an emitter provided at one or each of both of a first excitation site and a second excitation site in the water or in both the water and the water system and electrically coupled in series with the at least two output terminals of the device,

wherein the device is electrically coupled in series with the first excitation site and the second excitation site of the water or of both the water and the water system directly or through the emitter, such that the DC superimposed time-varying AC pulsating ionic wave current is applied to the water or to both the water and the water system, and

the DC bias output and the AC driving signal are superimposed such that the superimposed time-varying frequency electromagnetic wave is able to induce a flow of ionic current having a DC component travelling in a pulsating and time-varying manner in the water or in both the water and the water system and effect induced vibration of electrons and molecules of the water or of both the water and the water system.

17. The system as claimed in claim 16, wherein the DC biasing unit is selected from the group consisting of switch mode DC power supply, an AC to DC converter, a rechargeable DC battery and an inductive diode filter.

18. The system as claimed in any one of claims 16 to 17, wherein the water system comprises a housing which is metallic or non-metallic.

19. The system as claimed in claim 18, wherein the housing is made of an electrically non-conductive material, and if the first and/or second excitation sites are positioned on the electrically non-conductive substrate, the emitter is provided at the respective excitation site to be electrically coupled with the device.

20. The system as claimed in any one of claims 16 to 19, wherein both the first and second excitation sites are positioned on the water system or in the water in a spaced relation, or one of the first and second excitation sites is positioned on the water system, and the other is positioned in the water.