

THE CLAIMS:

1. A body processing apparatus for treating a dead body, the body processing apparatus including:

at least one first water tank for holding water;

5 a body processing chamber, the body processing chamber adapted to receive the dead body, and in fluid connection with the first water tank, able to receive water therefrom;

an additive treatment means, whereby necessary additives may be added to the body processing chamber or to the water used, during the process;

10 at least one second water tank for receiving water from the body processing chamber, through a fluid connection therewith; and

a water cleaning system, in fluid connection with the second water tank,

wherein, the body is placed within the body treatment chamber, additives are added through use of the additive treatment means, water enters from the first water tank and
15 processing occurs until the body breaks down, after which the water is drained to the second water tank and enters the water cleaning system for cleaning.

2. The body processing apparatus of claim 1, wherein the body is a human body of a deceased person.

3. The body processing apparatus of claim 1, wherein the body is an animal body.

20 4. The body processing apparatus according to any one of claims 1 to 3, wherein a control is included with a control panel for computerised control of the apparatus.

5. The body processing apparatus of claim 4, wherein the movement of parts of the apparatus is controlled through the control panel.

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6. The body processing apparatus of claim 4 or 5, wherein the flow of water to different parts of the apparatus is controlled from the control, and use of the control panel and valves.

7. The body processing apparatus according to any one of claims 1 to 6, wherein the flow of water to valves or similar are used to open or close flow of water from one area to another.
- 5 8. The body processing apparatus according to any one of claims 1 to 7, wherein a solar power system to provide power is included.
9. The body processing apparatus according to any one of claims 1 to 8, wherein a solar water heater system is included to provide hot water.
- 10 10. The body processing apparatus according to any one of claims 1 to 9, wherein a pump system is included to assist to move the water around the apparatus.
11. The body processing apparatus of claim 10, wherein one or more pump is included to provide movement of water from one area to another as required throughout the system.
- 15 12. The body processing apparatus according to any one of claims 1 to 11, wherein a water from the first tank can be used in a solar water heating system and heated before use for body processing in the chamber.
- 20 13. The body processing apparatus according to any one of claims 1 to 12, wherein an irrigation system is linked to the apparatus to make use of excess water in the system.
- 25 14. The body processing apparatus according to any one of claims 1 to 13, wherein a cremulator is associated with the apparatus for use to further dry and process or powder the bones suitable to be returned to the family in an urn, for example.
- 30 15. The body processing apparatus according to any one of claims 1 to 14, wherein a first water tank includes a clean water tank for supply of clean water to the body processing chamber.

16. The body processing apparatus according to any one of claims 1 to 15, wherein a counter, (a litre counter) is included before the water enters the chamber to measure the water volume entering the chamber.
- 5 17. The body processing apparatus according to any one of claims 1 to 16, wherein water volume entering the chamber is measure or controlled by the control system.
18. The body processing apparatus of claim 17, wherein a the water is entering the chamber from a solar water heating system and the volume of water is measured using
10 a litre counter or similar and a similar volume of water to that used to enter the chamber is caused to enter the system or enter the hot water system.
19. The body processing apparatus according to any one of claims 1 to 18, wherein a rain water tank is included to supply water to the clean water tank.
- 15 20. The body processing apparatus of claim 19, wherein a roof collection system is incorporated to collect rain water for the process and rain water is collected and stored in a rain water tank and is directed into the clean water tank for use in processing as required.
- 20 21. The body processing apparatus according to any one of claims 1 to 20, wherein a clean water tank is in fluid connection to a pump to pump clean water into a solar heating system for heating before use in the chamber for body processing.
- 25 22. The body processing apparatus according to any one of claims 1 to 21, wherein a mains power attachment is included for heating.
23. The body processing apparatus according to any one of claims 1 to 22, wherein a the body processing chamber is generally a cylindrical body, suitable to receive most
30 body sizes and shapes.
24. The body processing apparatus according to any one of claims 1 to 23, wherein a the chamber is sealable so as to contain water.

