

10 According to the embodiment in Figure 5, the handles (2') prepared in advance are supplied from a magazine (18) and applied by pressure to the sheath (17), at the same time bearing on the former (16). The handle is presented in the magazine ready to be used, that is to say cut, folded and shaped.

15 According to the embodiment in Figure 6, the handle (2'') is formed from a reel (1) by means of an apparatus incorporated in the packaging machine. Forming and cutting into individual handles are carried out by processes known per se. Laying in place is carried out in the same way as before. Alternatively, the handle can be conveyed horizontally, instead of travelling in the direction of advance of the sheath (17).

20 At this stage, whether with one of the processes described or the other, the configuration of Figure 1 is obtained, with the possible alternative forms of the handles.

25 To reinforce the handle even further, the upper corner can be turned down, after the cushion equipped with its handle has been filled and after the upper edge has been welded, as illustrated in Figure 7. Since the handle is a rigid element, it then becomes possible, in fact, to use it as a (reference) guide and support element. For this purpose, the handle (2) is held in jaws (20, 21) provided with grooves (22, 23). A piston (24) moving vertically then presses the turned-down corner (3) against the handle, the said corner previously being given a spot of adhesive. If the materials are compatible, the corner (3) and the handle (2) can be welded.

Reference will now be made to Figures 8A and 8B.

The apparatus used for carrying out this process comprises essentially:

- a rotary arm (101),
- a supply magazine (102).

The aim which is sought is to affix a handle or stiffening element (designated below simply by "handle") to a tubular sheath (104) shaped round a vertical former (105).

According to the main characteristic of this embodiment, the arm (101) mounted rotatively about an axle (106) has a suction means, for example a suction cup (107), for taking a handle from the magazine (102). The suction cup is mounted so as to execute a translational movement in the longitudinal axis of the arm (101). Thus, when the rotary arm comes into alignment in front of the magazine (102), the suction cup is in a retracted position (108) relative to the arm. For taking a handle, the suction cup advances to the position (109) and comes up against the handle presented. When suction has been applied, the suction cup carries the handle with it during its retraction to the position (108) once again, and then the rotary arm (101) rotates through a specific angle in order to bring the handle opposite the former (105).

The handle is then applied against the film (104) in the region of a flat portion (111) of the former, as a result of the extension of the suction cup out of the rotary arm into a position similar to the position (109), mentioned above.

The handle is then fixed to the sheath by a welding means (111) likewise carried by the arm (101) and movable in a translational movement along the longitudinal axis of the latter, in the same way as the suction cup.

The welding means then passes from a retracted position (112) to a welding position (113) which allows the handle to be laid on the sheath. The welding means and the suction cup, with the suction cut off, are then retracted, and the arm comes in front of the magazine (102) once again

for a new operation.

According to an advantageous embodiment, each handle in a magazine will have associated with it a sheet of synthetic material (114) which will be arranged between the suction cup and the handle just before the latter is taken up by the suction cup.

It will nevertheless be possible for the handle to be taken up by the suction cup, because one or more
5 holes made beforehand by means of a punch (115) will be provided in the sheet.

The sheets are obtained from a film reel (103) and a step-by-step drive (116) for the film.

The sheets are cut by a cutting means (117) disposed just in front of the magazine. Care will be taken to ensure that the surface of the sheet (114) is slightly
10 larger than that of the handle, in order to project beyond the sides of the latter to allow welding to the film (104).

