

IN THE CLAIMS

Please amend claim 55 as follows.

Please add new dependent claims 89 and 90.

1. (Allowed) A method for treating waste water comprising:

providing a flow-through oxygenator comprising an emitter for electrolytic generation of micro bubbles of oxygen comprising an anode separated at a critical distance from a cathode and a power source all in electrical communication with each other,

placing the emitter within a conduit; and

passing waste water through the conduit.

Claims 2-54 (Previously Cancelled).

55. (Currently Amended) A method for producing an oxygenated aqueous composition comprising:

flowing water at a flow rate no greater than [up to a maximum flow rate of] 12 gallons per minute through an electrolysis emitter comprising an electrical power source electrically connected to an anode electrode and a cathode electrode contained in a tubular housing,

causing electricity to flow from the power source to the electrodes, and,

producing the composition comprising a suspension comprising oxygen microbubbles and nanobubbles in the water, the microbubbles and nanobubbles having a bubble diameter of less than 50 microns, wherein:

the anode electrode is separated at a critical distance from the cathode such that the critical distance is from 0.005 inches to 0.140 inches;

the power source [is] produces a voltage no greater than [up to a maximum of] about 28.3 volts and an amperage no greater than [up to a maximum amperage of] about 13 amps,

the tubular housing has an inlet and an outlet and a tubular flow axis from the inlet to the outlet;

the water flows in the inlet, out the outlet, is in fluid connection with the electrodes, and the water flowing into the inlet has a conductivity produced by the presence of dissolved solids such that the water supports plant or animal life.

56. (Previously Presented) A method according to claim 55 wherein the housing contains at least one anode and at least one cathode, the electrodes are of a grid or solid design and are relatively positioned in cross section along the radius of the tubular housing with their long axes substantially parallel to the tubular water flow axis of the housing.

57. (Previously Presented) A method according to claim 55 wherein the housing has a side arm positioned at an angle relative to the tubular flow axis and the electrodes are located in the side arm.

58. (Previously Presented) A method according to claim 57 wherein the side arm contains a multiple number of anode and cathode electrodes and the electrodes are plate shaped.

59. (Previously Presented) A method according to claim 56 wherein a multiple number of anode and cathodes are present and are of grid or solid design.

Claims 60 - 65 (Previously Cancelled).

66. (Previously Presented) A method according to claim 55 wherein the water has a temperature no greater than about ambient temperature at the inlet and the water temperature is a factor for formation of the suspension.

Claims 67, 68, 69 (Previously Cancelled).

70. (Previously Presented) A method according to claim 55 wherein the microbubbles and nanobubbles remain in the water at least in part for a period up to several hours.

Claims 71, 72, 73 (Previously Cancelled).

74. (Previously Presented) A method according to claim 70 wherein the period for which the microbubbles and nanobubbles at least in part remain in the water is determined by containing the water with microbubbles and nanobubbles in a two and one half gallon aquarium reservoir container.

Claims 75, 76, 77, 78, 79 (Previously Cancelled).

80. (Previously Presented) A method according to claim 55 wherein the microbubbles and nanobubbles supersaturate the water.

81. (Previously Presented) A method according to claim 55 wherein the bubble diameter of the microbubbles and nanobubbles is less than 0.0006 inches.

Claims 82, 83, 84 (Previously Cancelled)

85. (Previously Presented) A method according to claim 55 wherein the separation of electrodes is maintained by a nonconductive spacer.

Claim 86 (Previously Cancelled).

87. (Previously Presented) A method according to claim 55 wherein the electrode separation distance is about 0.045 to about 0.06 inches.

88. (Previously Presented) A method according to claim 55 wherein the microbubbles and nanobubbles are substantially incapable of breaking the surface tension of the water.

89. (New) A method according to claim 55 wherein each anode and cathode electrode of the emitter is positioned so that substantially all points midway between opposing anode and cathode electrodes are closer to a surface of the tubular housing than to a center point within the tubular housing.

90. (New) A method according to claim 89 wherein each anode and cathode electrode of the emitter are positioned so that the electrodes do not obstruct a water flow passage along the center of the tubular housing.