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(54) **AN INFANT BATHING SYSTEM**

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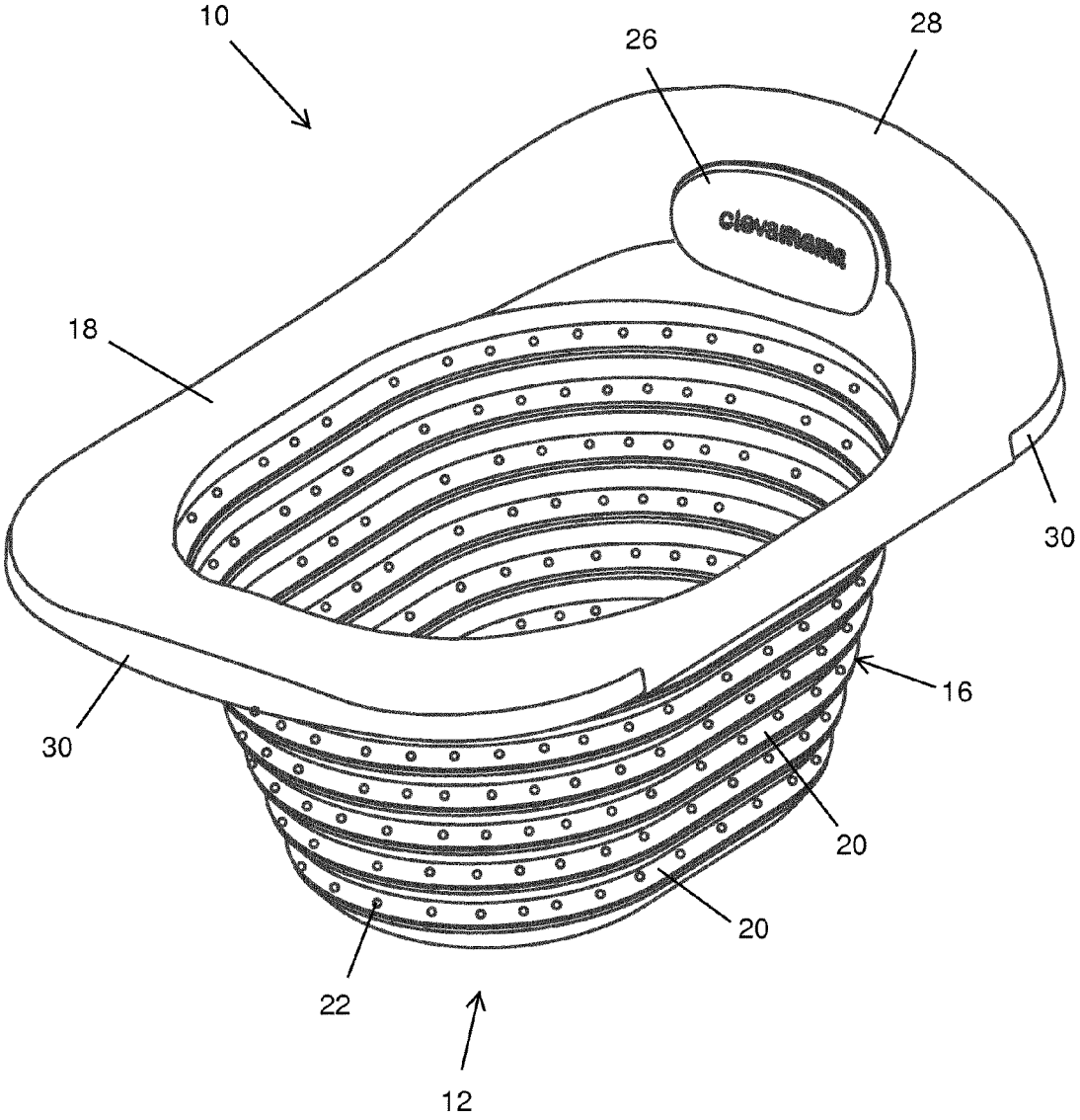
(57) **ABSTRACT**

The present invention is concerned with a bathing system for an infant, and in particular a bathing system for an infant which can be located in a conventional sink or the like and which simplifies the filling and emptying of the bathing system in order to provide an improved bathing experience, the bathing system comprising a receptacle adapted to receive and retain an infant, the receptacle comprises a plurality of apertures to permit the flow of water into and out of the receptacle, the receptacle also preferably being displaceable between a collapsed and an expanded state.



