

SENSORY EXPERIENCE METHOD AND APPARATUS

This invention relates to both an apparatus in the one case and a method in the other for effecting a beneficial sensory experience for a participant's body, preferably a human.

5 The problem to which this invention is directed relates to both a method and apparatus for providing an olfactory and visual stimulation while reducing other stimulation so as to heighten the positive stimulatory effects.

It is known to provide relaxation by having a participant float within a body of high-density liquid such as a highly salted water bath.

10 While floating, the body is supported more or less uniformly so that the effect of gravity is distributed more uniformly so that individual muscle tensions to say, support a limb, can be reduced and especially if the liquid is at about body temperature, then stimuli to the floating body requiring compensation causing possible further tensions for heating or cooling of the body is reduced allowing the brain to focus on other inputs.

15 It is however, difficult to know what further stimulation might be most appropriate for any individual for instance in the form of visual or olfactory stimulation.

My discovery is that it is feasible to provide over a flotation bath an environment, which includes an atmosphere of fine water droplets, which can be used for intersecting and reflecting light, which also act as a carrier both to introduce and then assist in extraction of an essential oil.

20 The advantage of this is that, whereas essential oils once introduced into an enclosure would be expected to persist, if they are carried within an atmosphere of fine mist which is fine water droplets then the droplets themselves are more able to be directed and will then be appropriate to both carry in, hold in a dispersed state and then be reasonably effectively extracted by being carried with the water droplets.

25 What this means then is that there can be an exchange over a relatively smaller period of time of an essential oil.

There can be also a relationship between other sensory inputs and essential oils.

Such other in puts can include a colour or colour combination and in another case it can either be an audible sound or combination of sounds or of course such sounds in the form of music.

Accordingly, according to one form of this invention, there is then proposed a method of stimulation of the senses for a participant, the method including the steps of the participant being substantially supported either directly or indirectly by a body of liquid so as to float, and while floating, being subjected to both visual and olfactory stimulation, the visual stimulation
 5 being provided by a source or sources of light of selected patterns and/or colour or colours being directed into an atmosphere of fine water droplets, there being at least one essential oil as an olfactory stimulant carried by the droplets, and from time to time, substantially extracting the fine water droplets together with the essential oil of a first set, and replacing these with a fresh set of fine water droplets and a further essential oil.

10 In preference, the method includes the further step while the participant remains floating within the body of liquid, that a first essential oil or oil combination is introduced with or during introduction into an enclosure within which the participant exists and at a selected time thereafter, there is extracted from the enclosure at least to a substantive extent the fine water droplets together with such essential oils that have been collected by such fine water droplets,
 15 and thereafter at a further selected time, introducing a further atmosphere of fine water droplets and a further essential oil or oils combination during or with at least this further fine droplet atmosphere.

In preference, during at least some of the period during which a first of the fine droplets have been introduced and are left to remain within the enclosure, there is also provided an input of
 20 an audible sound.

In preference, the audible sound is in the form of music which has been selected to be appropriate to be with the essential oil or oils combination at the time.

In preference, there is a source of light which is coloured so that the coloured light is directed to shine within the enclosure at the least while the fine water droplets are suspended in the
 25 atmosphere within the enclosure, and the colour or colours of such light are selected to be appropriate to the essential oil or oils combination within the enclosure at the time.

In preference, the pattern of introducing and extracting an atmosphere of fine water droplets and an accompanying essential oil or oils combination is repeated a plurality of times with a period between such different sets of atmosphere to allow for effective extraction and then
 30 further introduction of fresh fine water droplets.

In a further form, the invention can be said to reside in an apparatus for effecting a beneficial sensory input for a participant which includes a body of liquid within which the participant can float, a means to effect an input of fine water droplets into an area immediately above the body

of liquid, means adapted to extract such fine water droplets, means to effect, in aerosol manner, input of each of a selected essential oil into the area above the body of liquid, means to effect each of a selected lighting either colour and/or pattern of the area above the body of liquid, and means to effect a sound input into the area for a person floating within the body of liquid to
 5 hear, characterised in that there are means to effect in synchronised manner the input and extraction of fine water droplets in conjunction with the essential oils, noise and colours.

In preference, there is provided a sequenced arrangement for introduction and extraction of fine water droplets together with a sequence of introduction of a selected essential oil or oils combination with each further introduction of fine water droplets.