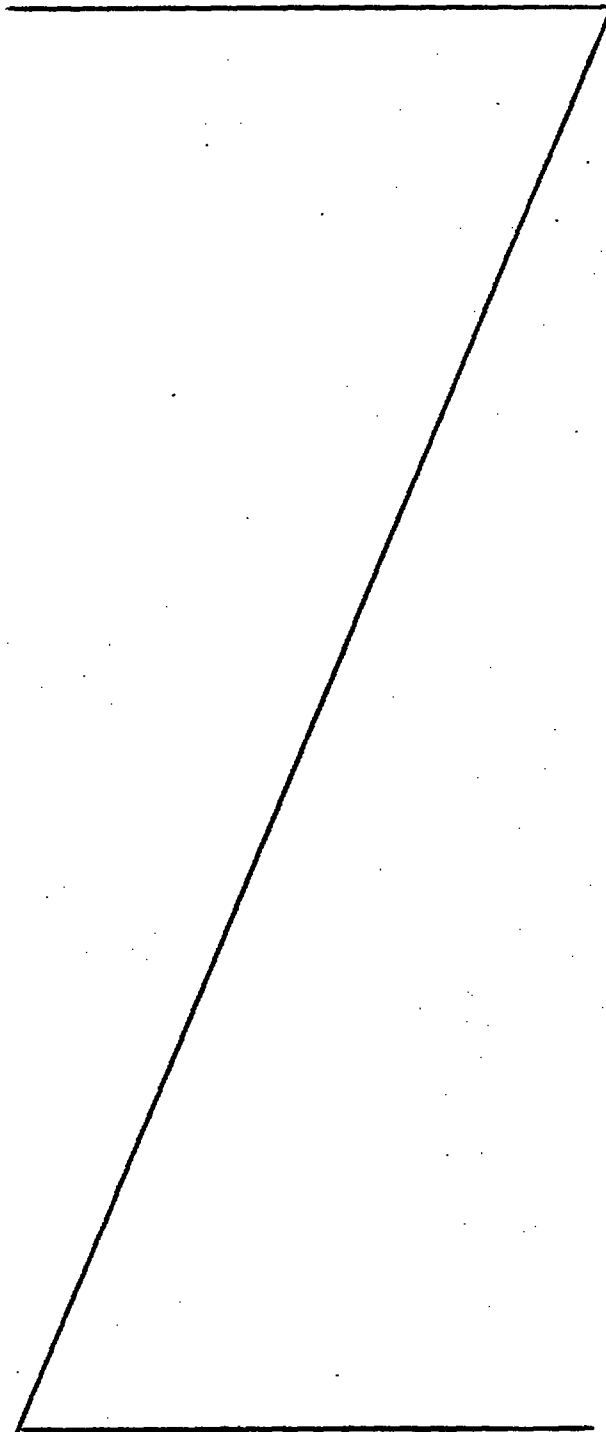
The sheet can be made of any material compatible
15 in welding terms with that of the film (104). Since it is not in contact with the liquid contained in the final sachet, it can be made of a material of lower quality than the actual sachet.

The handles can be made of any material, for
20 example cardboard, and will also serve as labels identifying the sachet and its content. In the magazine (102), they are conveyed one after the other by means of a conventional spring system (118).

Of course, the apparatus as a whole is indexed in
25 such a way that the sheath descends onto the former during the take-up of a handle by the rotary arm, and that the advance of the plastic sheet takes place during the positioning of the handle on the tubular sheath.

The operation of cutting the sheet (114) associated
30 with the handle is carried out in conjunction with the take-up by suction of the latter by the suction cup (107).

All these elements make use of pneumatic and mechanical assemblies perfectly well known to a person skilled in
35 the art, and therefore will not be described in more detail.



Revendications (as printed)

1. Procédé pour la réalisation d'un sachet en matière synthétique souple contenant un liquide, muni d'un moyen de maintien et de rigidification (2), ledit sachet étant obtenu à partir d'un coussin (1) rempli de liquide, ledit coussin étant lui-même réalisé en continu à partir d'une gaine (17) de film synthétique enroulé sur un mandrin vertical (16), ledit moyen de préhension et de rigidification consistant essentiellement en une

poignée rigide ou semi-rigide (2), caractérisé en ce que celle-ci est rapportée sur la gaine (17) lorsque celle-ci est sur le mandrin (16) de la machine de formage.

2. Procédé selon la revendication 1 caractérisé en ce que le coin supérieur (3) du coussin est rabattu sur la poignée (2).

3. Procédé selon l'une des revendications 1 et 2, caractérisé en ce que les poignées ou éléments de rigidification sont pris par aspiration à partir d'un magasin d'alimentation (102), par un bras rotatif (101) comportant une ventouse d'aspiration (107) et des moyens de soudure (111) et que ledit bras rotatif vient d'appliquer après rotation ladite poignée ou élément de rigidification contre la gaine tubulaire (104) positionnée sur le mandrin (105), la poignée ou élément de rigidification étant fixée à la gaine par des moyens de soudure.