25. The body processing apparatus of claim 24, wherein a the seal is strong, to make the chamber water tight and suitable for use with hot water and for use with a high pH solution.
- 5 26. The body processing apparatus according to any one of claims 1 to 25, wherein a the body processing chamber includes means to put the body in and out easily including sliding on rails.
27. The body processing apparatus according to any one of claims 1 to 26, wherein a
10 body processing chamber includes a body basket into which the body is placed.
28. The body processing apparatus of claim 27, wherein an actuator is included to control the movement of the body basket on rails between and out and in position and the body basket can be slid in and out on rails to enable the body to be placed inside.
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29. The body processing apparatus according to any one of claims 1 to 28, wherein a potassium is added to the water before it enters the body processing chamber, before sealing the body processing chamber and processing the body.
- 20 30. The body processing apparatus according to any one of claims 1 to 29, wherein a water is received from a first water tank into the body processing chamber for processing through a water entry point included in a roof of the chamber.
31. The body processing apparatus according to any one of claims 1 to 30, wherein
25 once the water has entered the chamber the water is circulated within the chamber through use of a pump and spray used throughout the process.
32. The body processing apparatus of claim 31, wherein the circulation includes a pump arrangement to move water from one location to another.
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33. The body processing apparatus of claim 31 or 32, wherein the circulated water is pumped from the base to the top of the chamber.

34. The body processing apparatus according to any one of claims 31 to 33, wherein the circulated water is reintroduced into the chamber.
35. The body processing apparatus according to any one of claims 1 to 34, wherein
5 the additive includes or is Potassium Hydroxide.
36. The body processing apparatus of claim 35, Potassium Hydroxide is added of a weight substantially equivalent to 5% of the weight of the body.
- 10 37. The body processing apparatus according to any one of claims 1 to 36, wherein the additive is introduced using an additive treatment means that does not distribute the additive for processing until the water enters the chamber.
38. The body processing apparatus according to any one of claims 35 to 37, wherein
15 as the Potassium Hydroxide and water mix the pH of the water changes.
39. The body processing apparatus according to any one of claims 1 to 38, wherein the additive increases the alkalinity of the water.
- 20 40. The body processing apparatus according to any one of claims 1 to 39, wherein the additive and water change the pH of the water to substantially 14.
41. The body processing apparatus according to any one of claims 1 to 40, wherein the water solution from body processing after body processing has been completed is
25 treated to substantially return the water to substantially pH neutral or approximately pH 7.2.
42. The body processing apparatus according to any one of claims 1 to 41, wherein a food acid is introduced to the water from the body processing to substantially return the
30 water to a substantially pH neutral or approximately pH 7.2.
43. The body processing apparatus according to any one of claims 1 to 42, wherein sensors are included within the system.

44. The body processing apparatus according to any one of claims 1 to 42, wherein a pH sensor is included to sense the pH of the water solution.

45. The body processing apparatus according to any one of claims 1 to 44, wherein after body processing the water is completely drained from the chamber to the holding tank, and the chamber flushed with clean water to be clean and dry.

46. The body processing apparatus according to any one of claims 1 to 45, wherein a back wash tank is included for clean water used to back wash other parts of the system.

47. The body processing apparatus according to any one of claims 1 to 46, wherein a pump is used to pump water from the back wash tank to back wash a bag of a bag filtration system so a small amount of body nutrient may be removed from the system for the family.

48. The body processing apparatus according to any one of claims 1 to 47, wherein the second holding tank is used to contain the drained water from the processed body including the obtained nutrient and contained nutrient from the body is pumped to a bag filter for a first stage of filtering.

49. The body processing apparatus according to any one of claims 1 to 48, wherein a water cleaning system is included to clean the water that is captured from the body processing chamber and substantially cleans the water to clean water.

50. The body processing apparatus according to any one of claims 1 to 49, wherein the water cleaning system includes a bag filtration system.

51. The body processing apparatus of claim 50, wherein the majority of the nutrient and particles contained in the processing water are removed through use of the bag filter part of the water cleaning system.

52. The body processing apparatus according to any one of claims 1 to 51, wherein a physical filtration system is included in the water cleaning system to thoroughly clean the water.