10 In preference, there are means to introduce the essential oil or oils into the stream of fine water particles as they are introduced into the enclosure so that at least during some of the time of such introduction, the essential oil or oils combination will be intimately mixed with such fine water particles or droplets.

15 In preference, there are means to effect a source of light which will effect a lighting of the atmosphere within the enclosure and there are means to effect a colouring of such light from its source which colour is selected for each of the introduced essential oils.

In other words, there will be a matching sequence of essential oil, colours of lighting and as well a matching audio input.

20 In preference, there are means to effect a heating of the liquid within the body of water and means to maintain this at a selected temperature which can be at about body temperature.

In preference, the body of liquid is a high salt content and in preference such salt is Epsom salts which is to an extent that a participant's body, preferably a human, will float with a substantive proportion of the participant's body above a level of the liquid in the bath.

25 In preference, a person would use a flotation pillow for their head if desired and also would have closures for the ears such that liquid would not pass into the ear but such closures would be selected to allow for hearing of audible signals and music through these closures.

30 In preference, there would be a sequence control which would allow for a selected time for introduction of water vapour with appropriate essential oil or oils combination, a period during which the fine water droplets would be allowed then to remain dormant while the colours are shone through the atmosphere of the enclosure and the sound is played, and then there is a period for extraction and reinsertion of a fresh set of fine water droplets together with a different

set of essential oil or oils combination and at the same time a change in the audible sounds and also the colours and patterns selected for this particular further essential oil.

In preference there can be a sequence of these over a period which may be typically a one-hour stretch and six full changes through such a period so that each cycle is through a period of
5 ten minutes.

For a better understanding of this invention it will now be described with reference to a preferred embodiment which shall be described with the assistance of drawings wherein,

Fig 1 is a schematic view showing an enclosure with a pool, a person shown typically within the pool, and associated accessories relating to all of these according to the embodiment.

10 Fig 2 illustrates a program pattern of introduction of the stimuli according to this embodiment and according to a selected program.

Now referring to the drawings and in particular to Fig 1, there is an arrangement 1 which includes an enclosure 2 which is defined by four walls 3 and a ceiling 4 and of course a floor 5 with access thereto by a door 6.

15 Within the enclosure thus defined there is a pool 7 which includes liquid 8 which in this case is water with a high concentration of Epsom salts to the extent that a participant can float readily within the liquid without assistance and such that a substantive portion of the body is above the level of the liquid.

In our embodiment, additional buoyancy support can be provided for the head of the participant
20 and it has advantage to provide closures against liquid egress into the ear canals, but selected so that sound can still pass generally through such closures. Such devices are commonly available.

There are means to both introduce and extract fine water droplets from the enclosure 2.

There are various ways that fine water droplets can be generated and one of these is to create
25 steam and to allow some of this to condense which then provides a fine mist or fine water droplets which generally then will suspend in conventional atmosphere. These fine water droplets can be supplied via conduit 9 and released at outlets 10 and 11.

The means to extract the fine water droplets is a source of suction such as an exhaust fan. In the case of the embodiment illustrated in Figure 1, suction is effected via the same conduit 9

that the fine water droplets are provided through, so that outlets 10 and 11, also serve as inlets for the extracted fine water droplets. Extraction may however be provided by one or more exhaust fans positioned away from the conduit.

5 There is also the additional advantage that the fine water droplets maintain a temperature that is at least warm and this then provides an environment that is generally at about a body temperature.

By having fine water droplets in the atmosphere of the enclosure 2, this has two functions, one of which is to carry and distribute essential oils and then secondly, to facilitate the extraction of essential oils after a period of time so that a replacement essential oil without at least
10 substantive contamination of the first essential oil can be achieved.

While reference is made to one essential oil it is possible to use a combination of essential oils at the same time.

However, I have found that there is a beneficial combination of various essential oils and colours of light and in this embodiment then there is provided that there are means to effect a
15 combination of an essential oil selection and a colour of light selection so that these are matched for any particular selected period.

The provision of light is shown in our illustration by a light source 12 and there are means specifically within the light source 12 that control and effect a change in sequence with the selection of essential oils such that there is a matching light for each of the essential oils
20 chosen.

Such devices can be obtained from conventional commercial sources and are typically used in theatrical productions and night club environments.

In conjunction with the combination of essential oils and light colour, there is also an additional input namely, music which is also selected to match the colour and essential oil in a particular
25 phase of the stimulation period.