4. Procédé selon la revendication 3, caractérisé en ce que la ventouse (107) et les moyens de soudure (111) sont montés mobiles en translation longitudinale sur le bras rotatif (101) de manière à pouvoir prendre chaque poignée ou élément de rigidification puis à le positionner contre la gaine et à le souder sur celle-ci.

5. Procédé selon l'une quelconque des revendications 3 et 4 caractérisé en ce que l'on intercale entre la ventouse (107) et chaque poignée, juste avant la prise de celle-ci par la ventouse, une feuille de matériau synthétique (114) compatible par soudure avec le film de la gaine tubulaire (104), ladite feuille comportant un ou plusieurs trous pour permettre l'aspiration de la poignée par la ventouse.

6. Procédé selon l'une quelconque des revendications 3 et 5, caractérisé en ce que la descente de la gaine sur le mandrin est opérée pendant la prise d'une poignée par le bras rotatif, que l'avance de la feuille de matière synthétique et la prise de la poignée suivante sont réalisées pendant le positionnement de la poignée sur la gaine tubulaire.

7. Procédé selon l'une quelconque des revendications 5 et 6 caractérisé en ce que la feuille (111) est découpée conjointement à la prise par aspiration de la poignée associée par la ventouse (107).

8. Dispositif pour mise en oeuvre du procédé selon l'une quelconque des revendications 1 à 7 comportent essentiellement une machine de conformation et de conditionnement à cheminement vertical, munie d'un mandrin (16), une alimentation en poignées (2', 2'') à partir d'un magasin (18) ou d'une bobine (19) caractérisé en ce qu'il comporte des moyens d'application par pression des poignées (2', 2'') sur la gaine de film (17).

9. Dispositif selon la revendication 8 caractérisé en ce que le coin (3) est rabattu sur la poignée (2) par un piston (24) se déplaçant verticalement, la poignée (2) étant maintenue dans des mâchoires (20, 21) munies de rainures (22, 23).

10. Dispositif selon la revendication 8 caractérisé en ce qu'il comporte essentiellement

un bras (101) monté rotatif autour d'un axe (106), muni d'une part d'une ventouse (107) pour la prise d'une poignée ou élément de rigidification dans un magasin (102), ladite ventouse étant montée mobile en translation selon l'axe longitudinal dudit bras et d'autre part de moyens de soudure (111) montés mobiles en translation selon l'axe longitudinal dudit bras.

11. Dispositif selon la revendication 10, caractérisé en ce qu'il comporte en outre un ensemble d'alimentation en film destiné à former les feuilles (114) composé d'une bobine (103), d'un poinçon (115), d'un entraînement pas à pas (116) du film et d'un moyen de découpe (117) disposé avant le magasin (102).

Claims (as printed)

1.) Process for the formation of a sachet of flexible synthetic material containing a liquid, equipped with a supporting and stiffening means (2), the said sachet being obtained from a liquid-filled cushion (1), the said cushion being itself made continuously from a sheath (17) of synthetic film wound on a vertical former (16), the said grasping and stiffening means consisting essentially of a rigid or semi-rigid handle (2), characterised in that the handle is attached to the sheath (17) when the latter is on the former (16) of the shaping machine.

2.) Process according to Claim 1, characterised in that the upper corner (3) of the cushion is turned down over the handle (2).

3.) Process according to one of Claims 1 and 2, characterised in that the handles or stiffening elements are taken by suction from a supply magazine (102) by a rotary arm (101) comprising a suction cup (107) and welding means (111) and in that the said rotary arm after rotation comes to apply the said handle or stiffening element against the tubular sheath (104) positioned on the former (105), the handle or stiffening element being fixed to the sheath by welding means.

4.) Process according to Claim 3, characterised in that the suction cup (107) and the welding means (111) are mounted for longitudinal translational movement on the rotary arm (101) in such manner as to be able to take each handle or stiffening element and then position it against the sheath and to weld it thereto.

