THAT WHICH IS CLAIMED IS:

1. A flame retardant additive composition which comprises

at least one glow suppressant, wherein the glow suppressant is a compound comprising at least one 5-membered or 6-membered ring moiety containing at least one nitrogen atom, wherein the 5-membered or 6-membered ring moiety containing at least one nitrogen atom is selected from triazole, piperidine, piperazine, triazine, and morpholine; and

at least one brominated flame retardant, wherein the brominated flame retardant contains aromatically-bound bromine and is

a brominated anionic chain transfer vinyl aromatic polymer which contains 70 wt% or more bromine;

wherein the flame retardant additive composition contains 0.5 wt% or more glow suppressant, based on the total weight of the flame retardant additive composition.

2. A flame retardant additive composition as in Claim 1 wherein the 5-membered or 6-membered ring moiety containing at least one nitrogen atom of the glow suppressant is an unsaturated ring moiety.

3. A flame retardant additive composition as in any of Claims 1-2 which contains 1 wt% or more glow suppressant, based on the total weight of the flame retardant additive composition.

4. A flame retardant additive composition as in Claim 1 which comprises at least one inorganic compound, optionally wherein

i) the total amount of inorganic compounds is 10 wt% or more, based on the total weight of the flame retardant additive composition; or

ii) the inorganic compound comprises talc, antimony trioxide, zinc borate, aluminum phosphinate, aluminum diethyl phosphinate, calcium phosphinate, and/or hydrotalcite; or

iii) the inorganic compound comprises talc and antimony trioxide, and optionally at least one inorganic compound selected from zinc borate, aluminum phosphinate, aluminum diethyl phosphinate, calcium phosphinate, and/or hydrotalcite.

5. A flame retardant additive composition as in any of Claims 1-2 or 3-4 wherein the glow suppressant comprises melamine polyphosphate, optionally wherein the composition comprises at

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least one inorganic compound, and wherein the inorganic compound is zinc borate and aluminum diethyl phosphinate.

6. A process for forming a flame retardant additive composition, which process comprises combining

at least one glow suppressant, wherein the glow suppressant is a compound comprising at least one 5-membered or 6-membered ring moiety containing at least one nitrogen atom, wherein the 5-membered or 6-membered ring moiety containing at least one nitrogen atom is selected from triazole, piperidine, piperazine, triazine, and morpholine; and

at least one brominated flame retardant that contains aromatically-bound bromine and is

a brominated anionic chain transfer vinyl aromatic polymer which contains 70 wt% or more bromine;

in amounts such that the flame retardant additive composition contains 0.5 wt% or more glow suppressant, based on the total weight of the flame retardant additive composition.

7. A process as in Claim 6 wherein the 5-membered or 6-membered ring moiety containing at least one nitrogen atom of the glow suppressant is an unsaturated ring moiety.

8. A process as in any of Claims 6-7 wherein the glow suppressant is in an amount of 1 wt% or more, based on the total weight of the flame retardant additive composition.

9. A process as in Claim 6 which comprises combining at least one inorganic compound, optionally wherein the inorganic compound is in an amount such that the flame retardant additive composition contains 10 wt% or more inorganic compound, based on the total weight of the flame retardant additive composition.

10. A process as in Claim 9 wherein the inorganic compound comprises talc, antimony trioxide, zinc borate, aluminum phosphinate, aluminum diethyl phosphinate, calcium phosphinate, and/or hydrotalcite, or wherein the inorganic compound comprises talc and antimony trioxide, and optionally at least one inorganic compound selected from zinc borate, aluminum phosphinate, aluminum diethyl phosphinate, calcium phosphinate, and/or hydrotalcite.

11. A process as in any of Claims 6-7, 8-9 or 10 wherein the glow suppressant comprises melamine polyphosphate, optionally wherein the process comprises combining at least one

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inorganic compound, and wherein the inorganic compounds are zinc borate and aluminum diethyl phosphinate.

