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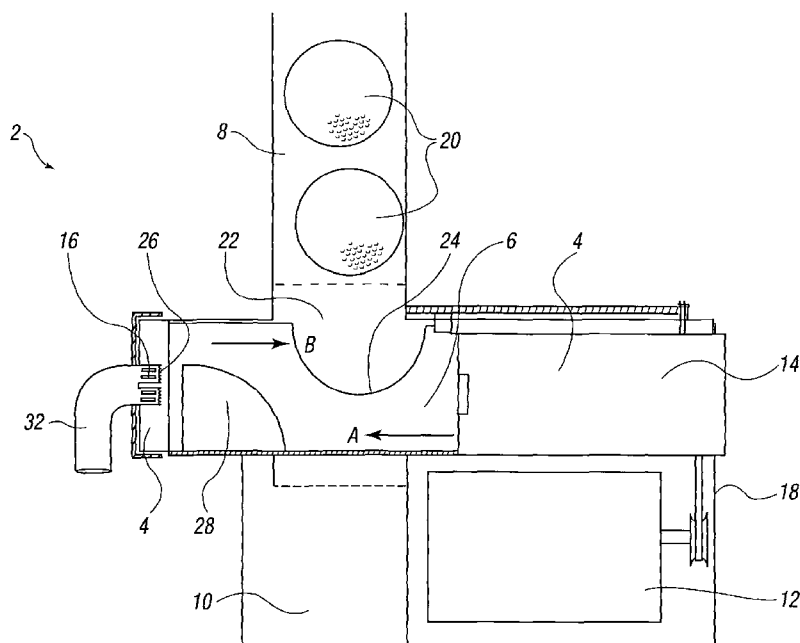


FIG. 1

(57) Abstract: A juicer apparatus (2) for extracting the juice from one or more fruits, said apparatus including a press means (4) which includes at least one extracting portion (16) and a first member (6), wherein once the one or more fruits have been pressed by the press means (4) the first member (6) substantially removes the pressed articles from the extracting portion (16) by the extracting portion (16) and/or the first member (6) moving from a first position to at least a second position.

Press Apparatus and Method of Use Thereof

The present application relates to an improved press apparatus and method of use of said improved press apparatus.

Although the following description refers almost exclusively to a press for juicing citrus fruits, it will be appreciated by those skilled in the art that such an apparatus and method could be used to press a number of articles to extract substances from the same, including other foodstuffs, aggregates and minerals.

The use of apparatuses to obtain substances such as juices from fruits is well known. There are many types of apparatuses or machines capable of obtaining juices from fruit. Currently the most popular are the machines that include a press or the machines that include a centrifuge arrangement. Typically machines used to obtain juices from fruit are called 'juicers'. Arguably the most successful types of 'juicers' are the commercial citrus fruit juicers which slice the fruit in half and then press the halves to obtain the juice. These commercial juicers are successful in ensuring no bitter tasting peel oil enters the juice. However, such juicers have disadvantages in that they are bulky and the mechanisms for juicing the fruit are complex. These disadvantages occur because the juicers mimic the actions a person performs to manually obtain juice from a fruit. For example the machine first slices the fruit in half, then presses each half of the fruit, often simultaneously, to obtain the juice from the same. The machine then often performs further actions to discard the remaining skin or peel. These systems therefore have an additional drawback in that they are only suitable for use in a commercial environment, such as a store or shop, and not for domestic or home use.

It is therefore an aim of the present invention to provide an improved press apparatus for a juicer.

It is a further aim of the current invention to provide a juicer that is less bulky than conventional juicers

It is a further aim of the current invention to provide a press that can obtain juice from multiple articles without having to be cleaned.

It is a yet further aim of the current invention to provide an efficient juicer that is of a size to be used domestically.

In a first aspect of the invention there is provided an apparatus for pressing one or more articles in use, said apparatus including a press means including at least one extracting portion and a first member wherein once the one or more articles have been pressed by the press means the first member substantially removes the pressed articles from the extracting portion by the extracting portion and/or the first member moving from a first position to at least a second position.

Typically the press means includes a first ram portion and an extracting portion. In use, the first ram portion and an extracting portion are located a spaced distance apart, in at least one position. The one or more articles to be pressed are located substantially between the first ram portion and the extracting portion in the spaced distance between the two portions. The articles are then pressed by moving one, or both, of the first ram and/or extracting portions closer together thereby reducing the distance between the two and pressing the one or more articles.

Typically the first ram portion moves relative to the extracting portion in order to press the one or more articles located therebetween.

In one embodiment the ram portion includes a head portion. Typically the head portion is in contact with the article being pressed in use.

In one embodiment the head portion includes substantially deformable material. Typically the head portion forms a seal with the wall of the apparatus and/or the first member to substantially contain the substances obtained from the articles in the press and prevent said substances coming into contact with the remainder of the ram portion.

In one embodiment it is the circumference of the head portion that forms the seal by abutting against the wall of the apparatus and/or the first member.

Preferably the apparatus is used to press one or more fruits and substantially extract the juice therefrom.

Preferably the apparatus is used to press citrus fruits such as oranges and/or the like.

In one embodiment the apparatus is for extracting juice from oranges. Typically the apparatus is a juicer for oranges and other such citrus fruits. Preferably the oranges are juicing oranges such as Valencia oranges and/or the like.

In one embodiment at least part of the head portion includes a substantially curved surface. Typically the concave side of the curved surface is in contact with the article to be pressed.

In one embodiment the juicer is for use in a users' home and/or for domestic use. Typically therefore the apparatus is of dimensions to be easily accommodated in a room, such as a kitchen, in a home or domestic residence.

In one embodiment the extracting portion includes at least one blade means onto which the one or more articles are pressed. Typically the first ram portion presses the one or more articles onto the blade means. Further typically the blade means cuts into the one or more articles to allow the juice contained therein to be pressed out and thereby extracted.

In one embodiment the blade means includes one or more types of blade.

In one embodiment the blade means includes a blade which cuts or slices into the article, substantially dividing at least a portion of the same into at least two further portions or sections. Preferably the blade means includes a blade which cuts at least part of the article into four sections or quarters. Typically the blade is cross shaped when viewed along at least one axis. The blade does not have to slice through the entirety of the article(s).

In one embodiment the blade means includes at least one blade which is shaped to substantially form any one or any combination of pipe, tube, conduit and/or the like.

In one embodiment the pipe and/or conduit blade is shaped to carry the juice extracted and/or pressed and/or expressed from the pressing of the one or more articles towards a collection vessel. Typically the collection vessel is a drinking glass or the like.

In one embodiment the extracting portion includes one or more blade means that substantially extend into the spaced distance between first ram portion and the extracting portion. Typically the extracting portion includes a plurality of blade means. Further typically the blade means are aligned to be substantially parallel to adjacent blade means and extend into the spaced distance between first ram portion and the extracting portion.

In one embodiment the blade means form one or more conduits through which juice from the article passes to be collected.