53. The body processing apparatus according to any one of claims 1 to 52, wherein sediment produced from the processing is removed from the water solution before water cleaning.

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54. The body processing apparatus according to any one of claims 1 to 53, wherein the water cleaning system includes a physical filter, a chemical filter and a UV sterilizer to return the processed water to clean water.

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55. The body processing apparatus of claim 54, wherein the physical filter is a bag filtration system and the bag filtration system enables the sediment from processing to be separated from the water.

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56. The body processing apparatus according to any one of claims 1 to 55, wherein a sediment pot is used in fluid connection with at least one part of the water cleaning system to remove a small volume of water and or sediment from the processing water.

57. The body processing apparatus according to any one of claims 1 to 56, wherein the water cleaning system includes a water filter.

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58. The body processing apparatus according to any one of claims 1 to 57, wherein the water cleaning system includes a UV sterilizer to remove potential bacteria from the water solution.

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59. The body processing apparatus of claim 58, wherein the UV sterilizer reduces to substantially zero the risk of bacteria in the water.

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60. The body processing apparatus according to any one of claims 1 to 59, wherein water is caused to flow through a bag filter, carbon filter and then a UV sterilizer of the water cleaning system to clean the processing water to clean water.

61. The body processing apparatus according to any one of claims 1 to 60, wherein cleaned water from the water cleaning system is pumped or returned to the clean water tank for further use.

62. The body processing apparatus according to any one of claims 1 to 61, wherein one or more heating means or elements are included to further heat the water in the body processing chamber or maintain the temperature of the water received from a solar heating system.
- 5 63. The body processing apparatus of claim 62, wherein the maintained temperature is substantially 92 degrees Celsius.
64. The body processing apparatus according to any one of claims 1 to 63, wherein
10 the processing is carried out for 10 hours.
65. The body processing apparatus according to any one of claims 1 to 64, wherein the body processing chamber can be tilted.
- 15 66. The body processing apparatus of claim 65, wherein the body processing chamber can be tilted to substantially 45 degrees during processing.
67. A body processing apparatus for treating a dead body, the body processing apparatus including:
20 two first water tanks for holding water, one being a rain water tank and one being a clean water tank;
a solar water heating system that receives clean water from the clean water tank and heats it,
25 a body processing chamber including a heating means, the body processing chamber adapted to receive the dead body in a basket, and in fluid connection with the first clean water tank water from the solar heating system, able to receive clean heated water therefrom;
an additive treatment means, whereby necessary Potassium Hydroxide may be added
30 to the body processing chamber to increase the alkalinity of the water before processing, and food acid may be added to the water after body processing to increase the acidity and return the pH of the water to substantially neutral;
at least one second water tank for receiving water from the body processing chamber, through a fluid connection therewith;

a water cleaning system, in fluid connection with the second water tank, including at least one filtration unit and a UV treatment unit to substantially clean the water; and a recycling pipe to take clean water from the water cleaning system to be used in the clean water tank,

- 5 wherein, the body is placed within the body treatment chamber with the Potassium Hydroxide, and hot water enters from the first water tank, and the hot water is kept heated so processing occurs until the body breaks down, food acid is added to return the water to substantially neutral before the water is drained to the second water tank and enters the water cleaning system for cleaning, and once cleaned is returned to the clean water
10 tank for reuse.

68. A method of body processing using the body processing apparatus of claim 1, the method including the following steps:

- a) putting a body in the body processing chamber;
- b) sealing the body in the body processing chamber;
- 15 c) adding additives and water to the body processing chamber to start the processing of the body by taking the water pH to substantially 14;
- d) adding acid to the processing water to return the water to substantially neutral pH 7.2
- e) draining the processing water from the body processing chamber; and
- 20 f) cleaning the drained water to clean water suitable for recycling.

69. The method of claim 68, wherein a further step is included:

tilting the body processing chamber to 45 degrees from the horizontal during body processing.

70. The method of claim 68, where the body processing apparatus is the body
25 processing apparatus of any one of claims 1 to 67.