Claims

1. A filter (10, 110) comprising: a tube (12, 112) extending from a first end to a second end, the first end being tapered, that is the centre of the first end extends longitudinally further than an outer portion of the first end, the tube defining a bore with an internal cross-sectional area, the tube having: an inlet (18, 118) to the tube (12, 112), the inlet being positioned through the first end of the tube (12, 112), and the inlet having an inlet cross-sectional area; an outlet (16, 116) from the tube (12, 112) at the second end, the outlet having an outlet cross-sectional area; a plurality of slots (20, 120) in the tube (12,112) between an outside thereof and the bore, the slots extending generally parallel to the longitudinal direction from the first to the second end; the tube (12, 112) comprising a mounting means suitable for mounting it to a pipeline, the mounting means comprising a threaded outer body; the tube (12, 112) comprising a further mounting means suitable for attaching a nozzle thereto; wherein the inlet cross-sectional area is less than the outlet cross-sectional area, the inlet cross-sectional area is less than the internal cross-sectional area of the bore defined by the tube; wherein the internal cross-sectional area of the bore defined by the tube (12, 112) is the same along at least 75% of its length; and wherein, in use, the fluid flows from a pipeline into the filter through the inlet (18, 118) and the plurality of slots (20, 120), through the bore of tube (12, 112), and out of the filter through the outlet (16, 116) into a nozzle.

2. A filter (10, 110) as claimed in claim 1, wherein the internal cross-sectional area of the bore defined by the tube (12, 112) is the same along 95% of its length.

3. A filter (10, 110) as claimed in any preceding claim, wherein the threaded outer body (22, 122) is provided around the tube (12, 112), with a wider outer diameter compared to the tube (12, 112).

4. A filter (10 110) as claimed in any preceding claim, wherein the further mounting means suitable for mounting a nozzle thereto comprises a threaded bore.

5. A filter (10, 110) as claimed in any preceding claim, wherein the filter (10, 110) is provided as a single-piece filter.

6. A filter (10, 110) as claimed in any preceding claim, wherein the slots (20, 120) extend for up to 75% or up to 50% of the length of the tube (12, 112).

7. A filter (10, 110) as claimed in any preceding claim, wherein there is at least 4 slots (20, 120), optionally up to 20 or up to 24.

8. A filter (10, 110) as claimed in any preceding claim, wherein the first end is dome-shaped.

9. A nozzle apparatus, comprising a filter (10, 110) as claimed in any preceding claim, and a nozzle with a nozzle outlet, the nozzle outlet having a nozzle outlet cross-sectional area.

10. A nozzle apparatus as claimed in claim 9, wherein the inlet cross sectional area is less than the nozzle outlet cross-sectional area.

11. A nozzle apparatus, comprising: a filter (10, 110) comprising a tube (12, 112) extending from a first end to a second end, the first end being tapered, that is the centre of the first end extends longitudinally further than an outer portion of the first end, the tube (12, 112) defining a bore with an internal cross-sectional area; the tube having: an inlet to the tube (12, 112), the inlet being positioned through the first end of the tube (12, 112) and the inlet having a first inlet cross-sectional area; an outlet (16, 116) from the tube (12, 112) at the second end, the outlet having an outlet cross-sectional area; a plurality of slots (20, 120) in the tube (12, 112) between an outside thereof and the bore, the slots extending generally parallel to the longitudinal direction from the first to the second end; the tube (12, 112) comprising a mounting means suitable for mounting it to a pipeline, the mounting means comprising a threaded outer body; the tube (12, 112) comprising a further mounting means suitable for attaching a nozzle thereto; a nozzle with a nozzle outlet, the nozzle outlet having a nozzle outlet cross-sectional area; wherein the inlet cross-sectional area of the filter (10, 110) is smaller than the outlet cross-sectional area of the nozzle; the inlet cross-sectional area is less than the internal cross-sectional area of the bore defined by the tube; the internal cross-sectional area of the bore defined by the tube is the same along at least 75% of its length; and wherein, in use, the fluid flows from a pipeline into the filter through the inlet (18, 118) and

the plurality of slots (20, 120), through the bore of tube (12, 112), and out of the filter through the outlet (16, 116) into the nozzle.

12. Use of a filter (10, 110) as claimed in any one of claims 1 to 8, or a nozzle apparatus as claimed in any one of claims 9 to 11, with a sprinkler system for firefighting/fire containment.