In one embodiment at least part of the blade means resemble fruit corers wherein the same are substantially hollow and cylindrical in shape.

In one embodiment at least one sharp edge is formed by at least one end of the cylinder. It will be appreciated by those skilled in the art that blade means of this type could be any suitable shape to substantially form a tube and/or conduit, such as cuboid shape, star-shape and/or the like.

In one embodiment an edge of the blade means is substantially formed at an angle to the walls of the blade means which form the conduit. For example if the walls of the blade means formed a cylinder, the sharp edge formed at an acute angle to the walls would be elliptical in shape, whereby a point, or leading portion of the edge, is formed by the edge of the cylinder.

In one embodiment at least one type of blade means is substantially conical, pyramidal and/or cylindrical in shape.

In one embodiment at least a portion of the blade means is substantially planar. Typically the plane of the substantially planar portion bisects the cone, pyramid or cylinder parallel to

the longitudinal axis of the blade means, or at an angle to said longitudinal axis.

In one embodiment the blade means includes any one or any combination of slots, channels, grooves and/or the like. Typically the slots, channels grooves and/or the like allow extracted materials to exit the press means and/or apparatus.

In one embodiment the extracting portion includes at least one curved surface.

In one embodiment the blade means are located on a substantially curved surface of the extracting portion. Typically the blade means are situated on the convex side of the curved surface.

In one embodiment the curved surface includes one or more apertures. Typically the apertures substantially align with any conduits formed by the blade means thereby allowing juice to be pressed through the curved surface, from one side to the other, to be collected.

In one embodiment the shape of the curved surface of the extracting portion substantially matches and/or is complimentary with the shape of the curved surface of the head portion. Typically this arrangement ensures that the article is pressed with a substantially even force between the extracting portion and the first ram portion.

In one embodiment the blade means are positioned across the curved surface so that the blade means positioned towards the centre of the same come into contact with the article first before the other blade means located further towards the periphery of the curved surface. Typically as the first ram portion pushes the

article onto the blade means the article is deformed, typically by becoming compressed. The internal pressure of the article builds due to compression, and therefore in this embodiment, it is released firstly toward the centre of the article by contact with the blade means and subsequently substantially further towards the periphery of the article as the pressing continues.

In one embodiment the curvature of the head portion of the first ram portion is substantially shallower than the article being pressed. Typically, when pressing an orange the centrally located blade means contacts the orange first, thereby piercing the skin and letting the juice out. As the orange is pressed further the juice contained therein is forced towards the edge of the orange and portions of the orange located towards the edge of the same come into contact with the blade means located further towards the periphery of the press means. Further typically the blade means located progressively towards the edge of the extracting portion release the pressure being built up in the orange during the press. Preferably this arrangement ensures the maximum amount of juice is obtained from the orange.

In one embodiment at least part of the first member is situated between the extracting portion and the ram portion, in a first position, when the one or more articles are being pressed.

In one embodiment the first member includes at least one aperture through which at least part of the blade means can extend.

In one embodiment the first member has apertures through which at least one or more blade means of the extracting portion protrude substantially into the spaced distance between the first ram portion and the extracting portion. Typically when one or

more articles are being pressed and the spaced distance between the first ram portion and the extracting portion is reduced, the blade means substantially cut the one or more articles and/or provide a channel through which the juice contained within the one or more articles can be extracted.

In one embodiment at least part of the first member is shaped to fit closely and/or abut against the curved surface of the extracting portion and/or the ram portion.

In one embodiment once the one or more articles have been pressed the relative movement between the ram portion and/or extracting portion, and the first member removes the one or more articles from the press means.

Typically once the one or more articles have been pressed, the first ram portion and/or the extracting portion substantially return to their original positions thereby re-establishing the original spaced distance, and the first member moves to a second position thereby removing the one or more pressed articles from the extracting portion.

In one embodiment the first member is shaped so that at least part of the press means can substantially pass through the same to press one or more articles in use.

In one embodiment the first member is in the form of a plate means. Typically the plate means is a plate, membrane, surface, cover and/or the like.

Typically the plate means is shaped complimentary to any one or any combination of the extracting member, ram portion and/or head portion. Further typically the plate means is substantially curved. Typically the curved shape allows the plate

means to be positioned between the ram portion and the extracting portion in use.

Preferably the plate means includes one or more apertures. Typically at least part of the blade means extends through said one or more apertures when in the extracting portion and/or the first portion when substantially at the first and/or second positions in use.

In one embodiment the first member is substantially hollow and includes at least one aperture thereby allowing at least part of the press means to pass through the same. Typically the hollow area inside the first member substantially surrounds the spaced distance between the first ram portion and the extracting portion.

In one embodiment the first member is substantially linear in shape. Typically the first member is defined by a surface which is shaped to substantially form a body portion of the first member and said first member also includes first and second ends that are formed substantially perpendicularly to the linear body portion and are located at opposite ends thereof.

In one embodiment the hollow first member includes one or more apertures formed therein.

In one embodiment the first member is a substantially hollow cylinder with at least one aperture formed substantially perpendicular to the longitudinal axis of the same, through which a portion of the press means can pass.

In one embodiment the first member includes a plurality of apertures formed therein.

Typically the first member includes;

- at least one aperture which allows the ingress of at least part of the ram portion into the first member, and/or
- at least one aperture which allows the ingress of at least part of the extracting portion into the first member, and/or
- at least one aperture to allow the ingress of one or more articles into the first member and/or press means, and/or
- at least one aperture to allow the egress of one or more pressed articles from the first member and/or press means.

It will be appreciated by those skilled in the art that one or more apertures could be used for the same purpose, for example the aperture which allows the ingress of one or more articles could also allow the ingress of the first ram portion.

In one embodiment the cylindrical first member is substantially hollow and includes an open first end. The open first end defines a circular aperture substantially perpendicular to the longitudinal axis of the first member. Typically the first ram portion enters the first member through the first open end.

In one embodiment the first ram portion is substantially cylindrical in shape. Typically the first member is only slightly larger than the ram portion and therefore the inner wall of the first member and the outer wall of the ram portion are in contact and/or abut in use, but the same can move with respect to each other.

In one embodiment the cylindrical first member includes a number of apertures formed in the second end of the same. Typically the second end of the first member is the circular planar surface of the cylindrical first member which is located at the opposite end of the cylinder from the open first end.

Further typically the apertures formed in the second end of the first member allow the blades of the extracting portion to enter the first member and into any articles within said first member.

In one embodiment the juice pressed from the one or more articles substantially exits the press means through the apertures formed in the second end of the first member. Typically the blade means are inserted through said apertures and channel the juice through said apertures and out of the press means.

In one embodiment the body portion of the first member includes at least one entrance aperture to allow one or more articles to enter the first member and thereby the press means.

In one embodiment the first member includes at least one exit aperture to allow one or more pressed articles to exit the first member and thereby the press means.