5.) Process according to any one of Claims 3 and 4, characterised in that between the suction cup (107) and each handle, just before the latter is taken by the suction cup, there is interposed a sheet of synthetic material (114) compatible with welding with the film of the tubular sheath (104), the said sheet comprising one or more holes to permit the suction of the handle by the suction cup.

6.) Process according to any one of Claims 3 and 5, characterised in that the descent of the sheath on to the former is effected during the taking of a handle by the rotary arm, in that the

advance of the sheet of synthetic material and the taking of the next handle are effected during the positioning of the handle on the tubular sheath.

7.) Process according to any one of Claims 5 and 6, characterised in that the sheet (111) is cut out in conjunction with the taking by suction of the associated handle by the suction cup (107).

8.) Apparatus for carrying out the process according to any one of Claims 1 to 7, comprising essentially a vertically progressing shaping and make-up machine equipped with a former (16) a supply of handles (2', 2'') from a magazine (18) or a reel (19), characterised in that it comprises means for pressure application of the handles (2', 2'') to the film sheath (17).

9.) Apparatus according to Claim 8, characterised in that the corner (3) is turned down on the handle (2) by a vertically moving piston (4), the handle (2) being retained in jaws (20, 21) equipped with grooves (22, 23).

10.) Apparatus according to Claim 8, characterised in that it comprises essentially an arm (101) mounted for rotation about an axis (106) and equipped for one part with a suction cup (107) for the taking of a handle or stiffening element from a magazine (102), the said cup being mounted for translational movement in the direction of the longitudinal axis of the said arm, and for the other part with welding means (111) mounted for translational movement in the direction of the longitudinal axis of the said arm.

11.) Apparatus according to Claim 10, characterised in that it further comprises a film supply assembly for film intended to form the sheets (114), composed of a reel (103), a punch (115), a step-by-step drive (116) for the film and a cutting means (117) disposed before the magazine (102).

Patentansprüche (as printed)

1. Verfahren zur Herstellung eines eine Flüssigkeit enthaltenden Beutels aus synthetischem, flexiblem Material, der über ein Halte- und Versteifungsmittel (2) verfügt, wobei der Beutel ausgehend von einem mit Flüssigkeit gefüllten Kissen (1) erhalten wird und das Kissen selbst kontinuierlich ausgehend von einer Hülle (17) aus einer synthetischen Folie hergestellt ist, die einen vertikalen Dorn (16) umwickelt, und wobei das Greif- und Versteifungsmittel im wesentlichen aus einem steifen oder halbsteifen Handgriff (2) besteht, dadurch gekennzeichnet, daß dieser auf die Hülle (17) aufgebracht wird, wenn sich diese auf dem Dorn (16) der Bearbeitungsmaschine befindet.

2. Verfahren nach Anspruch 1, dadurch gekennzeichnet, daß die obere Ecke (3) des Kissens auf den Handgriff (2) umgeschlagen ist.

3. Verfahren nach einem der Ansprüche 1 und 2, dadurch gekennzeichnet, daß die Handgriffe oder Versteifungselemente durch Ansaugen aus



un bras (101) monté rotatif autour d'un axe (106), muni d'une part d'une ventouse (107) pour la prise d'une poignée ou élément de rigidification dans un magasin (102), ladite ventouse étant montée mobile en translation selon l'axe longitudinal dudit bras et d'autre part de moyens de soudure (111) montés mobiles en translation selon l'axe longitudinal dudit bras.

11. Dispositif selon la revendication 10, caractérisé en ce qu'il comporte en outre un ensemble d'alimentation en film destiné à former les feuilles (114) composé d'une bobine (103), d'un poinçon (115), d'un entraînement pas à pas (116) du film et d'un moyen de découpe (117) disposé avant le magasin (102).

Claims (as printed)

1.) Process for the formation of a sachet of flexible synthetic material containing a liquid, equipped with a supporting and stiffening means (2), the said sachet being obtained from a liquid-filled cushion (1), the said cushion being itself made continuously from a sheath (17) of synthetic film wound on a vertical former (16), the said grasping and stiffening means consisting essentially of a rigid or semi-rigid handle (2), characterised in that the handle is attached to the sheath (17) when the latter is on the former (16) of the shaping machine.

