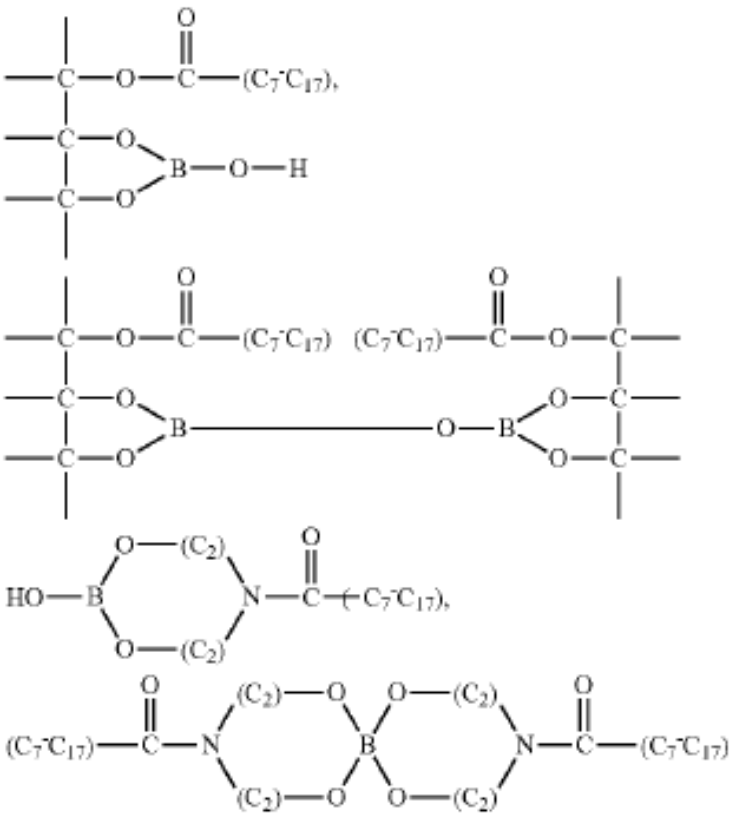
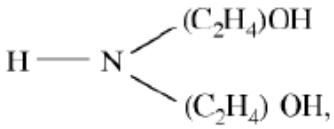
CLAIMS:

1. A method for improving corrosion protection and friction coefficient in an engine or other mechanical component lubricated with a lubricating oil by using as the lubricating oil a formulated oil, said formulated oil having a composition comprising a lubricating oil base stock comprising a monoester and other synthetic base oil; a viscosity modifier; and a mixture of (i) at least one molybdenum dithiophosphate having a molybdenum to sulfur ratio of about 0.93, and (ii) at least one borated ester, as a minor component; wherein corrosion protection and friction coefficient are improved as compared to corrosion protection and friction coefficient achieved using a lubricating oil containing a minor component other than the mixture of (i) at least one molybdenum dithiophosphate having a molybdenum to sulfur ratio of about 0.93, and (ii) at least one borated ester,

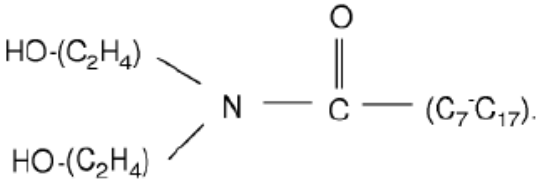
wherein the monoester comprises about 20 wt. % of the formulated oil, the combination of the other synthetic base oil and viscosity modifier comprise from about 66.47 to 69.037 wt. % of the formulated oil, the at least one molybdenum dithiophosphate having a molybdenum to sulfur ratio of about 0.93 comprises from 0.763 to 1.526 wt. % of the formulated oil, and the at least one borated ester represented by the following formula:



as well as unreacted glycerol, glycerol mono-, di- and tri-ester,
unreacted



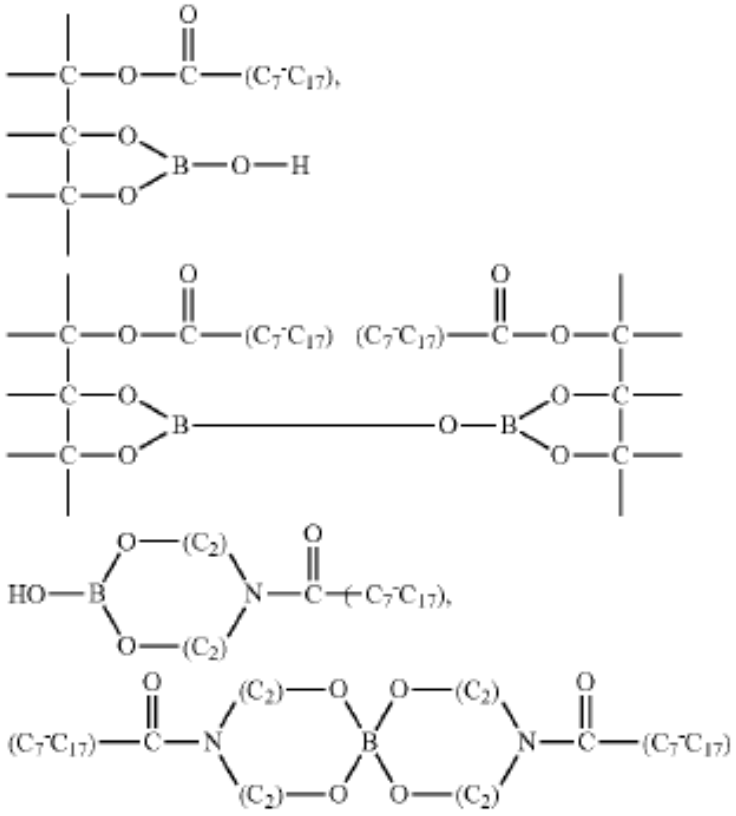
unreacted boronating agent and unboronated



and comprises from about 0.4 to 1.0 wt. % of the formulated oil, and wherein the formulated oil has a friction coefficient of 0.04 or lower at 140ºC, as measured by the Mini Traction Machine (MTM) under a contact pressure of 1.0 GHz, and a copper strip rating of 1A or 1B as measured by ASTM D130 at 150ºC.

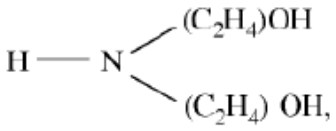
2. A lubricating oil having a composition comprising a lubricating oil base stock comprising a monoester and other synthetic base oil; a viscosity modifier; and a mixture of (i) at least one molybdenum dithiophosphate having a molybdenum to sulfur ratio of about 0.93, and (ii) at least one borated ester, as a minor component; wherein corrosion protection and friction coefficient are improved as compared to corrosion protection and friction coefficient achieved using a lubricating oil containing a minor component other than the mixture of (i) at least one molybdenum dithiophosphate having a molybdenum to sulfur ratio of about 0.93, and (ii) at least one borated ester,

wherein the monoester comprises about 20 wt. % of the formulated oil, the combination of the other synthetic base oil and viscosity modifier comprise from about 66.47 to 69.037 wt. % of the formulated oil, the at least one molybdenum dithiophosphate having a molybdenum to sulfur ratio of about 0.93 comprises from 0.763 to 1.526 wt. % of the formulated oil, and the at least one borated ester is represented by the following formula:

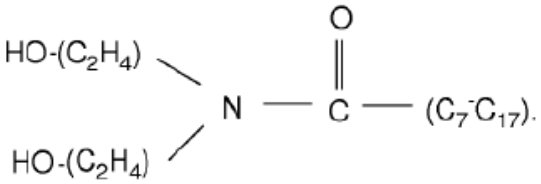


as well as unreacted glycerol, glycerol mono-, di- and tri-ester,

unreacted



unreacted boronating agent and unboronated



and comprises from about 0.4 to 1.0 wt. % of the formulated oil, and wherein the formulated oil has a friction coefficient of 0.04 or lower at 140ºC, as measured by the Mini Traction Machine (MTM) under a contact pressure of 1.0 GHz, and a copper strip rating of 1A or 1B as measured by ASTM D130 at 150ºC.