Typically the entrance aperture is located towards the first end of the first member and the exit aperture is located towards the second end of the first member. Preferably the entrance and exit apertures are offset from one another so that they are not aligned in a substantially horizontal or substantially vertical axis of the first member.

The offset position of the entrance and exit apertures ensures one or more articles entering the first member in one direction cannot simply proceed in that direction and exit the same.

In one embodiment the apparatus includes a housing. Typically the housing substantially covers the press means and the first member.

In one embodiment the apparatus includes an infeed means whereby the articles to be pressed can be positioned before being selectively introduced into the press means. Typically the one or more articles are selectively introduced into the first member through one or more apertures formed in the apparatus housing.

In one embodiment the infeed means includes a sensor and an entrance means. Typically the sensor detects that a sufficiency or excess of a predetermined quantity of one or more articles are present in the infeed means and thereby the entrance means selectively allows the predetermined quantity to pass into the press means.

In one embodiment the apparatus includes a waste receptacle whereby the unwanted remains of the pressed articles can be deposited. Typically the unwanted remains include waste such as the skin, rind, pith and/or the like of citrus fruit articles. Further typically the waste receptacle is located adjacent to the press means and the unwanted remains are deposited into the same from the press means through at least one aperture in the apparatus housing.

In one embodiment the first member moves from a first position to at least a second position. Typically, in use, the first member moves from a first position to a second position in a linear direction.

Typically when the first member is in the first position the entrance aperture is substantially aligned with an aperture in the apparatus housing and the infeed means. Further typically when the first member is in the first position this arrangement allows one or more articles can be inserted into the same.

In one embodiment when the first member moves to the second position the exit aperture aligns with an aperture in the housing and the waste receptacle and thereby the one or more pressed articles can be removed from the press means.

In one embodiment the entrance apertures and the exit apertures are substantially located in the top and bottom of the first member respectively. Typically by positioning the entrance and exit apertures in such a way the one or more articles can enter and exit the first member by travelling in a downwards direction due to gravity. Preferably the infeed means is gravity fed.

In one embodiment once one or more articles have been pressed the ram portion returns to its original position substantially at the same time as the first portion moves to the second position.

In one embodiment the ram portion engages with the first member when pressing one or more articles and therefore the first member moves to the second position when the ram portion returns to the original position.

In one embodiment once the first member has moved to the second position it substantially returns to the first position. Typically this movement is a linear reciprocating movement and once returned to the first position the press means is able to receive a second quantity of one or more articles to be pressed.

Further typically by ensuring that the entrance aperture of the first member only aligns with the infeed means when in the first position and exit aperture only aligns with the waste receptacle when in the second position, a mechanism is established wherein the one or more articles are introduced into the press means, the same are pressed and removed from the press means before a second quantity of articles can be introduced.

This ensures that multiple quantities of articles can be pressed to produce juice for the user without having to clean the press means between uses. This also facilitates the use of a smaller press means and apparatuses, as the press can be used a number of times in succession to produce the quantity of juice required.

In one embodiment the first member and the ram are formed as a single unit. Typically the first member is located on one end of the ram. In this arrangement the article to be pressed is located between the first member and the extracting portion. When the article has been pressed the ram including the first member returns to its original position. Typically the first portion includes a groove substantially around the edge of the same. This groove helps retain the pressed article in contact with the first article when the first article returns to its original position, thereby removing the pressed article from the extracting portion.

In one embodiment the press means and/or the first member are in mechanical communication with a motor. Typically the movement of the press means and/or the first member is driven by an electric motor. Preferably the electric motor is located inside the housing and actuates movement in the first ram portion and the first member.

In a second aspect of the invention there is provided a method for operating a press apparatus, said apparatus including a press means, including an extracting portion and a first member, said method including the steps of;

- inserting one or more articles to be pressed into the press means,
- pressing the one or more articles in the press means,

- extracting fluid and/or the like from the article using the extracting portion,
- returning the press means to the original position, and
- using the first member to remove the one or more pressed articles from the press means in order for the apparatus to be used again by moving the first member to a second position from a first original position.

A system for extracting juice from one or more articles, said system including an apparatus, said apparatus including a press means and a first member, said press means including at least two portions positioned to act as a press on one or more articles positioned substantially between the portions wherein the first member removes the pressed articles from the press means by moving from one position to at least one other position in use.

In a further aspect of the invention there is provided a system for pressing one or more articles in use, said apparatus including a press means including at least one extracting portion.

Typically, once the one or more articles have been pressed by the press means a first member substantially removes the pressed articles from the extracting portion. Further typically the pressed articles are removed by the extracting portion and/or the first member moving from a first position to at least a second position

The present invention is now described with reference to the following drawings wherein:

Figure 1 shows a cross sectional view through one embodiment of the apparatus;

Figure 2 shows the front view of the first member;

Figure 3 shows a cross sectional view through an alternative embodiment of a press means of an apparatus;

Figures 4a-4d show one embodiment of a press apparatus through a number of positions;

Figures 5a-5c show several embodiments of press heads and extracting portions in accordance with the invention;

Figures 6a-6c show several embodiments of corresponding extracting portions, press heads and ejection plates in accordance with the invention; and

Figure 7 shows an external perspective view of a juicer in accordance with one embodiment of the invention.

The following description describes embodiments of a press apparatus and method of use of the same. The press apparatus is used to obtain juice from fruits. Typically the fruits are oranges. In this embodiment the pressed fruits are removed from the press after the pressing action.

Turning firstly to Figure 1 there is shown an apparatus 2, said apparatus including a press means 4, a first member 6, an infeed means 8, a waste receptacle 10 and a motor 12. The press means 4 includes two portions; the ram portion 14 and the extracting portion 16 located a spaced distance apart from each other inside the housing 18. The first member 6 is positioned between the ram portion 14 and extracting portion 16, in the spaced distance between the two portions. The ram portion 14 and the extracting portion 16 are located along the same axis and when pressing one or more article the ram portion 14 moves towards the extracting portion 16 in a direction indicated by arrow A. In

this embodiment the first member 6 is a substantially hollow tube through which the ram portion passes whilst pressing one or more articles.

The articles to be pressed are typically citrus fruits and in this example the articles 20 are oranges. Before pressing the oranges 20 are located in the infeed means 8 such as the hopper shown in this example. The oranges 20 are selectively introduced to the press means 4 through an aperture 22 in the housing 18. The articles are often selectively introduced using a sensor means (not shown). Typically the sensor means controls the entry of the articles into the press means and will only introduce articles once it has detected that the predetermined amount of articles for pressing are present and the pressed articles have been removed from the press means. In the current example one orange is introduced into the press means 4 at a time. Another orange is not introduced to the press means until the previous pressed orange has been removed from the same.

The first member 6 is shown in a first position and can move in direction B to a second position. The first member 6 has a number of apertures formed in the same. The entrance aperture 24 aligns with the infeed means and the aperture 22 in the housing, when the first member 6 is in the first position. In this position the articles can be introduced from the infeed means into the press means through the aperture 24 in the first member. In this embodiment only one article, in this case an orange, is introduced at a time.