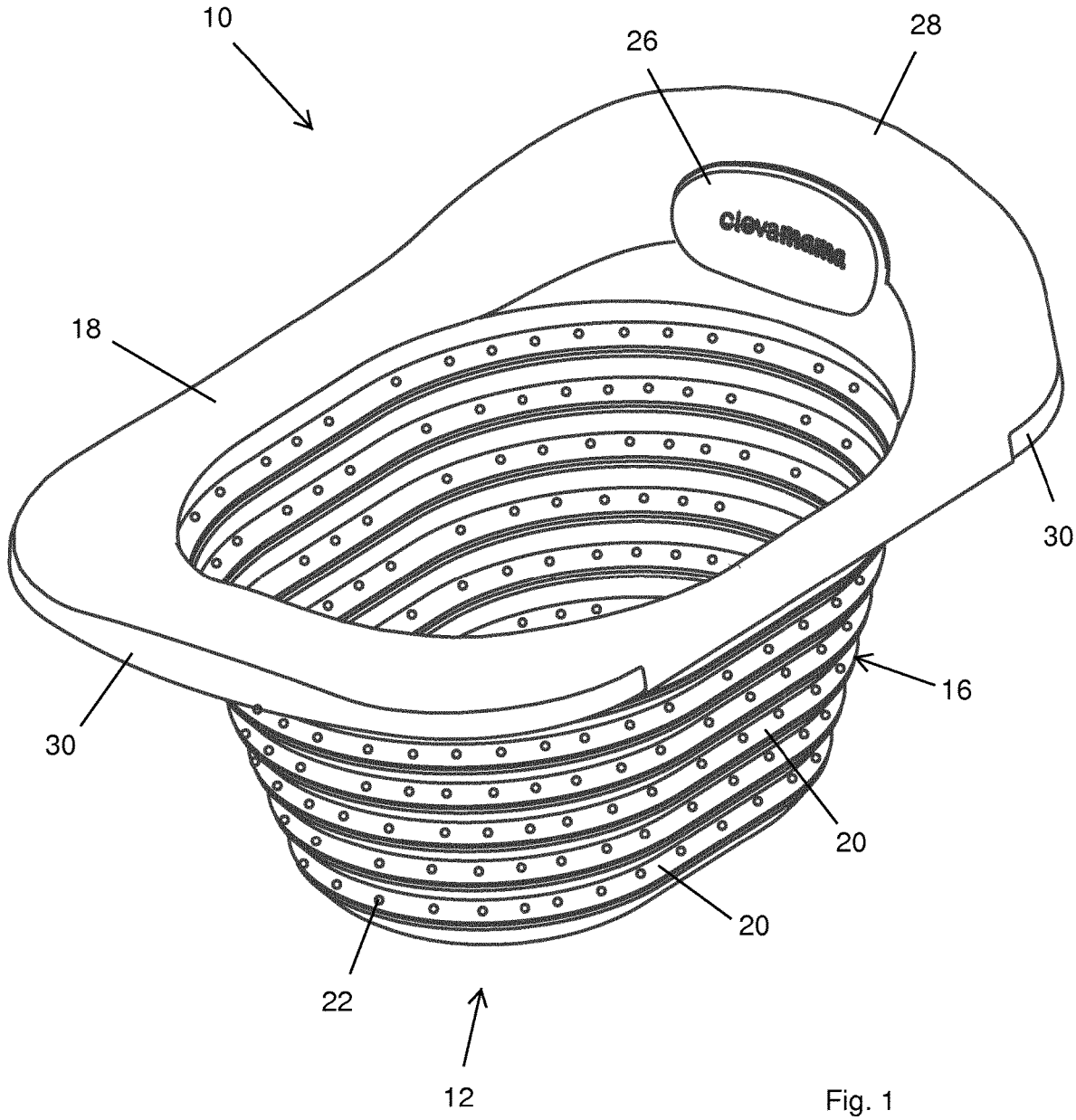


Fig. 1

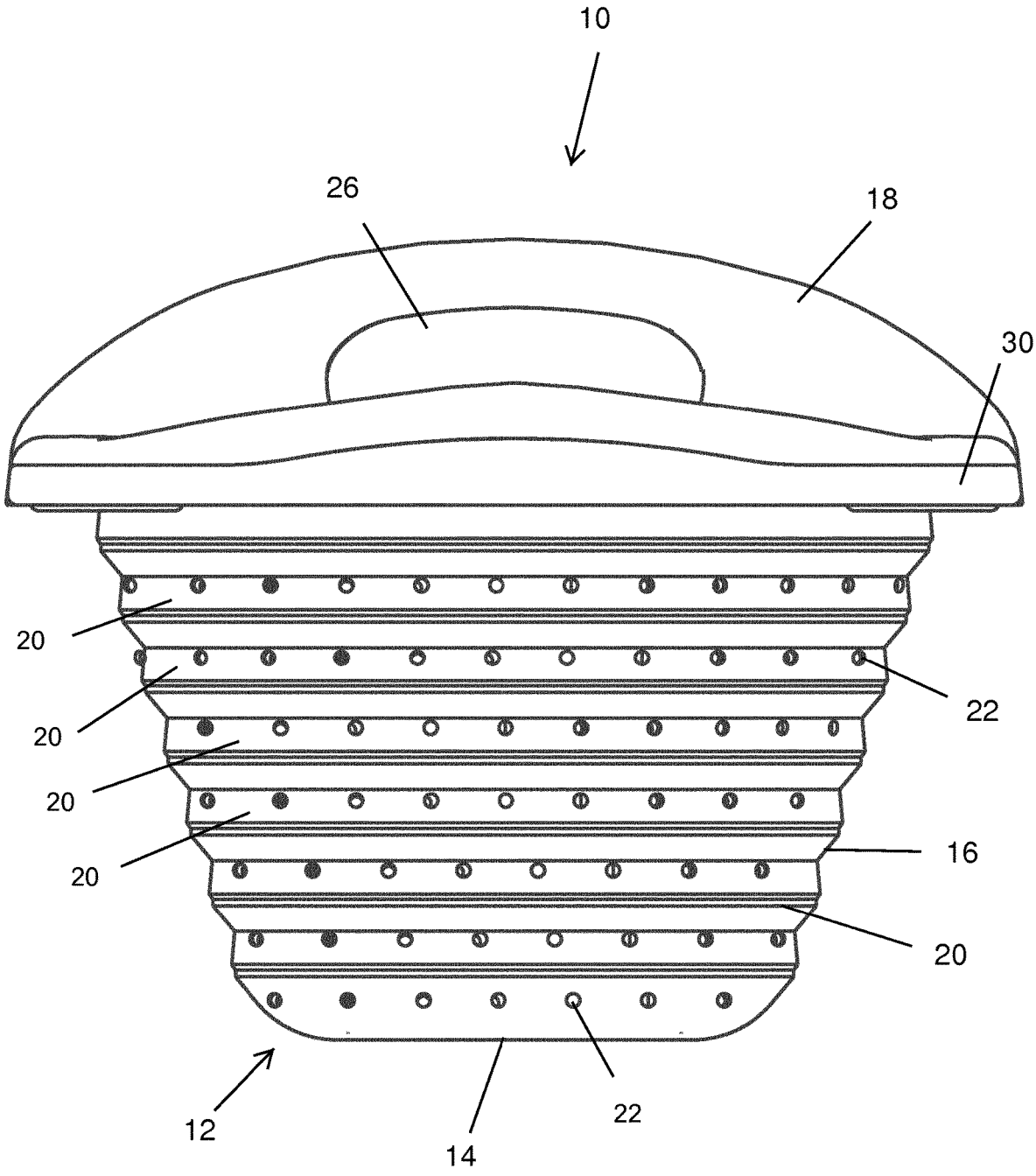


Fig. 2

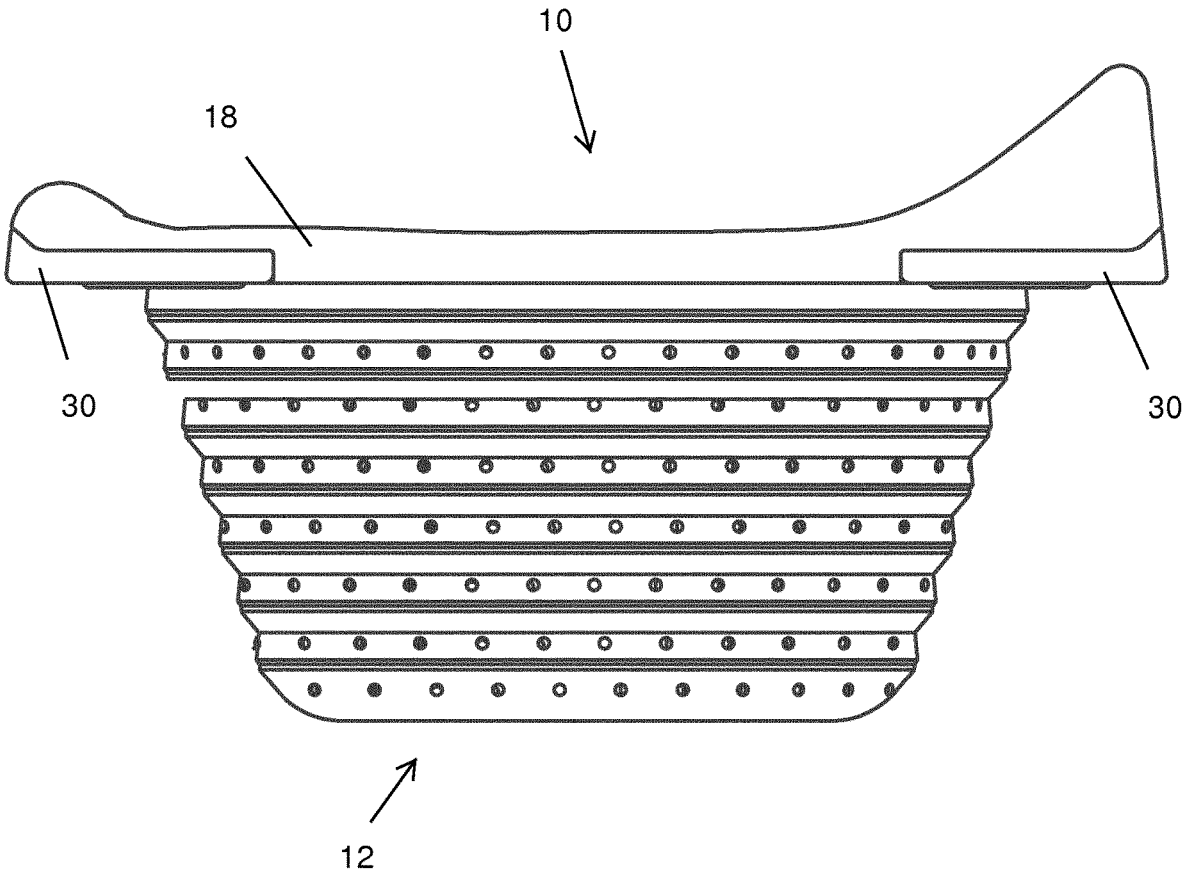


Fig. 3

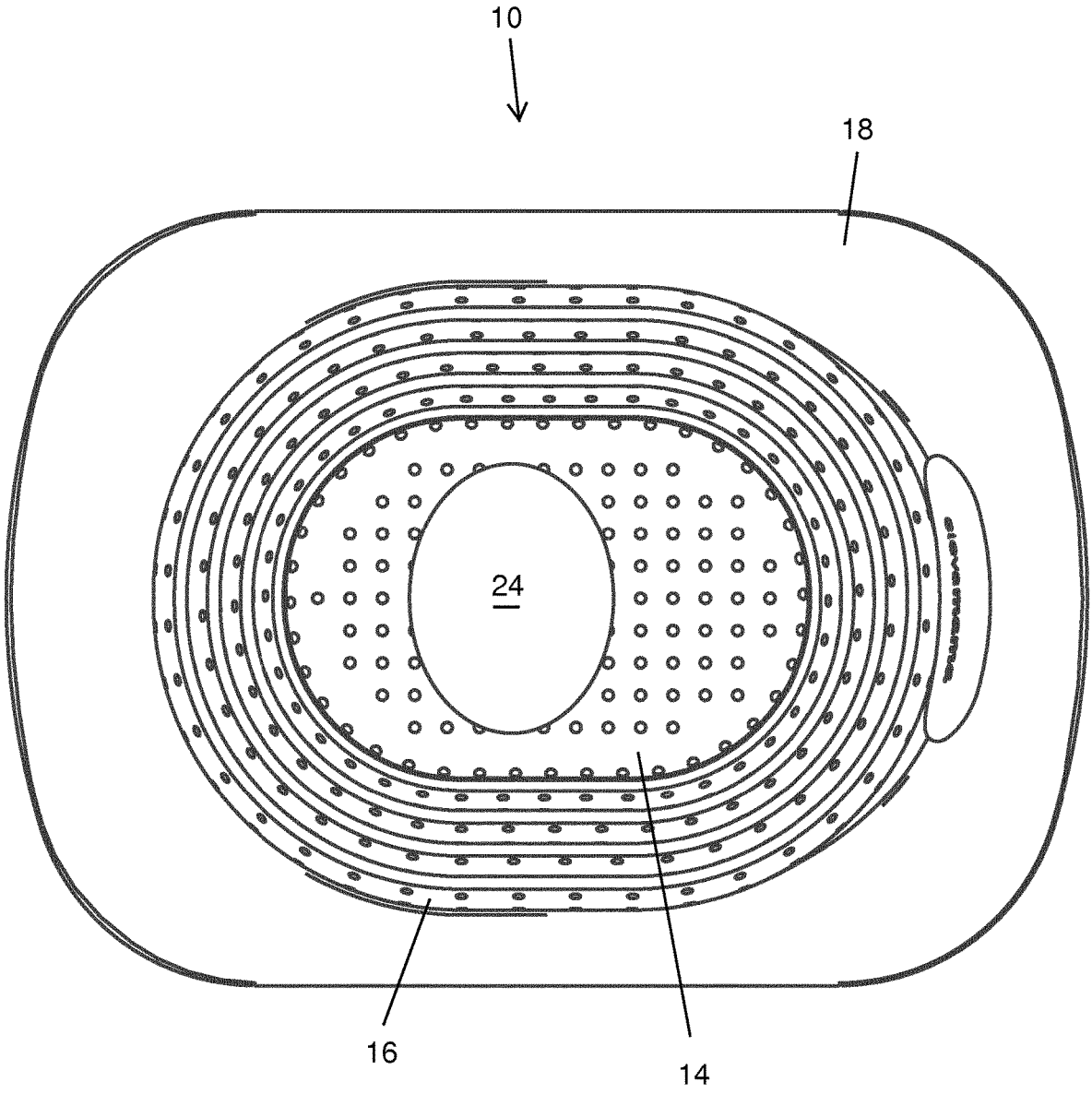


Fig. 4

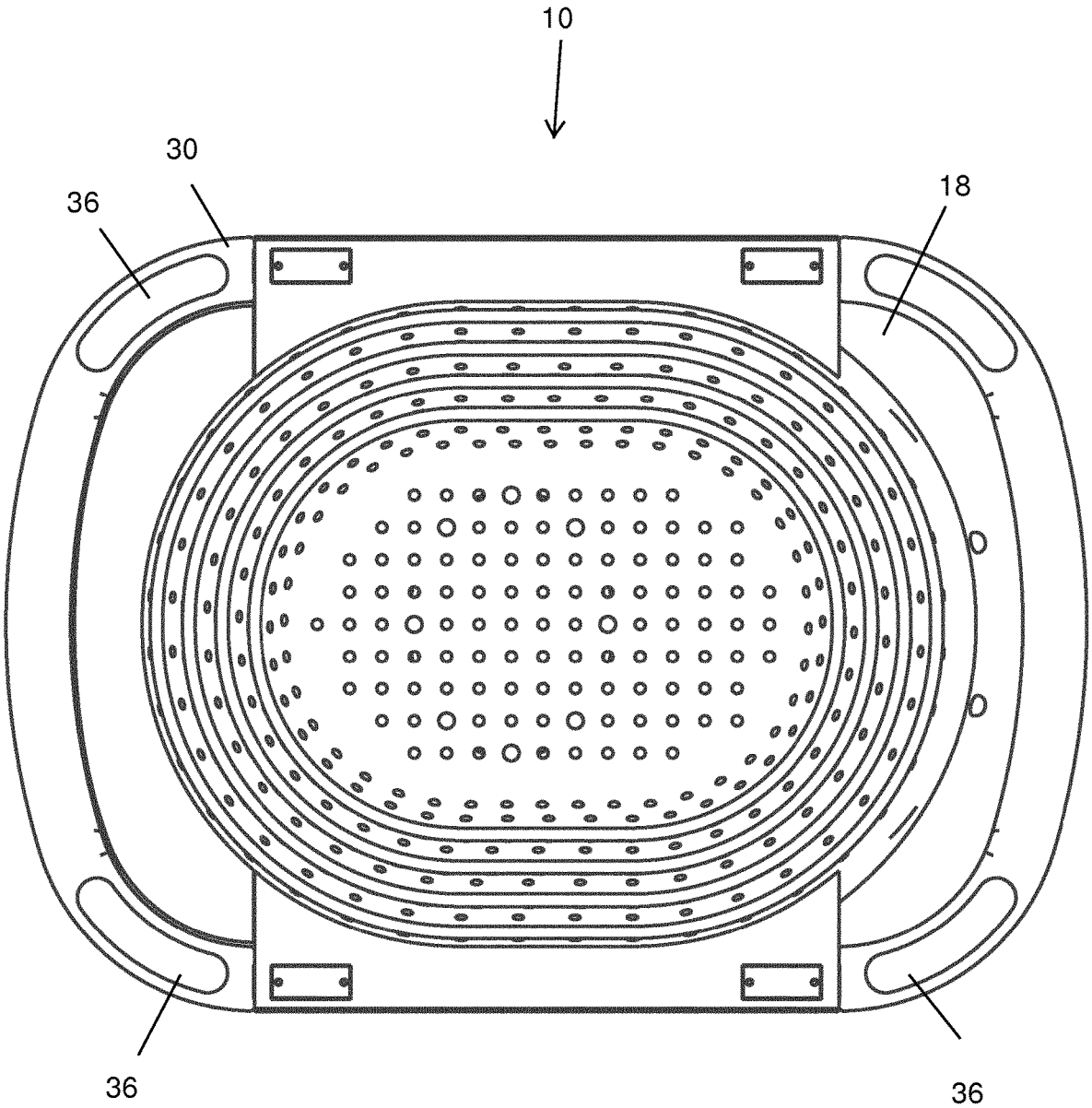


Fig. 5

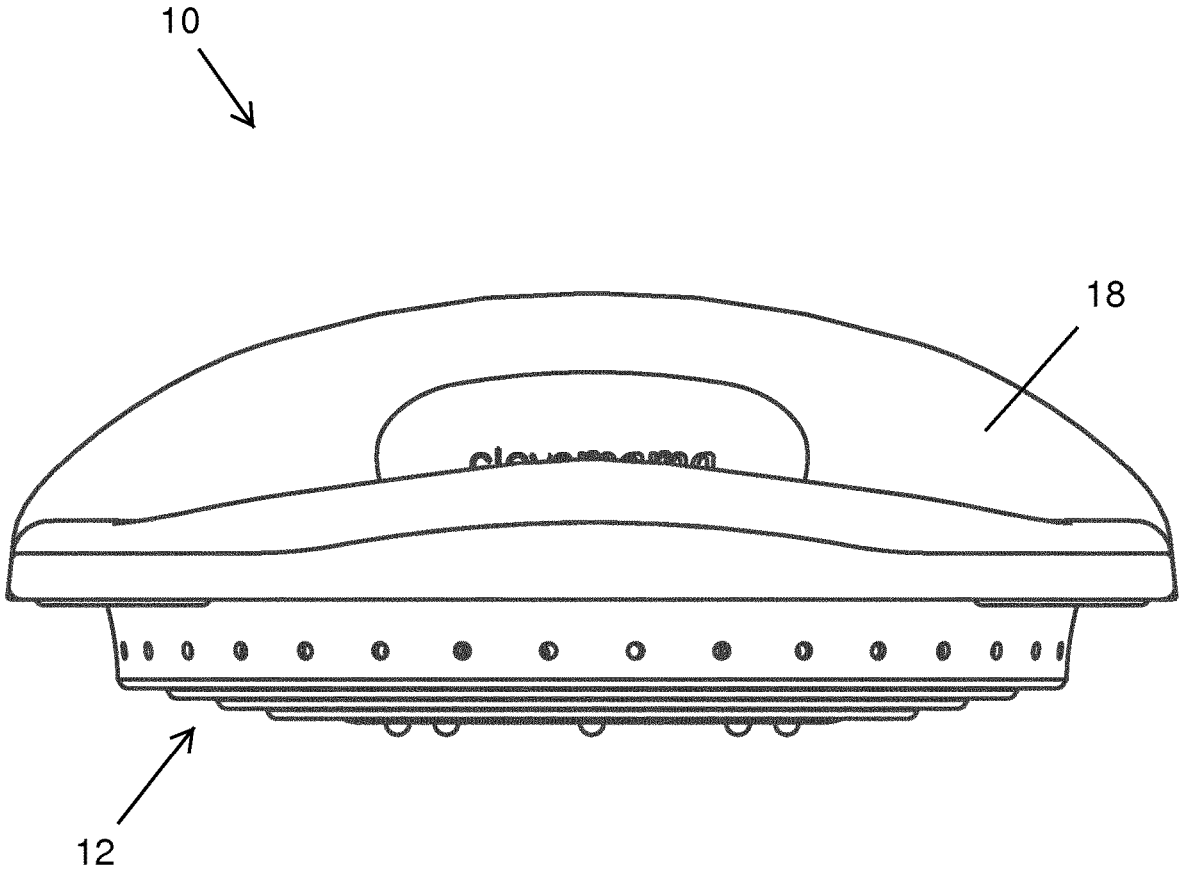