There can be either music chosen or a tone or tone combination in this embodiment and these are able to be selected prior to the participant being involved in the stimulatory program.

However, in a further embodiment, there are means for the participant to effect a further selection and to interact or change as desired either the length of the stimulation, or a particular
30 combination.

In this particular embodiment there can be means accessible by the participant 13.

There are a plurality of loud speakers at 14 which project sound into the enclosure 2 either in multi-channel form or in mono oral form.

One of the difficulties with the arrangement described is that an essential oil when introduced
 5 into an enclosure will normally distribute over many of the surfaces and remain generally within the atmosphere of the enclosure over an extended period of time.

By using a wet steam which produces fine droplets and in this particular case introducing this so that an injected liquid namely a selected essential oil or oils into the fine water droplets, at least through only a portion of the period of introduction of the fine water droplets into the
 10 enclosure, a substantive portion of the essential oil will remain with the liquid, and by extracting the fine water droplets from the enclosure 2, there can then be expected to be at least a substantive, if not total, removal of the phase selected essential oil.

Not shown but included within the enclosure is also a fresh air inlet which can also include a means for heating such fresh air to maintain a body temperature of the environment within the
 15 enclosure and this can assist then in firstly providing a through flow for fine water droplets removal together with the accompanying essential oil.

Fig 2 illustrates in graphical form a program according to the embodiment in which there is provided over a 60 minute period, a sequence of in any ten minute period, a first supply of fine water droplets in, and during such supply of set fine water droplets in, a smaller period during
 20 which there is opened a valve into a supply of selected essential oil and by use of suction, a selected proportion of essential oil is thereby pulled into and mixed up with and dissolved by the liquid within the fine water droplets.

At the same time through the selected phase, there is a coloured light which is arbitrarily shown as selection 1, and there is a sound choice also as selection 1.

Each of the subsequent phases match the same pattern where there is a selection of essential
 25 oils, a colour or as preferred a light pattern with colour and a selected music or sound.

The results in trials conducted so far have shown this method and apparatus to be very effective indeed and able to provide an improved experience for beneficial effect to a participant's body.

Although the invention has been herein shown and described in what is conceived to be the most practical and preferred embodiment, it is recognised that departures can be made within the scope of the invention, which is not to be limited to the details described herein but is to be accorded the full scope of the appended claims so as to embrace any and all equivalent devices and apparatus.

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Claims

1. A method of stimulation of the senses for a participant, the method including the steps of the participant being substantially supported either directly or indirectly by a body of liquid so as to float, and while floating, being subjected to both visual and olfactory stimulation, the visual stimulation being provided by a source or sources of light of selected patterns and/or colour or colours being directed into an atmosphere of fine water droplets, there being at least one essential oil as an olfactory stimulant carried by the droplets, and from time to time, substantially extracting the fine water droplets together with the essential oil of a first set, and replacing these with a fresh set of fine water droplets and a further essential oil.
2. A method of stimulation of the senses for a participant, the method including the steps of the participant entering into and being substantially supported by the body of liquid, said body of liquid having a high level of a dissolved salt so that the participant may float in the liquid, and while floating, being subjected to both visual and olfactory stimulation, the visual stimulation being provided by a source or sources of light creating selected patterns and/or colours which are directed into an atmosphere of fine water droplets, there being at least one essential oil as an olfactory stimulant carried by the droplets, and there being a substantial extraction of the fine water droplets together with the essential oil, and a replacement of these with a fresh set of fine water droplets and a further essential oil.
3. The method of stimulation of the senses for a participant as in either one of the preceding claims, further characterised in that a diffuse colour effect is achieved by introducing the fine water droplets into an area immediately above the participant, where the coloured lighting and sound are introduced as matching pairs.
4. The method of stimulation of the senses for a participant, as in any one of the preceding claims, wherein the method includes a programmed sequence, wherein fine water droplets carrying a first selected essential oil is bathed with a selected colour of light and during which time there is also an appropriate audio simulation of a selected music or sound selected for this purpose.
5. The method as in the immediately preceding claim, further characterised in that the fine water droplets together with the essential oil being either with that fine water droplets or injected in cooperation with the fine water droplets is extracted, and a replacement fine water droplets insertion is provided which also then carries a further selected essential

oil and this is then triggered together with appropriate matching further selected colour bathing of the fine water droplets, and an audio signal either music or selected noise.