In use, the ram portion 14 of the press means 4 moves towards the extracting portion 16 thereby pressing the article 20 between the two portions 14, 16. The extracting portion includes a blade means 26 that protrudes through an aperture (not shown) in one end of the first member 6 when the member is in the first

position. The blade means cuts the article 20 to provide an outlet for the juice and also provides a channel to transport the juice away from the pressed article. The force of the press means typically expels the juice from the article. Once expelled the juice travels along one or more channels formed by the blade means 26 on the extracting portion and out of the apparatus along a conduit 32. Typically the juice is caught in a container or receptacle such as a glass.

Once the article has been pressed the ram portion returns to the original position in direction B and the first member 6 also moves to a second position in direction B. In doing so, the remains of the pressed article are moved in direction B and substantially removed from the extracting portion 16. The first member 6 also has an exit aperture 28 through which the waste pressed articles fall, into the waste receptacle 10, as the first member moves to the second position. The entrance 24 and exit 28 apertures are vertically offset from one another to ensure that an article cannot enter the apparatus when in the first aperture is in the second position and an article cannot fall into the waste receptacle when the first member is in the first position. Typically once the waste pressed article has been deposited into the waste receptacle 10 the first member 6 returns to the first position in direction A.

Also it can be seen in this embodiment that the articles 20 can be pressed and juiced in the press means 4 by the steady reciprocating motion of the ram portion 14 and the first member 22 in directions A and B respectively. The movement of the ram portion 14 and the first member 6 in this embodiment is driven by an electric motor 12 which is also located inside the housing.

Figure 2 shows a face view or 'end' view of the first member 6. There can be seen a number of evenly spaced apertures 30

through which the blade means 26 of the extracting portion 16 protrude when the first member is in the first position. The apertures 30 also provide an outlet for the juice from the press means and into the conduit 32.

Turning now to Figure 3 where there is shown an alternative embodiment of the press means 4 wherein the ram portion 14 includes a shaped head portion 34. The head portion is constructed from deformable material and forms a seal with the surrounding wall 35 of the press means 4. The first member is not shown for clarity reasons. In this embodiment the extracting portion 16 includes a curved surface 36 from which a number of blade means 26 project. It can be seen that the respective concave curvature of head portion 34 and the convex curvature of the extracting portion 16, substantially match in shape. The blade means 26 provide conduits through which the juice squeezed from the article, in this example an orange 36, can pass to be collected from the conduit 32, which in this example is a spout 38.

It can be seen from Figure 3 that during the pressing of orange 36, the centrally located blade means contacts the orange first, thereby piercing the skin and letting the juice out. As the orange is pressed further, the same comes into contact with the blade means located further towards the periphery of the press means 4. In this embodiment, as the curvature of the head portion 34 is shallower than that of the orange, the juice is forced towards the periphery of the orange and therefore the blade means progressively releases the pressure being built up in the orange during pressing. This arrangement ensures the maximum amount of juice is obtained from the orange.

Figures 4a)-d) show a second embodiment of a press means 108 in accordance with the invention. In this example the press

means 108 includes a housing 118 with an entrance aperture 124 for the introduction of the citrus fruits 20 (not shown), and in particular oranges into the press. The main differences in this example and that disclosed in Figures 1-3 are that the ram portion and the head are the same article, in this example the press head 134 and the first member 106 is in the form of an circular ejector plate 106. Furthermore, the blade means 126 of the extracting portion 116 are in a different form but each of the components perform the same function as the specific embodiment disclosed in Figures 1-3.

In particular, Figure 4b shows the press means 108 in a position ready to receive on or more articles into the same through the aperture 124 in the housing 118. When an orange or similar article is introduced into the press 108, the aperture 124 is closed and the press head 134 advances in direction A, as shown in Figure 4c. During this movement the article pushes the ejector plate 106 against the extracting means. The blade means 126 protrude through the apertures 150 in the ejector plate 106 and into the article. The head 134 also contains apertures or recesses 152 into which the blades can protrude, to facilitate complete pressing of the article.

Figure 4d shows the press head 134 being retracted back towards the first position of Figure 4b in direction B. In this example the ejector plate 106 is mounted on springs 154 which ensure that the ejector plate is biased towards a position which is removed a spaced distance from the blades 126. As such, as the head 134 withdraws, the remains of the pressed article are pushed from the blade means 154 of the extracting portion 116. The remains can be automatically discarded through exit aperture 156.

The extracted material or juice exits the press means 108 through apertures in the blade means and/or extracting portion. Figure 5a)-5c) show a number of configurations of blade means 126a-126c on the extracting portions 116. Each of the blade configurations has press head 134 which have corresponding recesses 152a-152c or apertures formed in the same, which can receive the blade means during pressing. Figures 5b and 5a show embodiments where there are two types of blade means on the extracting portion. In particular, the press components shown in Figure 5b include a cross shaped blade 158, which aides juice extraction.

In addition, Figures 6a)-6c) show more examples of head 134 and corresponding blade means 126d-f configurations on the extracting portions 116. Also shown in these examples are the corresponding ejection plates 106.

Figure 7 shows an outer perspective view of the apparatus. The apparatus housing 18 includes a hopper 8, which holds the citrus fruits, typically oranges 20, to be pressed and the juice extracted therefrom. The examples and embodiments shown herein are particularly advantageous as the fruits are introduced into the press, pressed and expelled from the same automatically, with a minimum amount of bitter peel oil entering the juice. The configuration of the press means allows a reduction in size of the apparatus so it can be used domestically as well as commercially.

Claims

1. An apparatus for pressing one or more articles in use, said apparatus including a press means which includes at least one extracting portion and at least a first member, wherein once the one or more articles have been pressed by the press means the first member substantially removes the pressed articles from the extracting portion by the extracting portion and/or the first member moving from a first position to at least a second position.
2. An apparatus according to claim 1 wherein the press means includes a ram portion.
3. An apparatus according to claim 2 wherein the ram portion and the extracting portion are located a spaced distance apart in at least one position.
4. An apparatus according to claim 3 wherein the one or more articles are pressed by moving one, or both of the first ram and/or extracting portion closer together.
5. An apparatus according to claim 4 wherein the ram portion moves relative to the extracting portion to press the one or more articles.
6. An apparatus according to any of claims 2-5 wherein the ram portion includes a head portion.
7. An apparatus according to claim 6 wherein the head portion includes substantially deformable material.

8. An apparatus according to claim 6 or 7 wherein the head portion substantially forms a seal with at least one wall of the apparatus.

9. An apparatus according to any of claims 6-8 wherein at least part of the head portion includes a substantially curved surface.

10. An apparatus according to claim 9 wherein the concave side of the curved surface is in contact with the article to be pressed in use.