12. A flame retarded polyolefin composition formed from

i) at least one glow suppressant, wherein the glow suppressant is a compound comprising at least one 5-membered or 6-membered ring moiety containing at least one nitrogen atom, wherein the 5-membered or 6-membered ring moiety containing at least one nitrogen atom is selected from triazole, piperidine, piperazine, triazine, and morpholine, with the proviso that when the glow suppressant is a triazine, it is a 1,3,5-triazine substituted at the 2, 4, and 6 positions with amino groups;

ii) at least one inorganic compound, wherein the inorganic compound comprises talc, antimony trioxide, zinc borate, aluminum phosphinate, aluminum diethyl phosphinate, calcium phosphinate, and/or hydrotalcite; and

iii) at least one brominated flame retardant in a flame retardant amount, wherein the brominated flame retardant contains aromatically-bound bromine and is selected from

    a) a brominated anionic styrenic polymer having a number average molecular weight of 750 to 4000 and a bromine content of 60 wt% to 77 wt%,

    b) a brominated anionic chain transfer vinyl aromatic polymer which contains ~~about~~ 70 wt% or more bromine,

    or a mixture of any two or more of these, and

iv) at least one polyolefin,

wherein the flame retarded polyolefin composition contains 0.25 wt% or more glow suppressant, based on the total weight of the flame retarded polyolefin composition, and wherein the flame retarded polyolefin composition contains 5 wt% or more inorganic compound, based on the total weight of the flame retarded polyolefin composition.

13. A flame retarded polyolefin composition as in Claim 12 wherein the 5-membered or 6-membered ring moiety containing at least one nitrogen atom of the glow suppressant is an unsaturated ring moiety.

14. A flame retarded polyolefin composition as in any of Claims 12-13 which contains 0.5 wt% or more glow suppressant, based on the total weight of the flame retarded polyolefin composition.

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15. A flame retarded polyolefin composition as in Claim 12 wherein the inorganic compound is in an amount of 8 wt% or more, based on the total weight of the flame retarded polyolefin composition.

16. A flame retarded polyolefin composition as in any of Claims 12-13 or 14-15 wherein the inorganic compound comprises talc and antimony trioxide, and optionally at least one inorganic compound selected from zinc borate, aluminum phosphinate, aluminum diethyl phosphinate, calcium phosphinate, and/or hydrotalcite.

17. A flame retarded polyolefin composition as in any of Claims 12-13 or 14-16 wherein the glow suppressant comprises melamine polyphosphate, optionally wherein the composition comprises at least one inorganic compound, and wherein the inorganic compound is zinc borate and aluminum diethyl phosphinate.

18. A flame retarded polyolefin composition as in any of Claims 12-13, 14-16, or 17 wherein the brominated anionic styrenic polymer is

i) a brominated anionic polystyrene having a number average molecular weight of 1000 to 4000 and a bromine content of 70 wt% to 77 wt%, or
ii) a brominated anionic polystyrene having a number average molecular weight of 2000 to 3500 and a bromine content of 72 wt% to 76 wt%.

19. A process for forming a flame retarded polyolefin composition, which process comprises combining

i) at least one glow suppressant, wherein the glow suppressant is a compound comprising at least one 5-membered or 6-membered ring moiety containing at least one nitrogen atom, wherein the 5-membered or 6-membered ring moiety containing at least one nitrogen atom is selected from triazole, piperidine, piperazine, triazine, and morpholine, with the proviso that when the glow suppressant is a triazine, it is a 1,3,5-triazine substituted at the 2, 4, and 6 positions with amino groups;
ii) at least one inorganic compound, wherein the inorganic compound comprises talc, antimony trioxide, zinc borate, aluminum phosphinate, aluminum diethyl phosphinate, calcium phosphinate, and/or hydrotalcite;

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iii) at least one brominated flame retardant in a flame retardant amount, wherein the brominated flame retardant contains aromatically-bound bromine and is selected from

a) a brominated anionic styrenic polymer having a number average molecular weight of 750 to 4000 and a bromine content of 60 wt% to 77 wt%,

b) a brominated anionic chain transfer vinyl aromatic polymer which contains 70 wt% or more bromine,

or a mixture of any two or more of these, and

iv) at least one polyolefin,

in amounts such that the flame retarded polyolefin composition contains 0.25 wt% or more glow suppressant, based on the total weight of the flame retarded polyolefin composition, and wherein the flame retarded polyolefin composition contains 5 wt% or more inorganic compound, based on the total weight of the flame retarded polyolefin composition.

20. A process as in Claim 19 wherein the 5-membered or 6-membered ring moiety containing at least one nitrogen atom of the glow suppressant is an unsaturated ring moiety.

21. A process as in any of Claims 19-20 in which there is 0.5 wt% or more glow suppressant, based on the total weight of the flame retarded polyolefin composition.