- 5 6. The method as in the immediately preceding claim further characterised in that this combination of steps is further repeated for a selected number of times with, in each case, a different essential oil.
7. The method of stimulation of the senses for a participant, as in any one of the preceding claims, wherein the body of liquid and the area above the same into which the fine water droplets and the essential oil or oils are to be introduced, are both within an enclosure.
- 10 8. The method as in the immediately preceding claim, further characterised in that there is included the further step that during at least some of the period during which a first of the fine droplets have been introduced and are left to remain within the enclosure, there is also provided an input of an audible sound.
- 15 9. The method as in the immediately preceding claim further characterised in that there is included the further step that the audible sound is in the form of music which has been selected to be appropriate to accompany the essential oil or combination of oils at the time.
- 20 10. The method as in any one of the preceding claims 7 to 9, further characterised in that there is included the further step that there is a source of light which is coloured so that the coloured light is directed to shine within the enclosure at least while the fine water droplets are suspended in the atmosphere within the enclosure, and the colour or colours of such light are selected to be appropriate to accompany the essential oil or combination of oils within the enclosure at the time.
- 25 11. The method as in any one of the preceding claims, further comprised in that there is included the further step that the pattern of introducing and extracting an atmosphere of fine water droplets and an accompanying essential oil or oils combination is repeated a plurality of times with a period between such different sets of atmosphere to allow for effective extraction and then further introduction of fresh fine water droplets.
- 30 12. An apparatus for effecting a beneficial sensory input for a participant which includes a body of liquid within which the participant can float, a means to effect an input of fine water droplets into an area immediately above the body of liquid, means adapted to extract such fine water droplets, means to effect, in aerosol manner, input of each of a

selected essential oil into the area above the body of liquid, means to effect each of a selected lighting either colour and/or pattern of the area above the body of liquid, and means to effect a sound input into the area for a person floating within the body of liquid to hear, characterised in that there are means to effect in synchronised manner the input and extraction of fine water droplets in conjunction with the essential oils, noise and colours.

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13. An apparatus for assisting in providing beneficial stimulation comprising a body of water within an enclosure, means to introduce into the enclosure a first injection of fine water droplets, a means to introduce into the enclosure at least at sometime during the injection of the said first fine water droplets an essential oil or oils combination, and means to extract from the enclosure to at least a substantive extent fine water droplets within the atmosphere of the enclosure, means then to effect a further introduction of fine water droplets into the atmosphere of the enclosure with a second essential oil or oils combination, after a selected period of time from the said first extraction of fine water droplets from the enclosure.
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14. The apparatus as in the immediately preceding claim further characterised in that there is provided means to effect a sequenced arrangement for introduction and extraction of fine water droplets together with a sequence of introduction of a selected essential oil or oils combination with each further introduction of fine water droplets.
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15. The apparatus as in either one of the two immediately preceding claims further characterised in that there are means to introduce the essential oil or oils into the stream of fine water particles as they are introduced into the enclosure so that at least during some of the time of such introduction, the essential oil or oils combination will be intimately mixed with such fine water particles or droplets.
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16. The apparatus as in any one of preceding claims 14 or 15 further characterised in that there are means to effect a source of light, which will effect a lighting of the atmosphere within the enclosure, and there are means to effect a colouring of such light, which is selected for each of the introduced essential oils.
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17. The apparatus as in any one of the preceding 14 or 15 further characterised in that there are means to effect a heating of the liquid within the body of water and means to maintain this at a selected temperature which is approximately body temperature of the participant's body.
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18. The apparatus as in any one of the preceding claims 14 or 15 further characterised in that the body of liquid has a high salt content and such salt is Epsom salts which is to an extent that the participant's body floating will have a substantive proportion of the body above an upper level of the liquid.

5 19. The apparatus as in any one of the preceding claims 14 or 15 further characterised in that there is a sequence controller which is adapted to effect during a selected time
introduction of fine water droplets with an essential oil or oils combination, then a period
during which the fine water droplets be allowed then to remain dormant within the
enclosure while the colours are shone through the atmosphere of the enclosure and the
10 sound is played, and there is then a period for extraction and reinsertion of a fresh set of
fine water droplets together with a different set of essential oil or oils combination and
at the same time a change in the audible sounds and also the colours and patterns
selected for this particular further essential oil.