CLAIMS

1. Apparatus for washing and drying hands including:

a generally horizontal chamber defined by a wall, the chamber having a central axis, an open end with an inwardly curved peripheral lip, and a closed end;

a top micro-spray nozzle arranged in the wall above the central axis;

two side micro-spray nozzles arranged in the wall on opposed sides of the central axis;

an air inlet arranged in the wall above the central axis;

an air blower that includes a heater, the air blower being arranged to deliver drying air to the air inlet;

an air outlet arranged in the wall below the central axis; and

a plurality of side air ducts that each exteriorly surround at least a portion of the wall to connect the air outlet to the air blower, such that the air blower draws air from the chamber through the air outlet and then through the side air ducts;

wherein in use liquid is sprayed from the top and side micro-spray nozzles to collectively establish a liquid curtain of micro-sprays across the central axis of the chamber, and air circulates within the chamber and recirculates around the chamber from the air outlet to the air inlet.

2. Apparatus according to claim 1, wherein the plurality of side air ducts includes two side air ducts.

~~2~~3. Apparatus according to either claim 1 or 2, wherein the air inlet is partially fluidly connected to a diverter having two opposite facing air vents arranged in the chamber above the central axis, so that in use air is partially directed by the air vents toward the wall in opposite transverse directions relative to the central axis to thereby circulate air rotationally within the chamber about axes parallel to the central axis.

~~3~~4. Apparatus according to ~~either~~ any one of claims 1 ~~or 2~~ to 3, wherein the chamber has a circular, oval or elliptical vertical cross section.

4~~5~~. Apparatus according to any one of claims 1 to ~~3~~4, wherein the top and side micro-spray nozzles each have a flat fan-shaped spray pattern.

~~5~~6. Apparatus according to claim 4~~5~~, wherein the top and side micro-spray nozzles collectively establish a flat fan-shaped spray pattern within a sector having a sector angle of between 45 degrees and 180 degrees.

~~6~~7. Apparatus according to claim ~~5~~6, wherein the top and side micro-spray nozzles are directed generally radially orthogonal to the central axis.

~~7~~8. Apparatus according to claim ~~6~~7, wherein the top and side micro-spray nozzles are directed radially inwards at an angle of 88 degrees to the central axis towards the closed end.

~~8~~9. Apparatus according to any preceding claim, wherein the inwardly curved peripheral lip of the open end is disposed about the central axis within a sector having a sector angle of between 45 degrees and 180 degrees.

~~9~~10. Apparatus according to any preceding claim, wherein the inwardly curved peripheral lip can be formed as a continuation of the wall of the chamber that terminates in a rounded end.

~~10~~11. Apparatus according to any preceding claim, wherein in use, the inwardly curved peripheral lip is configured to restrict air flowing axially out the open end of the chamber.

~~11~~12. Apparatus according to any preceding claim, wherein the apparatus includes a chamber for storing a liquid to be added to the washing liquid.

~~12~~13. Apparatus according to claim ~~11~~12, wherein the liquid to be added to the washing liquid is a liquid soap.