Fig. 6

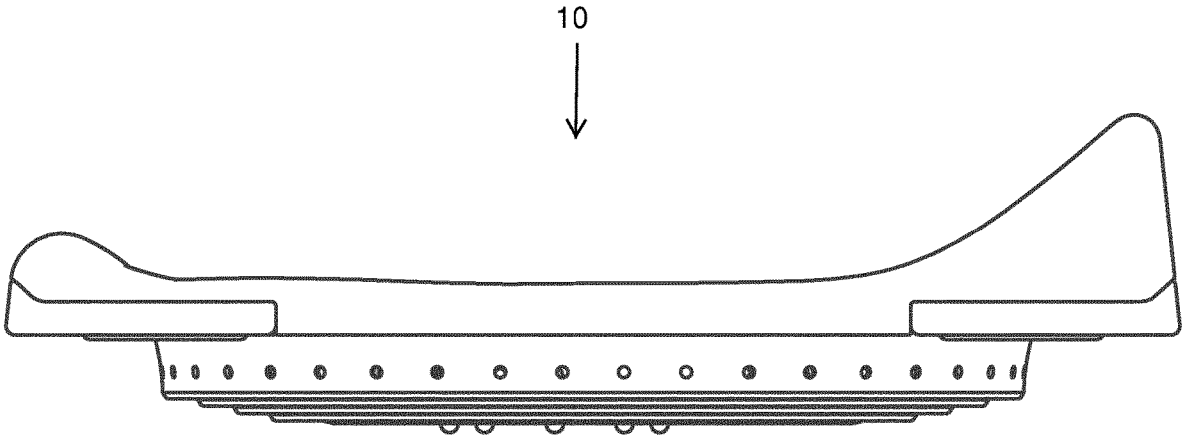


Fig. 7

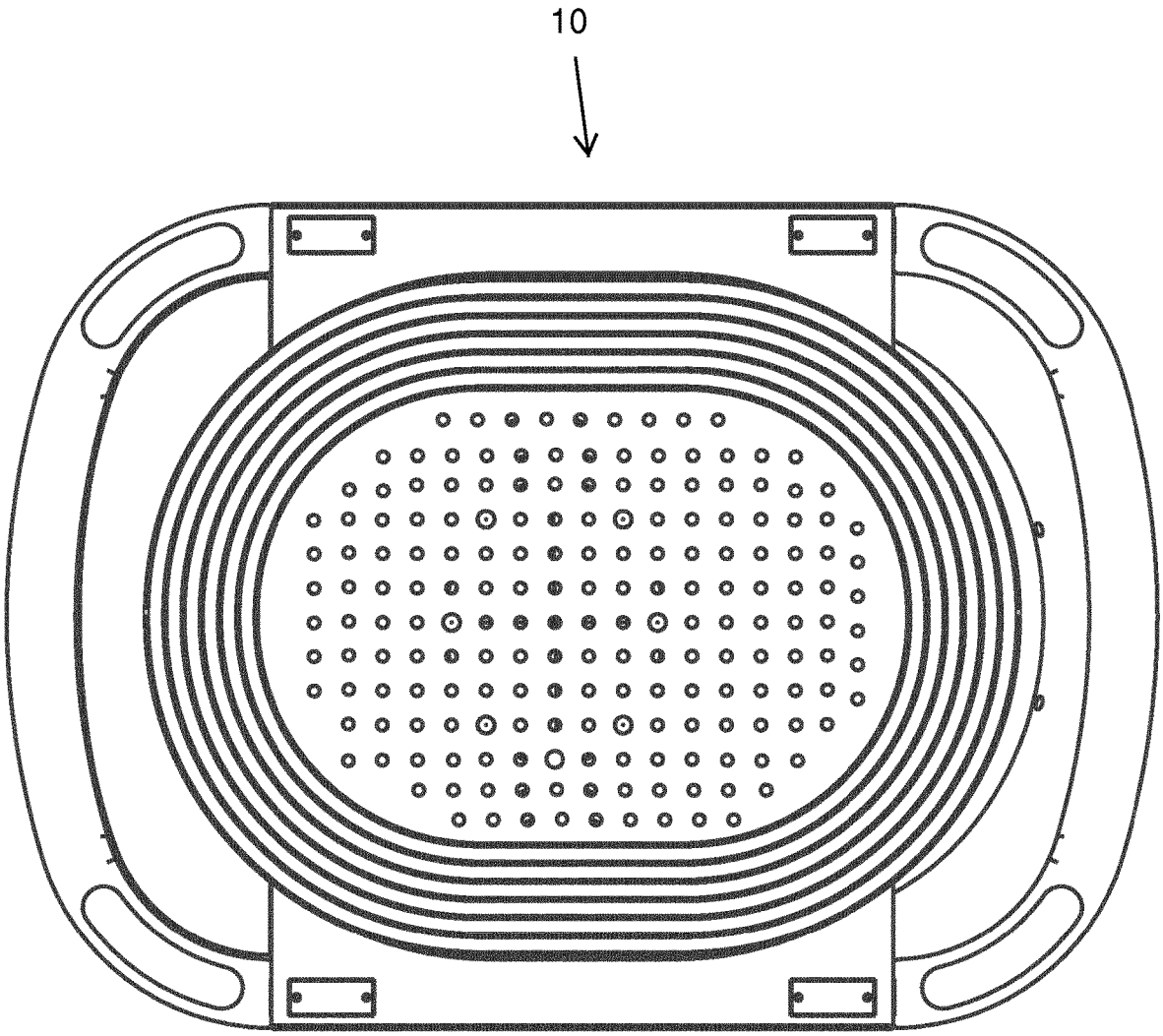


Fig. 8

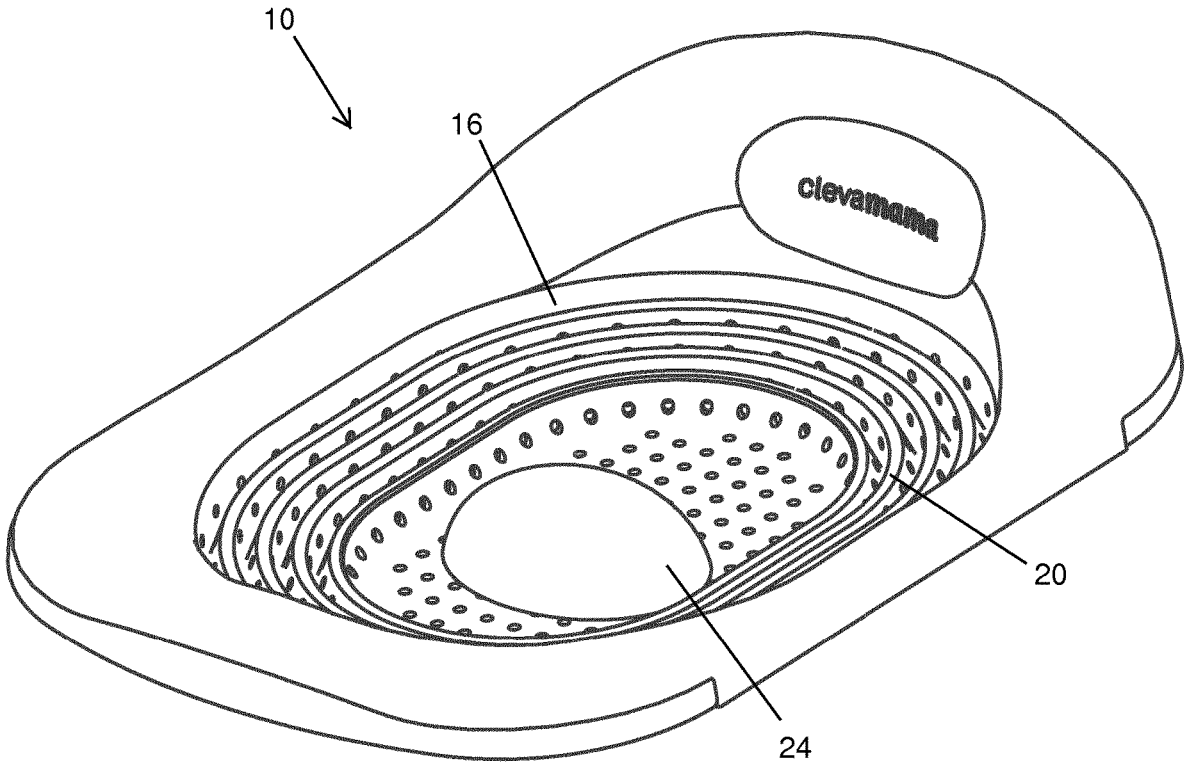


Fig. 9

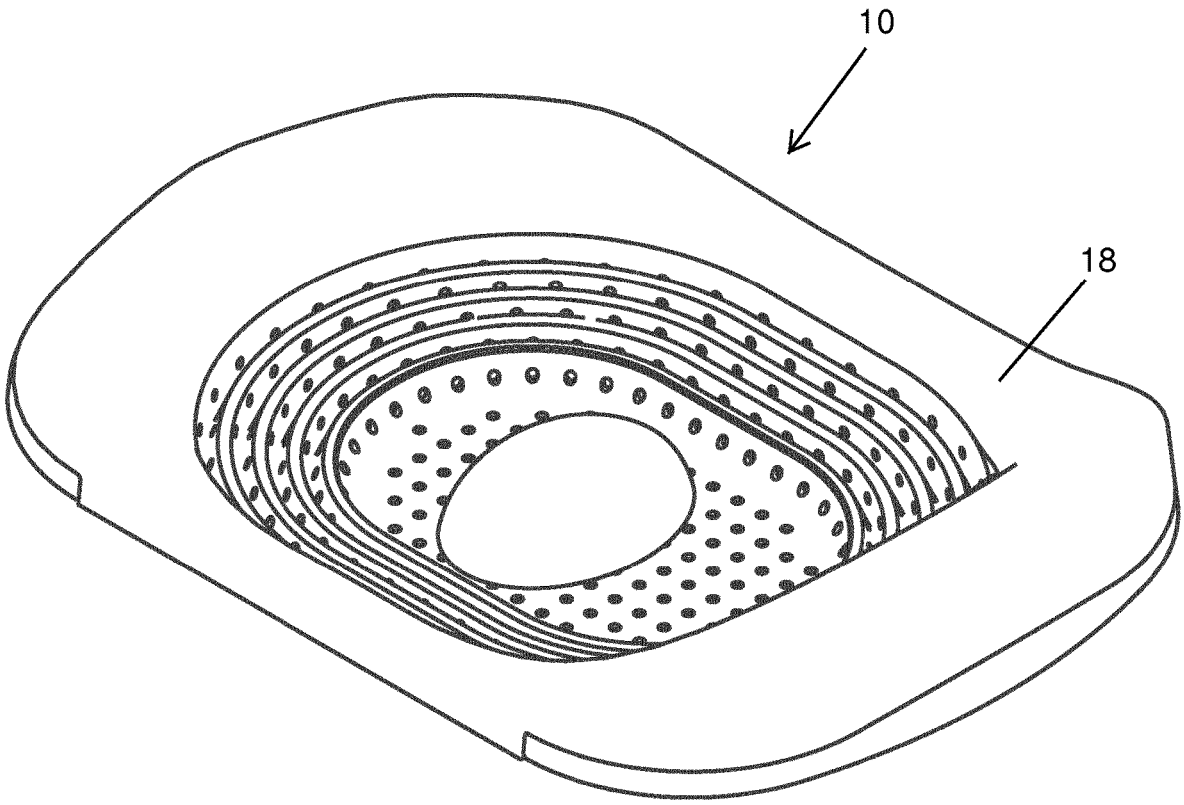


Fig. 10

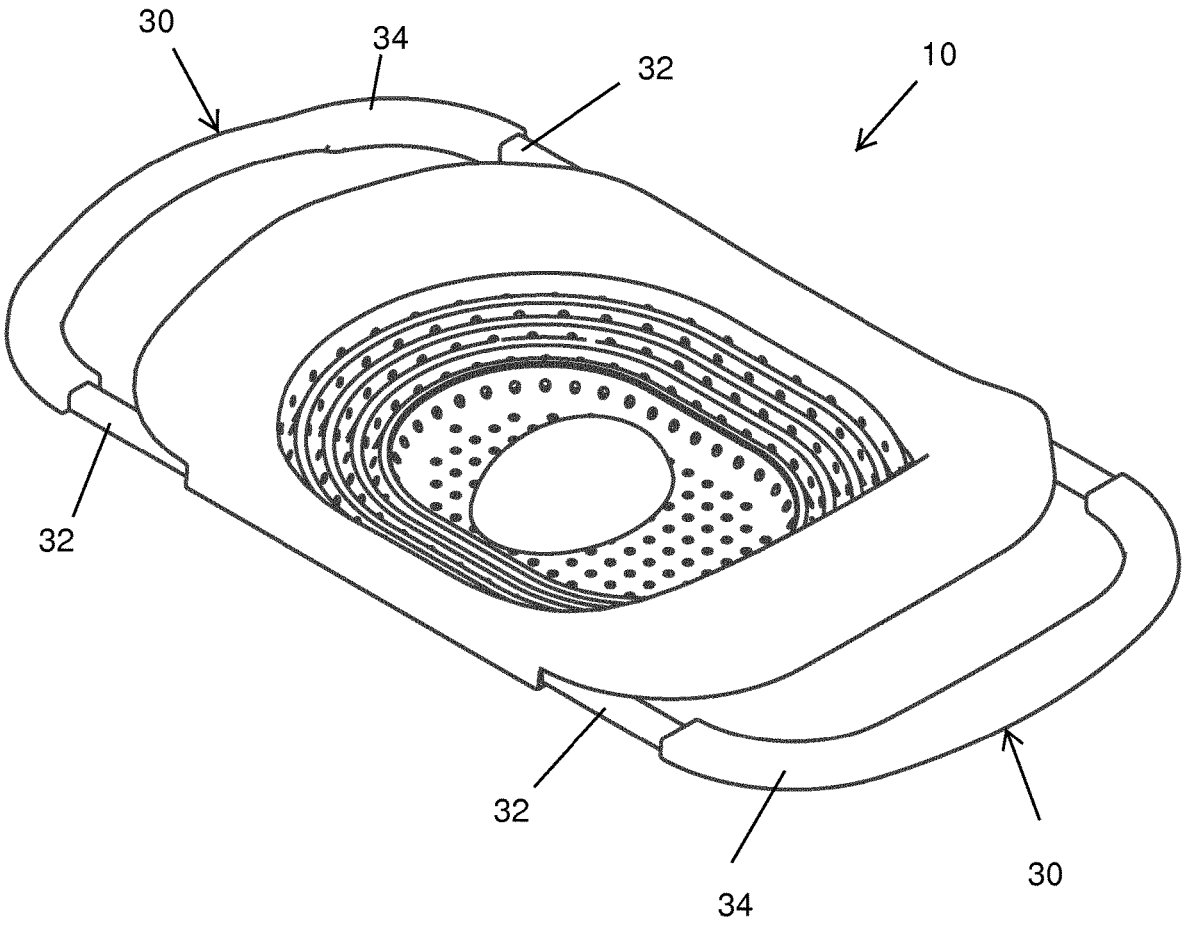


Fig. 11