2.) Process according to Claim 1, characterised in that the upper corner (3) of the cushion is turned down over the handle (2).

3.) Process according to one of Claims 1 and 2, characterised in that the handles or stiffening elements are taken by suction from a supply magazine (102) by a rotary arm (101) comprising a suction cup (107) and welding means (111) and in that the said rotary arm after rotation comes to apply the said handle or stiffening element against the tubular sheath (104) positioned on the former (105), the handle or stiffening element being fixed to the sheath by welding means.

4.) Process according to Claim 3, characterised in that the suction cup (107) and the welding means (111) are mounted for longitudinal translational movement on the rotary arm (101) in such manner as to be able to take each handle or stiffening element and then position it against the sheath and to weld it thereto.

5.) Process according to any one of Claims 3 and 4, characterised in that between the suction cup (107) and each handle, just before the latter is taken by the suction cup, there is interposed a sheet of synthetic material (114) compatible with welding with the film of the tubular sheath (104), the said sheet comprising one or more holes to permit the suction of the handle by the suction cup.

6.) Process according to any one of Claims 3 and 5, characterised in that the descent of the sheath on to the former is effected during the taking of a handle by the rotary arm, in that the

advance of the sheet of synthetic material and the taking of the next handle are effected during the positioning of the handle on the tubular sheath.

7.) Process according to any one of Claims 5 and 6, characterised in that the sheet (111) is cut out in conjunction with the taking by suction of the associated handle by the suction cup (107).

8.) Apparatus for carrying out the process according to any one of Claims 1 to 7, comprising essentially a vertically progressing shaping and make-up machine equipped with a former (16) a supply of handles (2', 2'') from a magazine (18) or a reel (19), characterised in that it comprises means for pressure application of the handles (2', 2'') to the film sheath (17).

9.) Apparatus according to Claim 8, characterised in that the corner (3) is turned down on the handle (2) by a vertically moving piston (4), the handle (2) being retained in jaws (20, 21) equipped with grooves (22, 23).

10.) Apparatus according to Claim 8, characterised in that it comprises essentially an arm (101) mounted for rotation about an axis (106) and equipped for one part with a suction cup (107) for the taking of a handle or stiffening element from a magazine (102), the said cup being mounted for translational movement in the direction of the longitudinal axis of the said arm, and for the other part with welding means (111) mounted for translational movement in the direction of the longitudinal axis of the said arm.

11.) Apparatus according to Claim 10, characterised in that it further comprises a film supply assembly for film intended to form the sheets (114), composed of a reel (103), a punch (115), a step-by-step drive (116) for the film and a cutting means (117) disposed before the magazine (102).

Patentansprüche (as printed)

1. Verfahren zur Herstellung eines eine Flüssigkeit enthaltenden Beutels aus synthetischem, flexiblem Material, der über ein Halte- und Versteifungsmittel (2) verfügt, wobei der Beutel ausgehend von einem mit Flüssigkeit gefüllten Kissen (1) erhalten wird und das Kissen selbst kontinuierlich ausgehend von einer Hülle (17) aus einer synthetischen Folie hergestellt ist, die einen vertikalen Dorn (16) umwickelt, und wobei das Greif- und Versteifungsmittel im wesentlichen aus einem steifen oder halbsteifen Handgriff (2) besteht, dadurch gekennzeichnet, daß dieser auf die Hülle (17) aufgebracht wird, wenn sich diese auf dem Dorn (16) der Bearbeitungsmaschine befindet.

2. Verfahren nach Anspruch 1, dadurch gekennzeichnet, daß die obere Ecke (3) des Kissens auf den Handgriff (2) umgeschlagen ist.