11. An apparatus according to any preceding claim wherein the extracting portion includes at least one blade means.

12. An apparatus according to claim 11 wherein the ram portion presses the one or more articles onto the blade means.

13. An apparatus according to claims 11 or 12 wherein the blade means includes one or more types of blade.

14. An apparatus according to claim 13 wherein the blade means cuts the one or more articles into at least two portions or sections.

15. An apparatus according to claim 14 therein the blade means cuts an articles into at least for portions and/or quarters.

16. An apparatus according to any of claims 11-15 wherein the blade means includes at least one blade which is substantially cross shaped when viewed along at least one axis thereof.

17. An apparatus according to any of claims 11-15 wherein the blade means includes at least one blade shaped to substantially form a pipe and/or conduit and/or the like.

18. An apparatus according to claim 17 wherein the conduit and/or pipe blade is shaped to carry at least part of substances expressed from pressing the one or more articles towards a collection vessel.

19. An apparatus according to any of claims 11-18 wherein the at least part of the blade means that substantially extend into the spaced distance between the first ram portion and the extracting portion.

20. An apparatus according to any of claims 12-19 wherein at least one of the types of blades are substantially cylindrical in shape.

21. An apparatus according to any preceding claim wherein the extracting portion includes at least one curved surface.

22. An apparatus according to claim 21 wherein the blade means is situated on the convex side of the curved surface.

23. An apparatus according to claim 21 or 22 wherein the curved surface of the extracting portion and the curved surface of the head portion match and/or are complimentary.

24. An apparatus according to any preceding claim wherein at least part of the first member is located substantially between the extracting portion and the ram portion before the one or more articles are pressed between the same.

25. An apparatus according to any of claims 11-24 wherein the first member includes at least one aperture through which at least part of the blade means can extend.

26. An apparatus according to any preceding claim wherein the first member is shaped to fit closely and/or substantially abut against the curved surface of the extracting portion and/or the ram portion.

27. An apparatus according to any of claims 2-26 wherein once the one or more articles have been pressed the relative movement between the ram portion and/or extracting portion, and the first member, removes the one or more articles from the press means.

28. An apparatus according to any preceding claim wherein the first portion is shaped so at least part of the press means substantially passes through the same whilst pressing the one or more articles.

29. An apparatus according to claim 28 wherein at least part of the blade means passes through the first portion.

30. An apparatus according to any preceding claim wherein the first member is in the form of a plate means.

31. An apparatus according to any preceding claim wherein the first member is substantially hollow and linear in shape.

32. An apparatus according to any preceding claim wherein the first member includes at least one entrance aperture and/or at least one exit aperture.

33. An apparatus according to claim 32 wherein the entrance and exit apertures are not aligned.

34. An apparatus according to any preceding claim wherein the apparatus includes a housing.

35. An apparatus according to claim 34 wherein the apparatus includes an infeed means whereby articles to be pressed can be selectively introduced into the press means through the housing.

36. An apparatus according to any preceding claim wherein the apparatus includes a waste receptacle wherein the remains of the pressed articles can be deposited.

37. An apparatus according to any preceding claim wherein the press means and/or the first member are in mechanical communication with a motor.

38. An apparatus according to claim 37 wherein the motor is an electric motor.

39. An apparatus according to any preceding claim wherein the apparatus presses one or more citrus fruits in use, thereby extracting juice from the same.

40. A method for operating a press apparatus, said apparatus including a press means, including an extracting portion and a first member, said method including the steps of;

- inserting one or more articles to be pressed into the press means,
- pressing the one or more articles in the press means,
- extracting fluid and/or the like from the article using the extracting portion,
- returning the press means to the original position, and
- using the first member to remove the one or more pressed articles from the press means in order for the apparatus to be used again by moving the first member to a second position from a first original position.

41. A system for extracting juice from one or more articles, said system including an apparatus, said apparatus including a press means and a first member, said press means including at least two portions positioned to act as a press on one or more articles positioned substantially between the portions wherein the first member removes the pressed articles from the press means by moving from one position to at least one other position in use.