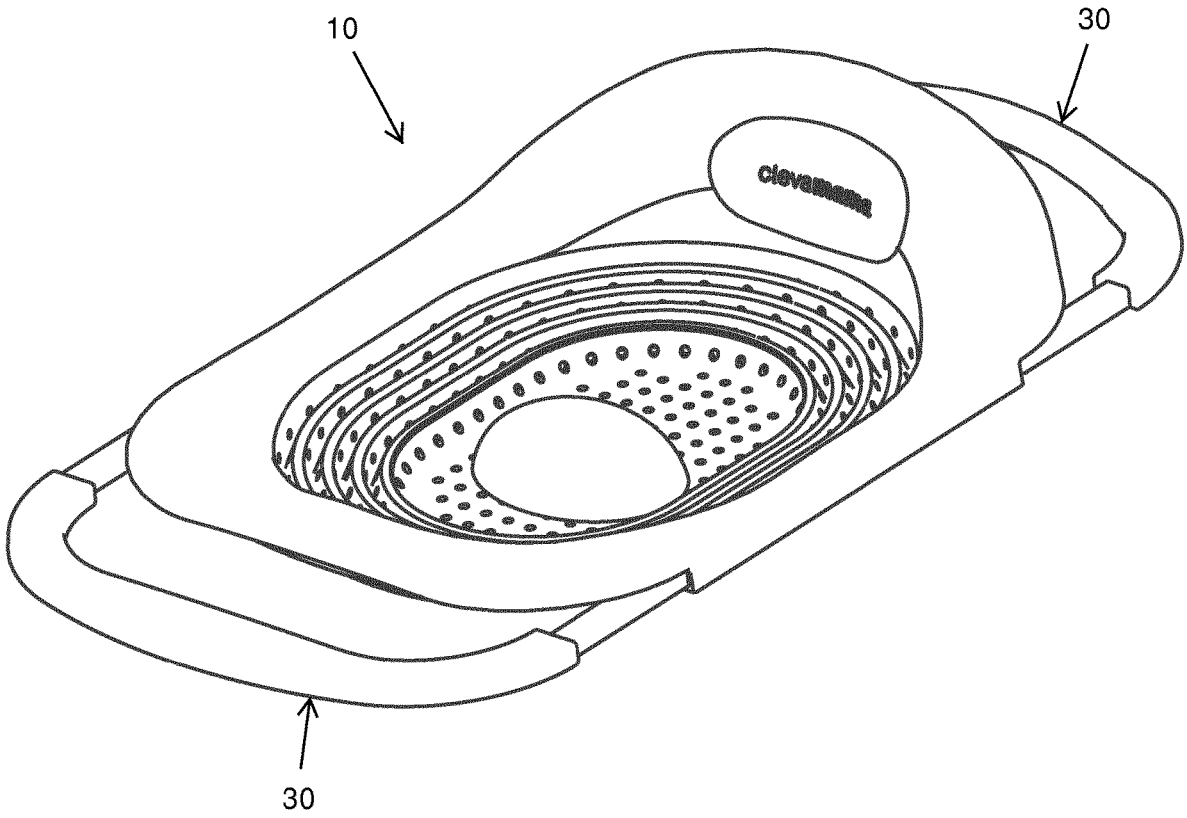


Fig. 12

AN INFANT BATHING SYSTEM

FIELD OF THE INVENTION

[0001] This invention relates to a bathing system for an infant, and in particular a bathing system for an infant which can be located in a conventional sink or the like and which simplifies the filling and emptying of the bathing system in order to provide an improved bathing experience.

BACKGROUND OF THE INVENTION

[0002] While the birth of a child is considered by many to be one of the most significant and enjoyable periods in a person's life, there are practical considerations and complications which can make the life of a parent significantly more complex and labour intensive, which when combined with the inevitable lack of sleep that normally accompanies the arrival of a new child, can reduce the enjoyment and increase the stress associated with this time.

