CLAIMS

What is claimed is:

1. An ~~viscosity-stabilized~~ ophthalmic formulation comprising a galactomannan, borate, ~~and~~ a diol alcohol, wherein the formulation further comprises a pharmaceutically acceptable divalent cation salt at a concentration greater than 0.05 w/v%.

2. A formulation according to claim 1 wherein said galactomannan is present at a concentration of ~~about~~ 0.1 w/v% to ~~about~~ 2.0 w/v% and said borate is present at a concentration of ~~about~~ 0.2 w/v% to ~~about~~ 2.0 w/v%.

3. A formulation according to claim 1 wherein said galactomannan is present at a concentration of ~~about~~ 0.05 w/v% to ~~about~~ 0.5 w/v% and said borate is present at a concentration of ~~about~~ 0.1 w/v% to ~~about~~ 1.5 w/v%.

4. A formulation according to claim 1 wherein said galactomannan is selected from the group consisting of:
guar, hydroxylpropyl guar, and combinations thereof.

5. A formulation according to claim 1 wherein said diol alcohol is selected from the group consisting of sorbitol, mannitol, polyethylene glycols, polypropylene glycols, glycerol and combinations thereof.

6. A formulation according to claim 1 wherein said diol alcohol is sorbitol or mannitol.

7. A formulation according to claim 6 wherein said diol alcohol is present at a concentration of ~~about~~ 0.5 w/v% to ~~about~~ 5.0 w/v%.

8. A formulation according to claim 7 wherein said diol alcohol is present at a concentration of ~~about~~ 0.5 w/v% to ~~about~~ 2.0 w/v%.

9. A formulation according to claim 1 further comprising a pharmaceutically acceptable divalent cation salt is of magnesium, calcium, zinc, or combinations thereof.

10. A formulation according to claim 9 wherein said salt is magnesium chloride at a concentration of ~~about~~ 0.05 w/v% to ~~about~~ 0.25 w/v%.

11. ~~In an~~Use of a diol alcohol to stabilized the viscosity of an ophthalmic formulation comprising a galactomann and borate~~, the improvement comprising adding a diol alcohol to stabilize the viscosity of the formulation~~.

12. ~~A formulation~~ Use according to claim 11, said formulation further comprising a pharmaceutically acceptable salt of magnesium, calcium, zinc, or combinations thereof.

13. ~~A formulation~~ Use according to claim 12 wherein the salt is magnesium chloride at a concentration of ~~about~~ 0.05 w/v% to ~~about~~ 0.25 w/v%.

14. Use of a formulation of claim 1 in the manufacture of a medicament for lubricating the eye.

15. Use of a formulation of claim 1 for the manufacture of a medicament ~~A method~~ for delivering a pharmaceutically active agent to the eye~~, comprising: administering to the eye a formulation of claim 1~~ the formulation further comprising a pharmaceutically active agent.

16. A method for manufacturing a sterile ophthalmic formulation comprising:
preparing an ophthalmic formulation comprising galactomannan and borate;
adding a diol alcohol in a quantity sufficient to stabilize the viscosity of the formulation to form a stabilized ophthalmic formulation; and
sterilizing the stabilized ophthalmic formulation, wherein the formulation further comprises a pharmaceutically acceptable divalent cation salt at a concentration greater than 0.05 w/v%.

17. A method according to claim 16 wherein said galactomannan is present at a concentration of ~~about~~ 0.05 w/v% to ~~about~~ 0.5 w/v% and said borate is present at a concentration of ~~about~~ 0.7 w/v%.

18. A method according to claim 16 wherein said galactomannan is selected from the group consisting of:
guar, hydroxylpropyl guar, and combinations thereof.

19. A method according to claim 16 wherein said diol alcohol is selected from the group consisting of sorbitol, mannitol, glycerol, polyethylene glycols, polypropylene glycols, and combinations thereof.

20. A method according to claim 19 wherein said diol alcohol is sorbitol or mannitol.

21. A method according to claim 16, wherein said ~~formulation further comprising a~~ pharmaceutically acceptable divalent cation salt is of magnesium, calcium, zinc, or combinations thereof.

22. A method according to claim 21 wherein said salt is magnesium chloride at a concentration of ~~about~~ 0.05 w/v% to ~~about~~ 0.25 w/v%.