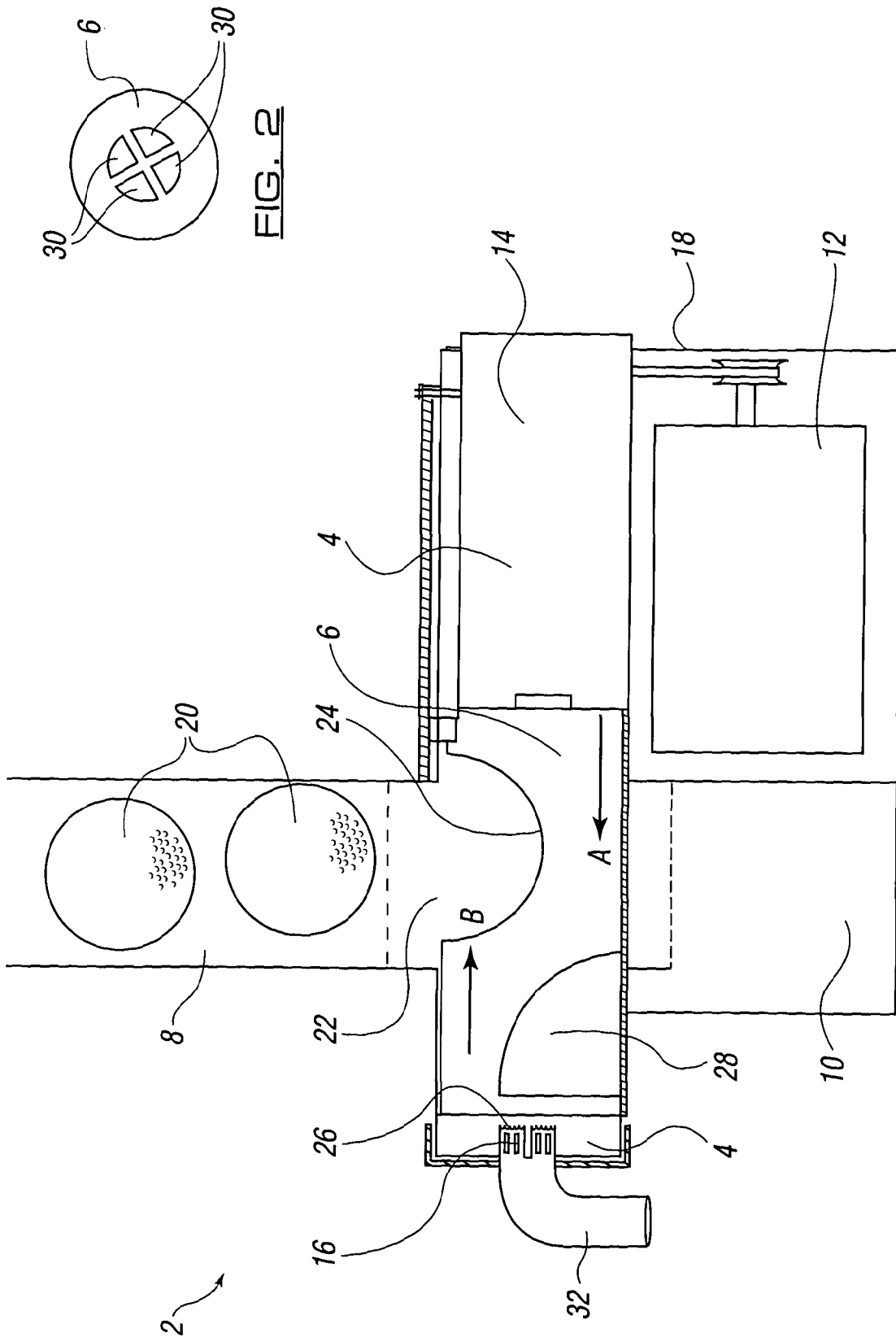


FIG. 1

FIG. 2

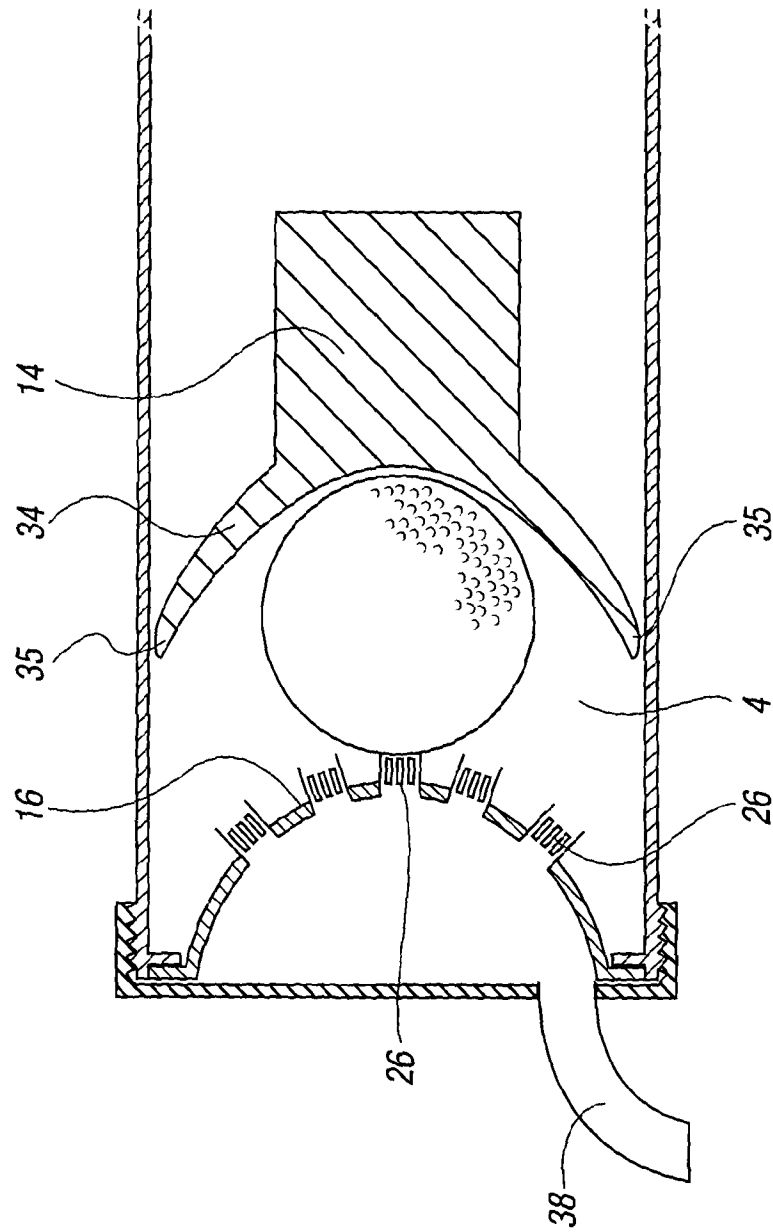


FIG. 3

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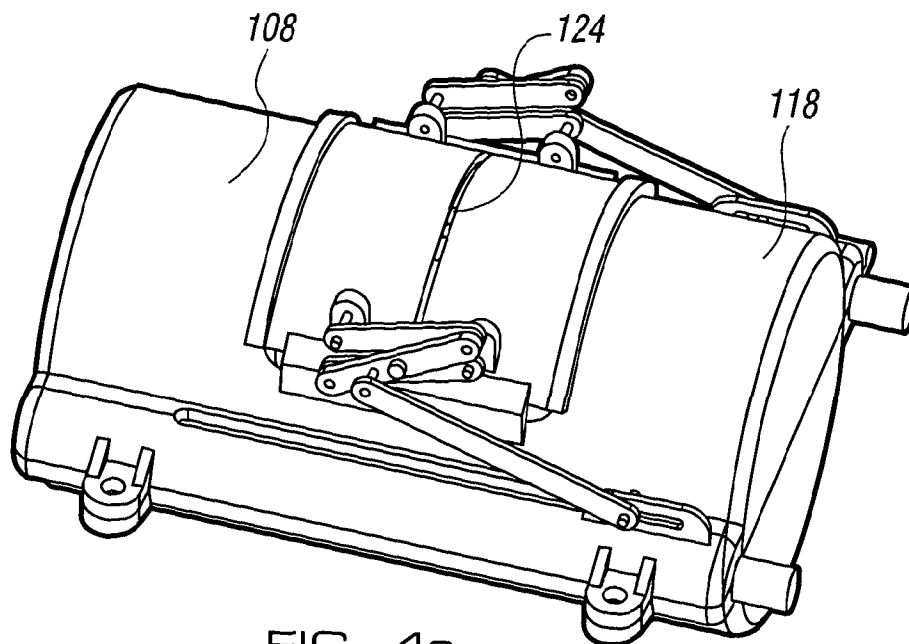