[0003] Day to day activities which as an adult are taken for granted become exponentially more complicated and time consuming, for example feeding, dressing, and bathing, all of which must be undertaken with great care and consideration. The ability of a parent or carer to apply the necessary care and consideration is often hampered by tiredness or time constraints, and it is therefore of significant interest to parents to find solutions that can ease the burden of the many daily task to be undertaken in caring for a new infant.

[0004] Bathing an infant is often considered one of the more stressful of these tasks, with many people opting to use a dedicated baby bath, due to the unsuitability of a conventional bath, which is too large for the purpose of bathing child, and in addition, requires significant time to suitably fill, time being a precious commodity when caring for a young infant. However, the tasks of filling the baby bath and subsequently emptying heavy volumes of water after washing the infant are additional awkward and time consuming tasks, and a suitable location is not always readily available to locate the filled baby bath while washing the child. Manoeuvring the infant into the bath, ensuring the infant remains safely positioned in the bath during bathing, and removing the wet infant from the bath are all tasks which must be performed with great care and attention. Once removed from the bath it is then generally necessary to apply a nappy and then dress the infant, with little or no time to empty the water from the baby bath, which can then become an issue, particularly if there are for example other young children such as toddlers in the household, for which a bath full of water can pose a significant safety risk.

[0005] It is therefore an object of the present invention to provide an infant bathing system which addresses the above-mentioned problems.

SUMMARY OF THE INVENTION

[0006] According to the present invention there is provided an infant bathing system comprising a receptacle adapted to receive and retain an infant; wherein the receptacle comprises a plurality of apertures to permit the flow of water into and out of the receptacle.

[0007] Preferably, the infant bathing system comprises one or more supports extending laterally of the receptacle at a position above a base of the receptacle, to permit the receptacle to be suspended over a fluid reservoir.

[0008] Preferably, the one or more supports each comprise a handle.

[0009] Preferably, the one or more supports are retractably extendable relative to the receptacle.

[0010] Preferably, the one or more supports at least partially comprise a non slip material on a contact face of the support.

[0011] Preferably, the receptacle is displaceable between a collapsed state and an expanded state such as to permit the depth of the receptacle to be altered.

[0012] Preferably, the receptacle is displaceable in stages between the collapsed state and the expanded state.

[0013] Preferably, the receptacle comprises a base and a sidewall.

[0014] Preferably, the sidewall is displaceable between a collapsed state and an expanded state.

[0015] Preferably, the sidewall comprises an array of circumferentially extending ribs with adjacent ribs stepped relative to one another in a radial direction.

[0016] Preferably, each rib comprises an array of the apertures therein.

[0017] Preferably, the base comprises a plurality of the apertures therein.

[0018] Preferably, the receptacle comprises an abutment on an interior surface of the base.

[0019] Preferably, the receptacle is at least partially formed of a flexible material.

[0020] Preferably, the bathing system comprises a rigid rim provided about a mouth of the receptacle.

[0021] Preferably, the receptacle comprises an integrated head rest.

BRIEF DESCRIPTION OF THE DRAWINGS

[0022] The present invention will now be described with reference to the accompanying drawings, in which:

[0023] FIG. **1** illustrates a perspective view of an infant bathing system according to a preferred embodiment of the present invention and with a receptacle in an expanded state;

[0024] FIG. **2** illustrates an end elevation of the bathing system with the receptacle in the expanded state;

[0025] FIG. **3** illustrates a side elevation of the bathing system;

[0026] FIG. **4** illustrates a plan view of the bathing system from above;

[0027] FIG. **5** illustrates a plan view from below of the bathing system;

[0028] FIG. **6** illustrates an end elevation of the infant bathing system with the receptacle in a collapsed state;

[0029] FIG. **7** illustrates a side elevation of the arrangement shown in FIG. **6**;

[0030] FIG. **8** illustrates a plan view from below of the bathing system with the receptacle in the collapsed state;

[0031] FIG. **9** illustrates a perspective view of the bathing system with the receptacle again in the collapsed state;

[0032] FIG. **10** illustrates an alternative perspective view of the arrangement shown in FIG. **9**;

[0033] FIG. **11** illustrates the infant bathing system in the collapsed state and with a pair of handles extended outwardly;

[0034] FIG. **12** illustrates an alternative perspective view of the bathing system with the handles of the system extended.

DETAILED DESCRIPTION OF THE DRAWINGS

[0035] Referring now to the accompanying drawings that is illustrated an infant bathing system, generally indicated as **10**, for use in simplifying the process of bathing a young infant (not shown) and which is designed to be collapsed into a flattened state for storage between uses. It is a well known issue that the arrival of a new child results in a proliferation of often large items of equipment such as buggies, cots, changing units, toys, etc., all of which take up significant space, and the ability to collapsed an item for storage is of significant benefit. The collapsible characteristic is also beneficial for the packaging, transport, commercial storage and sale of the bathing system **10**.

[0036] The bathing system **10**, in the preferred embodiment illustrated, comprises a receptacle **12** which is shaped and dimensioned to receive an infant therein when in an expanded state, for example as illustrated in FIG. **1**, and which incorporates a number of features described in detail hereinafter to ensure the comfort and support, and therefore safety of the infant during the bathing process. The receptacle **12** comprises a base **14** and a side wall **16** which in the embodiment illustrated is formed integrally with the base **14**, but could equally be formed separately therefrom and suitably joined. The exact shape and configuration of both the base **14** and sidewall **16** may be widely varied once maintaining the underlying functionality described hereinafter. For example the base **14** could be more concave in shape, effectively forming a continuous curved surface with the sidewall **14**

[0037] In the preferred embodiment illustrated, the base **14** and side wall **16** are formed from the same flexible or resilient material in order to both provide comfort to an infant when supported thereon, and to allow the receptacle **12** to be displaced between an expanded state as illustrated in FIGS. **1** to **6** and a collapsed state as illustrated in FIGS. **7** to **12** in which the bathing system **10** may be more easily stored and/or transported. In the preferred embodiment illustrated the receptacle **12** is formed from rubber but any other suitable material or combination of materials may be employed, for example a plastic, or a plastic or rubber coated substrate or the like. The use of rubber provides a comfortable and non slip surface while also providing the necessary flexibility to facilitate displacement of the receptacle **12** between the expanded and collapsed states. The base **14** and or sidewall **16** could also be provided with reinforcing elements (not shown) for example one or more annular elements encased in or secured to the sidewall **16** to provide improved support.

[0038] The bathing system **10** additionally comprises a rigid rim or frame **18** about a mouth of the receptacle **12** and to which the receptacle **12** is secured, the frame **18** preferably being formed from a moulded plastic material and providing rigidity and therefore structural integrity to the overall bathing system **10**. The receptacle **12** may be secured to the frame **18** in any suitable conventional fashion. It will of course be appreciated that the frame **18** could be formed integrally with the sidewall **16**, and that the shape and configuration of the rim **18** may be widely varied.

[0039] The sidewall **16** comprises a nestable array of ribs **20** with adjacent ribs **20** reducing in size in a radial direction between the frame **18** and the base **14**. The flexible nature of the side wall **16**, in combination with the array of stepped ribs **20**, allows the receptacle **12** to be displaced in concertina fashion between the expanded state as illustrated for example in FIG. **1** defining an enclosure for receiving an infant, and the collapsed state as illustrated for example in FIG. **9** in which the system **10** is essentially of flattened or planar form and can thus easily be stored in any number of suitable locations. Thus it will be appreciated that each rib **20** effectively forms a layer which may be collapsed and nested into the immediately adjacent upper layer or rib **20**, in order to achieve a very low profile when the receptacle **12** is displaced into the collapsed state. The ribs **20** could be formed from a rigid material such as plastic, with a flexible hinge such as a live hinge connecting adjacent ribs **20**, thereby allowing the above functionality while providing a more rigid and therefore supporting sidewall **16** if desired. It is also envisaged that the receptacle may be only partially collapsible, for example being formed from two or three sections which are displaceable relative to one another. It will of course be appreciated that any other functional alternative configuration for the side wall **16** and/or base **14** may be employed in order to achieve this reversibly collapsible capability.

