CLAIMS

1. An apparatus (100), for scrubbing smoke comprising:

a first tank (110), having:

a compartment (111), filled with a liquid;

an inlet (112), configured to draw in the smoke into the compartment (111) from a combustion source; and

at least one propeller within the compartment (111) that is partially immersed in the liquid;

characterized in that, the partially-immersed propeller interacts with the liquid and the smoke above the liquid that are in the compartment (111), for bringing the smoke to be in contact with the liquid so that a first scrubbing effect is provided upon the smoke.

2. The apparatus (100) according to claim 1, wherein the smoke is pre-treated with a scrubbing liquid in a wet scrubber tank, arranged between the combustion source and the first tank (110).

3. The apparatus (100) according to claim 1, wherein the propeller is configured to rotate at a pre-determined speed for mixing the smoke and water in the compartment.

4. The apparatus (100) according to claim 1, wherein the compartment (111) is partially filled with the liquid up to a pre-determined level.

5. The apparatus (100) according to claim 1, wherein the liquid from the compartment (111) is directed to the inlet (112) to spray the liquid on the smoke entering through the inlet (112).

6. The apparatus (100) according to claim 5, wherein the first tank (110) further includes at least one filter arranged in between the compartment (111) and the inlet (112) to filter out the pollutants from the liquid circulating between the compartment (111) and the inlet (112).

7. The apparatus (100) according to claim 6, wherein the filter is an alkaline filter system.

8. The apparatus (100), according to claim 1, wherein the first tank (110) further includes a drainage outlet to drain out the liquid from it at a pre-set time period.

9. The apparatus (100), according to claim 1, wherein the first tank (110) further includes an auto refill inlet to refill the liquid automatically at a pre-set time period.

10. The apparatus (100), according to claim 1, wherein the smoke is directed to flow through a patterned flow path arranged in the compartment (111) prior to mixing the smoke with the liquid.