FIG. 4a

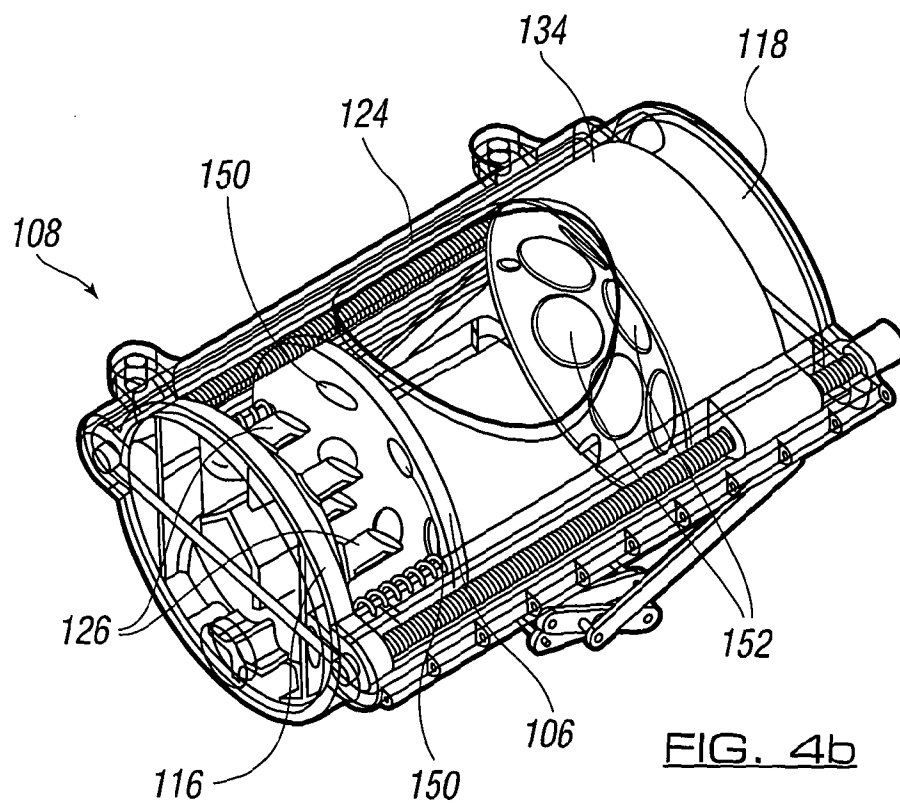


FIG. 4b

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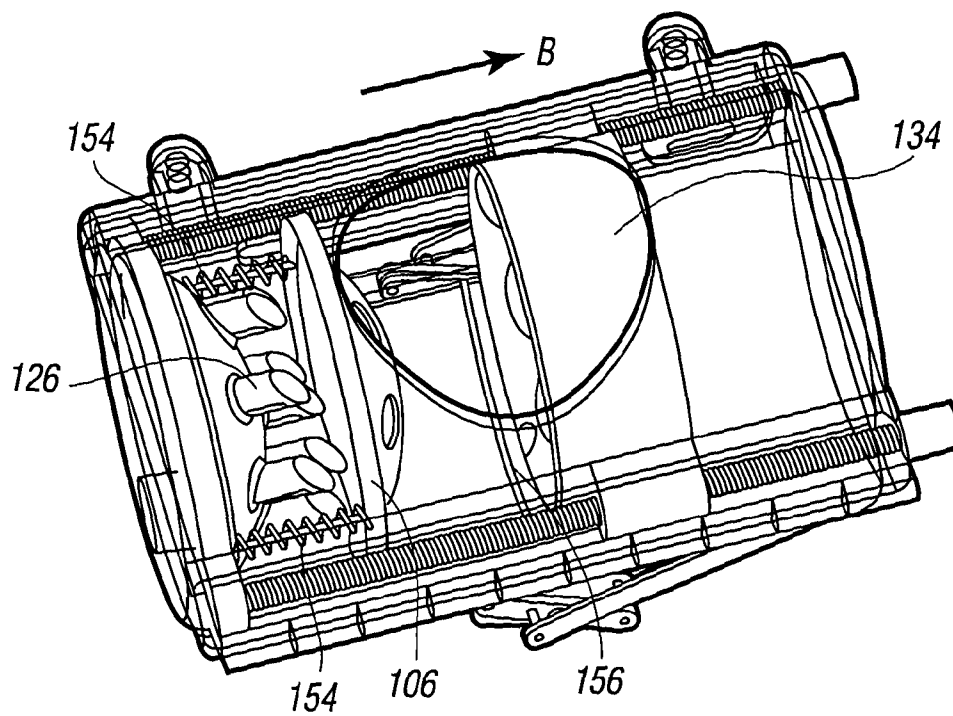
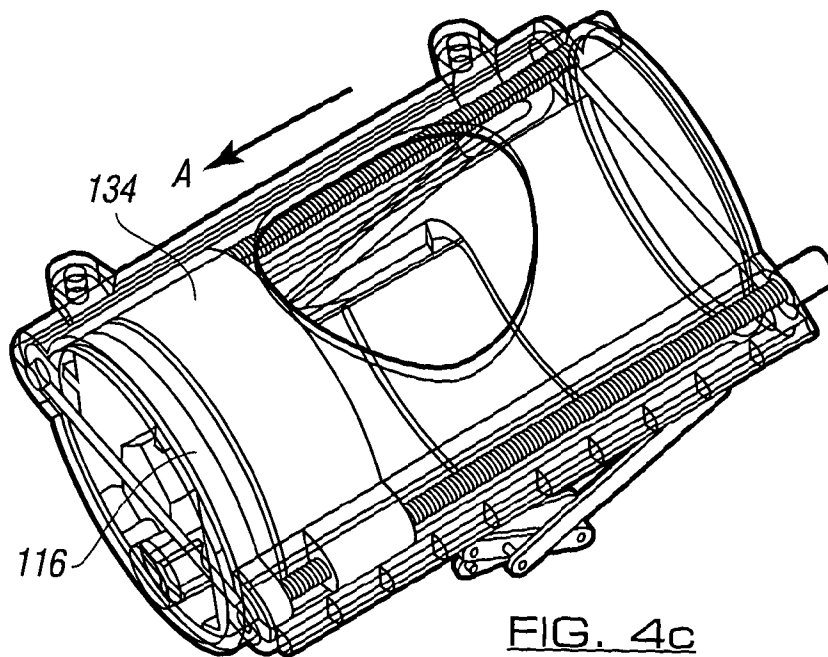
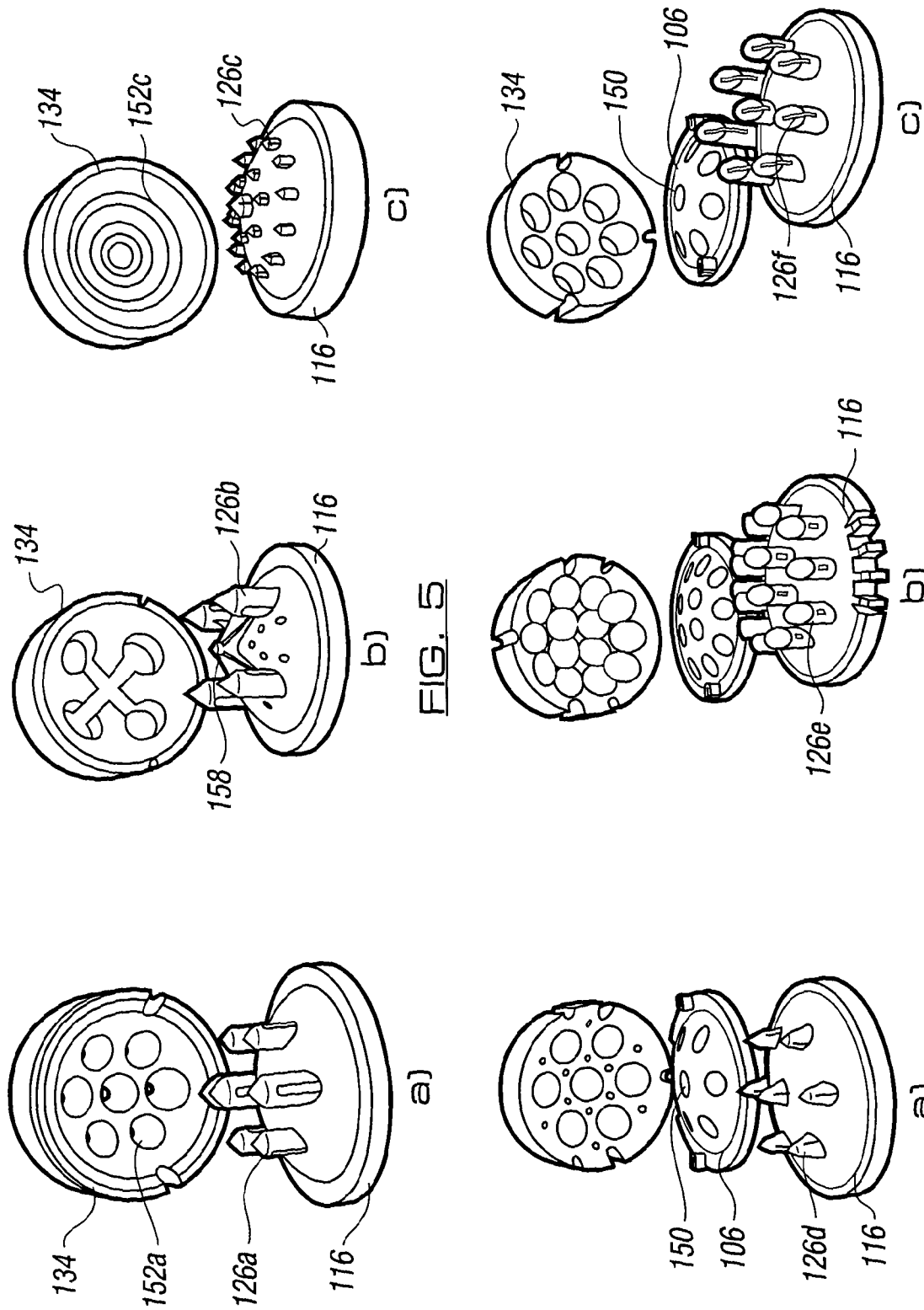