[0040] The receptacle **12** is additionally provided with a large number of through apertures **22** therein, preferably being located along each of the ribs **20** and in addition in the base **14**, which apertures **22** allow water to both enter into the receptacle **12** from the exterior, and to drain quickly and easily from the receptacle **12** when bathing has been completed, as will be described in greater detail hereinafter. The receptacle **12** is preferably additionally provided with an protrusion or abutment **24** located on the base **14** and arranged and dimensioned to effectively define a seat or ledge against which the buttocks of the child can rest in order to reduce the likelihood of the child slipping downwardly such as to lie completely flat, which obviously raises the risk of the child's head being submerged in the water in use. This can free up both of the parents hands to more quickly and easily undertake the bathing of the infant. The abutment **24** may be formed integrally with the base **14** or my be detachably secured thereto. The abutment **24** is again preferably but not essentially formed from a resiliently deformed or cushioned material in order to provide comfort to an infant when located in the expanded receptacle **12**.

[0041] A headrest **26** is preferably additionally provided on an elevated first end **28** of the receptacle **12** and/or frame **18** and which is preferably formed of the same resilient material as the receptacle **12** in order to provide a comfortable cushion against which the infant's head may be rested during bathing. It will of course be understood that the shape, configuration, and location of the headrest **26** may be altered.

[0042] Finally, the bathing system **10** comprises a pair of supports in the form of handles **30**, one located at either end of the frame **18**, and preferably reversibly displaceable outwardly from a retracted position beneath/within the frame **18** as illustrated in FIGS. **9** and **10**, and an extended position as illustrated in FIGS. **11** and **12**. The supports or handles **30** may however be fixed in position, but this is less preferred as the adjustable nature enables the bathing system **10** to be used with a range of sink sizes as hereinafter described. In the preferred embodiment illustrates the pair of handles **30** are infinitely adjustable in length from the fully retracted position to the fully extended position. Each handle **30** preferably comprises a pair of struts **32** which are telescopically received in the frame **18** and joined together by a curved cross member **34** which serves as a handhold for

lifting and manoeuvring the bathing system **10**. The handles **30** could however be rotatably or otherwise displaceable between the retracted and extended positions. Located on an underside of each of the cross members **34** are a pair of non-slip pads **36** which prevent or reduce movement of the bathing system **10** during use and as hereinafter described in detail.

[0043] Turning then to the operation of the bathing system **10**, one of the benefits of the system **10** is in allowing an infant to be bathed within a conventional kitchen sink (not shown) or the like, which provides a ready-made and physically secure or stable location into which the receptacle **12** may be located and at which a dedicated supply of water is already available via the one or more taps provided at a conventional sink. The bathing system **10** is thus initially left with the receptacle **12** in the collapsed state and the pair of handles **30** are drawn outwardly of the frame **18** to a distance greater than the width of the sink (not shown) into which the bathing system **10** is to be deployed. The bathing system **10** is then placed such that the collapsed receptacle **12** is located overlying the sink with the pair of handles **30** extending beyond either side of the sink in order to support the receptacle **12**. At this point the receptacle **12** may be displaced into the expanded state, for example by lightly pressing on the base **14** in order to extend the sidewall **16**. Depending on the depth of the sink being utilised, the sidewall **16** may be partially or fully expanded, for example until either the base **14** contacts the bottom of the sink or the sidewall **16** is fully expanded with the base **12** suspended over the bottom of the sink.

[0044] At this point the sink may then be filled with water directly from the existing taps (not shown) provided at the sink, with the large array of apertures **22** in the sidewall **16** and/or base **14** allowing the water filling the sink to simultaneously enter into and thus fill the receptacle **12**. When the water has reached a desired height within the receptacle **12**, the taps are simply turned off, and the infant may then be lowered into the receptacle **12** to rest against the stop **24** and headrest **26**. Alternatively, it will be appreciated that the infant may be placed into the receptacle **12** before the water is introduced into the sink, and the sink and receptacle **12** then filled with water, although with this sequence it is obviously more difficult to ensure that the temperature of the water is correct as it fills the sink and receptacle **12**.

[0045] The infant may then be bathed in conventional fashion and once bathing has been completed the sink can be emptied as normal while the infant is left safely located in the receptacle **12**. The array of apertures **22** will therefore result in the water within the receptacle **12** draining therefrom as the sink empties. By leaving the infant within the receptacle **12** during this procedure, a secure location is provided at which the infant is contained while the water is emptied and the infant can then also be partially dried within the receptacle **12** once completely drained, providing an additional level of support, before the infant is withdrawn from the receptacle **12** for final drying and dressing as appropriate. The receptacle **12** may then be quickly and easily displaced into the collapsed state and the bathing system **10** stored in an appropriate location for re-use. The use of plastic and rubber components also ensures that the bathing system **10** does not need to be dried prior to storage, further reducing the ancillary tasks associated with the bathing process.

[0046] It should be understood that the filling and emptying benefits provided by the array of apertures **22** in the receptacle **12** may be realised in the absence of the ability of the receptacle **12** to be displaceable between the expanded and collapsed state and the present invention thus envisages such embodiments in which a substantially rigid or fixed form receptacle is employed.

[0047] It will therefore be appreciated that the bathing system **10** of the present invention provides a simple yet practical means of safely bathing a child in an existing sink or the like while providing an improved level of comfort and support for the infant, and also avoiding the requirement for filling and emptying heavy loads of water from a conventional baby bath or the like.

1. An infant bathing system comprising a receptacle adapted to receive and retain an infant; wherein the receptacle comprises a plurality of apertures to permit the flow of water into and out of the receptacle.

2. An infant bathing system according to claim **1** comprising one or more supports extending laterally of the receptacle at a position above a base of the receptacle, to permit the receptacle to be suspended over a fluid reservoir.

3. An infant bathing system according to claim **2** in which the one or more supports each comprise a handle.

4. An infant bathing system according to claim **2** in which the one or more supports are retractably extendable relative to the receptacle.

5. An infant bathing system according to claim **2** in which the one or more supports at least partially comprise a non slip material on a contact face of the support.

6. An infant bathing system according to claim **1** in which the receptacle is displaceable between a collapsed state and an expanded state such as to permit the depth of the receptacle to be altered.

7. An infant bathing system according to claim **6** in which the receptacle is displaceable in stages between the collapsed state and the expanded state.

8. An infant bathing system according to claim **6** in which the receptacle comprises a base and a sidewall.

9. An infant bathing system according to claim **8** in which the sidewall is displaceable between a collapsed state and an expanded state.

10. An infant bathing system according to claim **9** in which the sidewall comprises an array of circumferentially extending ribs with adjacent ribs stepped relative to one another in a radial direction.

11. An infant bathing system according to claim **10** in which each rib comprises an array of the apertures therein.

12. An infant bathing system according to claim **8** in which the base comprises a plurality of the apertures therein.

13. An infant bathing system according to claim **8** in which the receptacle comprises an abutment on an interior surface of the base.

14. An infant bathing system according to claim **1** in which the receptacle is at least partially formed of a flexible material.

15. An infant bathing system according to claim **1** comprising a rigid rim provided about a mouth of the receptacle.

16. An infant bathing system according to claim **1** in which the receptacle comprises an integrated head rest.

* * * * *