22. A process as in Claim 19 wherein the inorganic compound is in an amount such that the flame retarded polyolefin composition contains 8 wt% or more inorganic compound, based on the total weight of the flame retarded polyolefin composition.

23. A process as in any of Claims 19-20 or 21-22 wherein the inorganic compound comprises talc and antimony trioxide, and optionally at least one inorganic compound selected from zinc borate, aluminum phosphinate, aluminum diethyl phosphinate, calcium phosphinate, and/or hydrotalcite.

24. A process as in any of Claims 19-20 or 21-23 wherein the glow suppressant comprises melamine polyphosphate, optionally wherein the inorganic compounds are zinc borate and aluminum diethyl phosphinate.

25. A process as in any of Claims 19-20, 21-23, or 24 wherein the brominated anionic styrenic polymer is

i) a brominated anionic polystyrene having a number average molecular weight of 1000 to 4000 and a bromine content of 70 wt% to 77 wt%, or
ii) a brominated anionic polystyrene having a number average molecular weight of 2000 to 3500 and a bromine content of 72 wt% to 76 wt%.

26. A flame retarded polyolefin composition formed from at least one polyolefin and a flame retardant amount of a brominated flame retardant that contains aromatically-bound bromine and is a brominated anionic styrenic polymer having a number average molecular weight of 750 to 7500 and a bromine content of 70 wt% to 77 wt%.

27. A flame retarded polyolefin composition as in Claim 26 wherein the flame retardant amount is ~~about~~ 5 wt% or more, based on the total weight of the flame retarded polyolefin composition.

28. A flame retarded polyolefin composition as in Claim 26 or 27 which comprises at least one inorganic compound, optionally wherein
i) wherein the inorganic compounds comprise talc, antimony trioxide, zinc borate, aluminum phosphinate, aluminum diethyl phosphinate, calcium phosphinate, and/or hydrotalcite.
ii) wherein the inorganic compounds are talc and antimony trioxide, and at least one inorganic compound selected from zinc borate, aluminum phosphinate, aluminum diethyl phosphinate, calcium phosphinate, and/or hydrotalcite.

29. A flame retarded polyolefin composition as in any of Claims 26-28 wherein the brominated anionic styrenic polymer is
i) a brominated anionic polystyrene having a number average molecular weight of 1000 to 4000, or
ii) a brominated anionic polystyrene having a number average molecular weight of 2000 to 3500 and a bromine content of 72 wt% to 76 wt%.

30. A masterbatch which comprises
a polyolefin; and
a brominated flame retardant that contains aromatically-bound bromine and is selected from
a) a brominated anionic styrenic polymer having a number average molecular weight of 750 to 7500 and a bromine content of 70 wt% to 77 wt%,

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b) a brominated anionic chain transfer vinyl aromatic polymer which contains 70 wt% or more bromine,

or a mixture of any two or more of these.

31. A masterbatch as in Claim 30 which comprises

at least one glow suppressant, wherein the glow suppressant is a compound comprising at least one 5-membered or 6-membered ring moiety containing at least one nitrogen atom, wherein the 5-membered or 6-membered ring moiety containing at least one nitrogen atom of the glow suppressant is selected from triazole, piperidine, piperazine, triazine, and morpholine with the proviso that when the glow suppressant is a triazine, the triazine is a 1,3,5-triazine substituted at the 2, 4, and 6 positions of the ring and the substituents are amino groups when the brominated flame retardant is a brominated anionic styrenic polymer.

32. A masterbatch as in Claim 31 wherein the 5-membered or 6-membered ring moiety containing at least one nitrogen atom of the glow suppressant is an unsaturated ring moiety.

33. A masterbatch as in Claim 30 which comprises at least one inorganic compound, optionally wherein the inorganic compound comprises antimony trioxide.

34. A masterbatch as in any of Claims 30-31, 32, or 33 wherein when a glow suppressant is present, the glow suppressant comprises melamine polyphosphate, optionally wherein the masterbatch comprises at least one inorganic compound, and wherein the inorganic compound is antimony trioxde.

35. A masterbatch as in any of Claims 30-31, 32, 33, or 34 wherein the brominated anionic styrenic polymer is

i) a brominated anionic polystyrene having a number average molecular weight of 1000 to 4000, or

ii) a brominated anionic polystyrene having a number average molecular weight of 2000 to 3500 and a bromine content of 72 wt% to 76 wt%.

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