FIG. 4d



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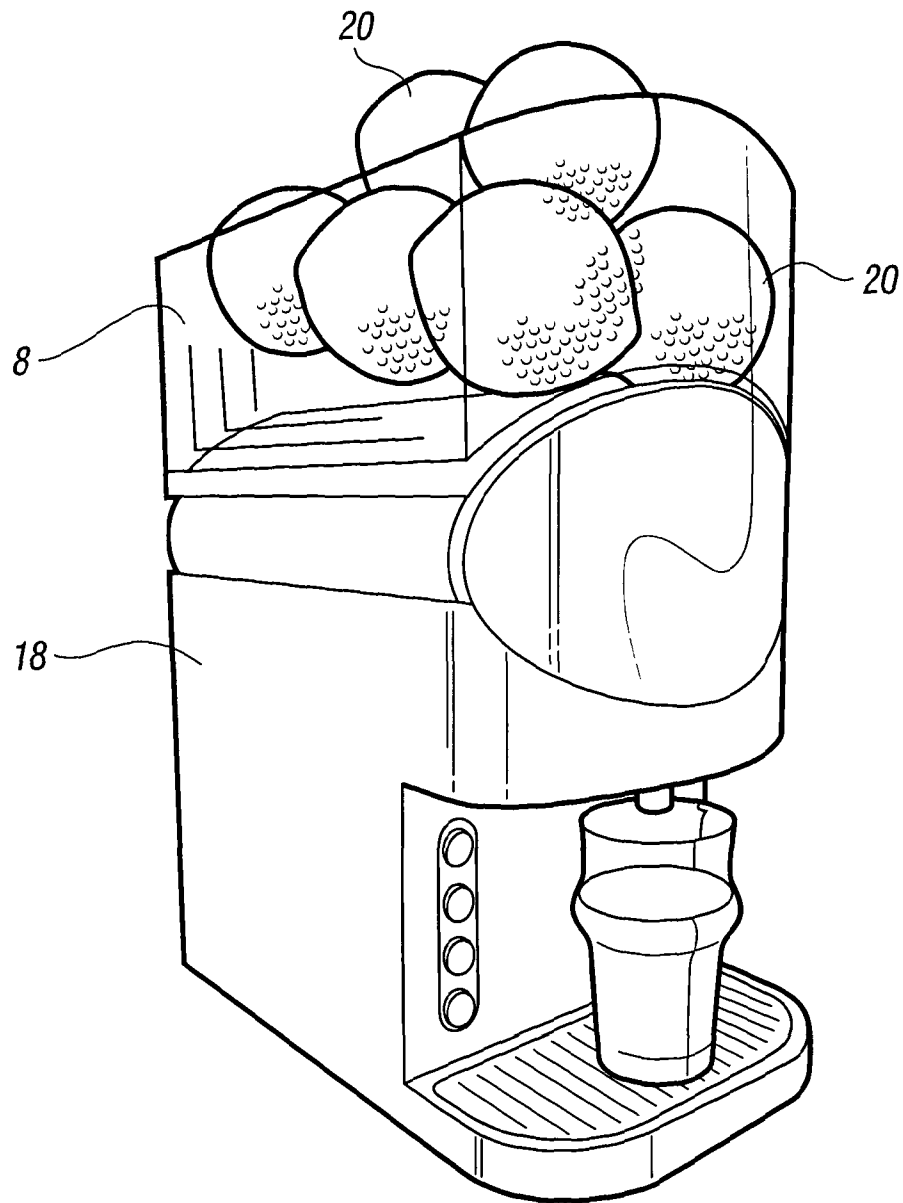


FIG. 7

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2012/050291

A. CLASSIFICATION OF SUBJECT MATTER

INV. A23N1/00 A23N1/02 A47J19/02
ADD.

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)

A23N A47J

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 practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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X	GB 2 216 784 A (MAQUINAS & ELEMENTOS SA [ES]) 18 October 1989 (1989-10-18) page 3, paragraph 2 - page 4, paragraph 5; claims 1,2; figures ----- -/-	1,11,13, 21,26, 34-40



Further documents are listed in the continuation of Box C.



See patent family annex.

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Date of the actual completion of the international search

11 May 2012

Date of mailing of the international search report

23/05/2012

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INTERNATIONAL SEARCH REPORT

International application No

PCT/GB2012/050291

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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X	US 3 807 297 A (MARRIE P) 30 April 1974 (1974-04-30) column 2, line 42 - column 3, line 3; figures -----	1-6,21, 39-41
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