CLAIMS:

1. An apparatus for generating a mist and/or foam, the apparatus comprising:

at least one first fluid supply passage having an inlet in fluid communication with a first fluid supply and a first fluid outlet;

at least one second fluid supply passage having an inlet in fluid communication with a second fluid supply and a second fluid outlet; and

a nozzle in fluid communication with the first and second fluid outlets, the nozzle having a nozzle inlet, a nozzle outlet, and a nozzle throat intermediate the nozzle inlet and nozzle outlet, the nozzle throat having a cross sectional area which is less than that of both the nozzle inlet and nozzle outlet;

and wherein the second fluid outlet includes a porous member through which the second fluid must flow.

2. The apparatus of claim 1, wherein the nozzle is downstream of the first and second fluid outlets, wherein the first and second fluid outlets are in fluid communication with the nozzle inlet.

3. The apparatus of claim 2, further comprising a mixing chamber intermediate the first and second fluid outlets and the nozzle inlet, and wherein the porous member is hollow and surrounds the second fluid outlet so as to define an inner chamber at least partially located within the mixing chamber.

4. The apparatus of any preceding claim, further comprising a plurality of first fluid supply passages having respective first fluid outlets, the first fluid outlets being circumferentially spaced about the second fluid outlet.

5. The apparatus of claim 1, wherein the first fluid outlet is in fluid communication with the nozzle inlet, whilst the second fluid outlet opens into the nozzle throat.

6. The apparatus of any preceding claim, further comprising at least one nozzle extension having an extension passage with a first end connectable to the nozzle outlet and a second end remote from the nozzle outlet, wherein the first end of the extension passage has a cross sectional area substantially the same as that of the nozzle outlet, and wherein the cross sectional area of the extension passage increases between the first and second ends thereof.

7. The apparatus of claim 6, wherein the increase in the cross sectional area of the extension passage is linear.

8. A method of generating a mist and/or foam, the method comprising the steps of:

supplying pressurised first and second fluids into respective first and second fluid passages of a mist/foam generating apparatus, the second fluid passage including a second fluid outlet having a porous member therein;

directing the first fluid from the first fluid passage into a nozzle having a nozzle inlet, a nozzle outlet, and a nozzle throat whose cross sectional area is less than that of both the nozzle inlet and nozzle outlet;

directing the second fluid from the second fluid passage through the porous member and into the nozzle to mix with the first fluid;

accelerating the first and second fluids through the nozzle throat;

and spraying the first and second fluids from the nozzle outlet.

9. The method of claim 8, wherein the nozzle is downstream of the outlets of both the first and second fluid passages, and wherein the directing steps direct the first and second fluids into the nozzle inlet.

10. The method of either claim 8 or claim 9, wherein the second fluid passage opens into the nozzle throat, wherein the first fluid may be directed from the first fluid passage into the nozzle inlet whilst the second fluid is directed into the nozzle throat.

11. The method of any of claims 8 to 10, wherein the first and second fluids are accelerated to at least sonic velocity through the nozzle throat.

12. The method of any of claims 8 to 11, wherein the first fluid is a gas selected from the group comprising compressed air, carbon dioxide and nitrogen.

13. The method of any of claims 8 to 12, wherein the second fluid is a liquid selected from the group comprising water, a liquid decontaminant and a liquid fire suppressant.

14. The method of any of claims 8 to 11, wherein the first fluid is a liquid foam solution, and the second fluid is compressed air or carbon dioxide.

15. The method of claim 14, wherein the foam solution is an aqueous film-forming foam solution.

16. The method of claim 14 or claim 15, further comprising the step of passing the first and second fluids from the nozzle outlet through a nozzle extension passage connected to the nozzle outlet, the nozzle extension passage having a cross sectional area which increases from a first end

connected to the nozzle outlet to a second end remote from the nozzle outlet.

17. The method of claim 14 or claim 15, further comprising the step of passing the first and second fluids from the nozzle outlet through a nozzle extension passage connected to the nozzle outlet, the nozzle extension passage having an extension throat whose cross sectional area is less than that of both first and second ends of the extension passage.

CLAIMS:

1. A method of generating a mist and/or foam, the method comprising the steps of:

supplying pressurised first and second fluids into respective first and second fluid passages of a mist/foam generating apparatus, the second fluid passage including a second fluid outlet having a porous member therein;

directing the first fluid from the first fluid passage into a nozzle having a nozzle inlet, a nozzle outlet, and a nozzle throat whose cross sectional area is less than that of both the nozzle inlet and nozzle outlet;

directing the second fluid from the second fluid passage through the porous member and into the nozzle to mix with the first fluid;

accelerating the first and second fluids through the nozzle throat;

and spraying the first and second fluids from the nozzle outlet;

wherein the first fluid is a liquid foam solution, and the second fluid is compressed air or carbon dioxide; and

wherein the foam solution is an aqueous film-forming foam solution.