3. Verfahren nach einem der Ansprüche 1 und 2, dadurch gekennzeichnet, daß die Handgriffe oder Versteifungselemente durch Ansaugen aus



einem Zuführungsmagazin (102) mit Hilfe eines drehbaren Armes (101) erfaßt werden, der einen Saugnapf (107) und Schweißeinrichtungen (111) aufweist, und daß der drehbare Arm nach der Drehung den Handgriff oder das Versteifungselement gegen die auf dem Dorn (105) positionierte schlauchförmige Hülle (104) aufbringt, wobei der Handgriff oder das Versteifungselement an der Hülle mittels der Schweißeinrichtung befestigt wird.

4. Verfahren nach Anspruch 3, dadurch gekennzeichnet, daß der Saugnapf (107) und die Schweißeinrichtung (111) in Längsrichtung verschiebbar so auf dem drehbaren Arm (101) befestigt sind, daß sie jeden Handgriff oder jedes Versteifungselement erfassen können und es danach gegen die Hülle positionieren und auf dieser festschweißen können.

5. Verfahren nach einem der Ansprüche 3 und 4, dadurch gekennzeichnet, daß man zwischen dem Saugnapf (107) und jedem Handgriff unmittelbar vor dessen Erfassung durch den Saugnapf ein Blatt aus einem synthetischen Material (114) einfügt, das schweißkompatibel mit der Folie der schlauchförmigen Hülle (104) ist, wobei das Blatt ein oder mehrere Löcher aufweist, um das Ansaugen des Handgriffs durch den Saugnapf zu gestatten.

6. Verfahren nach einem der Ansprüche 3 und 5 dadurch gekennzeichnet, daß die Abwärtsbewegung der Hülle auf dem Dorn während des Erfassens eines Handgriffs durch den drehbaren Arm erfolgt und daß der Vorschub des Blattes aus synthetischem Material und das Erfassen des nachfolgenden Handgriffs während der Positionierung des Handgriffs auf der schlauchförmigen Hülle erfolgen.

7. Verfahren nach einem der Ansprüche 5 und 6, dadurch gekennzeichnet, daß das Blatt (111) zusammen mit dem Erfassen durch Ansaugen des Handgriffs ausgeschnitten wird, der dem Saugnapf (107) zugeordnet ist.

8. Vorrichtung zur Durchführung des Verfahrens nach einem der Ansprüche 1 bis 7, die im wesentlichen eine Herstellungs- und Füllmaschine mit vertikalem Vorschub umfaßt mit einem Dorn (16) versehen ist und eine Speisung mit Handgriffen (2', 2'') ausgehend von einem Magazin (18) oder einer Rolle (19) aufweist, dadurch gekennzeichnet, daß sie Vorrichtungen zum Anbringen der Handgriffe (2, 2'') auf der Folie (17) durch Druckanwendung aufweist.

9. Vorrichtung nach Anspruch 8, dadurch gekennzeichnet, daß die Ecke (3) auf den Handgriff (2) mit Hilfe eines Kolbens (24) umgeschlagen wird, der sich vertikal verschiebt, wobei der Handgriff (2) in Klammern (20; 21) gehalten ist, die über Nuten (22, 23) verfügen.

10. Vorrichtung nach Anspruch 8, dadurch gekennzeichnet, daß sie im wesentlichen einen Arm (101) umfaßt, der drehbar um eine Achse (106) befestigt ist und einerseits mit einem Saugnapf (107) für das Erfassen eines Handgriffes oder Versteifungselementes in einem Magazin (102) ausgestattet ist, wobei der

Saugnapf entlang der Längsachse des Armes verschiebbar beweglich befestigt ist, und daß der Arm andererseits mit Schweißeinrichtungen (111) versehen ist, die in Richtung der Längsachse des Armes verschiebbar beweglich befestigt sind.

11. Vorrichtung nach Anspruch 10, dadurch gekennzeichnet, daß sie zusätzlich eine Zuführungseinheit für eine Folie die bestimmt ist die Blätter (114) zu bilden, aufweist die aus einer Spule (103), einer Stanze (115), einer schrittweise arbeitenden Vorschubeinheit (116) für die Folie und einer vor dem Magazin (102) angeordneten Schneideinrichtung (117) besteht.

5

10

15

20

25

30

35

40

45

50

55

60

65