CLAIMS

1. Fire extinguisher apparatus comprising at least one vessel containing a fire extinguishing medium and adapted to release said fire extinguishing medium when a fire or potential fire is identified characterised in that said fire extinguishing medium comprises an aqueous suspension of expanded vermiculite.

2. Apparatus according to claim 1 wherein said fire extinguishing medium comprises a stable aqueous suspension of fine expanded vermiculite.

3. Apparatus according to any preceding claim wherein said vermiculite suspension comprises expanded vermiculite in a particle size range of from 1 nanometre to 2000 micrometres.

4. Apparatus according to any preceding claim wherein said vermiculite suspension comprises expanded vermiculite with a maximum particle size of 300 micrometres or less.

5. Apparatus according to any preceding claim wherein said vermiculite suspension comprises vermiculite at between about 3% and about 40% by weight.

6. Apparatus according to any preceding claim wherein said vermiculite suspension comprises vermiculite at between about 10% and about 30% by weight.

7. Apparatus according to any preceding claim wherein said vermiculite suspension comprises vermiculite at between about 15% and about 25% by weight.

8. Apparatus according to any preceding claim wherein said vermiculite suspension comprises vermiculite at about 20% by weight.

9. Apparatus according to any preceding claim wherein said fire extinguishing medium remains stable in storage with the vermiculite remaining in suspension for a period of at least 6 months.

10. Apparatus according to any preceding claim wherein said fire extinguishing medium remains stable in storage with the vermiculite remaining in suspension for a period of at least 12 months.

11. Apparatus according to any preceding claim wherein said fire extinguishing medium remains stable in storage with the vermiculite remaining in suspension for a period of at least 24 months.

12. Apparatus according to any preceding claim which is adapted to be manually operated in the even of a fire being detected.

13. Apparatus according to any preceding claim which is adapted to automatically release the fire extinguishing medium responsive to a signal indicating that a fire or potential fire has been detected.

14. Apparatus according to any preceding claim comprising means to release said fire extinguisher medium as an intermittent or continuous spray and to direct said spray to a selected area.

15. A method of extinguishing or containing a fire responsive to identification of a fire or potential fire by applying to the fire and/or adjacent areas and/or areas of high risk in the event of the spread of fire a fire extinguishing medium comprising an aqueous suspension of expanded vermiculite.

16. A method of extinguishing or containing a fire responsive to identification of a fire by applying to the fire and/or adjacent areas and/or areas of high risk in the event of the spread of the fire a fire extinguishing and containing medium comprising an aqueous suspension of expanded vermiculite from one or more apparatus in accordance with any one of claims 1 to 14.

17. A method of manufacturing fire equipment apparatus according to any one of claims 1 to 14 by fully or partially filling a vessel adapted to release a fire extinguishing medium with a fire extinguishing medium comprising an aqueous vermiculite suspension.

18. Use of an aqueous suspension of expanded vermiculite as a fire extinguishing medium.

CLAIMS

1. Fire extinguisher apparatus comprising at least one vessel containing a fire extinguishing medium and adapted to release said fire extinguishing medium when a fire or potential fire is identified characterised in that said fire extinguishing medium comprises a stable aqueous suspension of expanded vermiculite.

2. Apparatus according to Claim 1, in which the fire extinguishing medium comprises expanded vermiculite in a particle size range of from 1 nanometre to 2000 micrometres.

3. Apparatus according to Claim 1 or 2, in which the vermiculite suspension comprises expanded vermiculite with a maximum particle size of 1000 micrometres or less.

4. Apparatus according to Claim 1, 2 or 3, in which the vermiculite suspension comprises expanded vermiculite with a maximum particle size of 300 micrometres or less.

5. Apparatus according to any preceding claim, in which the vermiculite suspension comprises vermiculite at between about 3% and about 40% by weight.

6. Apparatus according to any preceding claim, in which the vermiculite suspension comprises vermiculite at between about 10% and about 30% by weight.

7. Apparatus according to any preceding claim, in which the vermiculite suspension comprises vermiculite at between about 15% and about 25% by weight.

8. Apparatus according to any preceding claim, in which the vermiculite suspension comprises vermiculite at about 20% by weight.

9. Apparatus according to any preceding claim, in which the fire extinguishing medium remains stable in storage with the vermiculite remaining in suspension for a period of at least 6 months.

10. Apparatus according to any preceding claim, in which the fire extinguishing medium remains stable in storage with the vermiculite remaining in suspension for a period of at least 12 months.

11. Apparatus according to any preceding claim, in which the fire extinguishing medium remains stable in storage with the vermiculite remaining in suspension for a period of at least 24 months.

12. Apparatus according to any preceding claim, which is adapted to be manually operated in the even of a fire being detected.

13. Apparatus according to any preceding claim, which is adapted to automatically release the fire extinguishing medium responsive to a signal indicating that a fire or potential fire has been detected.

14. Apparatus according to any preceding claim, comprising means to release the fire extinguisher medium as an intermittent or continuous spray and to direct the spray to a selected area.

15. A method of extinguishing or containing a fire responsive to identification of a fire or potential fire by applying to the fire and/or adjacent areas and/or areas of high risk in the event of the spread of fire a fire extinguishing medium comprising a stable aqueous suspension of expanded vermiculite.

16. A method of extinguishing or containing a fire responsive to identification of a fire by applying to the fire and/or adjacent areas and/or areas of high risk in the event of the spread of the fire a fire extinguishing and containing medium comprising a stable aqueous suspension of expanded vermiculite from one or more apparatus in accordance with any of Claims 1 to 14.

17. A method of manufacturing fire equipment apparatus according to any of Claims 1 to 14 by fully or partially filling a vessel adapted to release a fire extinguishing medium with a fire extinguishing medium comprising a stable aqueous vermiculite suspension.

18. Use of a stable aqueous suspension of expanded vermiculite as a fire extinguishing medium.