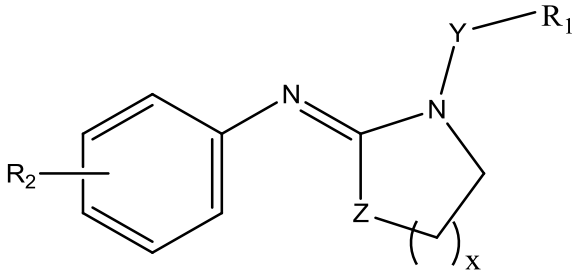
WHAT IS CLAIMED IS:

1. A lubricating oil composition comprising:

   (a) a major amount of a lubricating oil,

   (b) a diarylamine antioxidant, and

   (c) an amidine compound of Formula (I),



Formula (I)

wherein R_1 is hydrogen, an alkyl or an aromatic group containing 1-30 carbon atoms; x is from 1 to 5; Y is an optional linking alkyl group; Z is carbon or nitrogen; and R_2 is hydrogen or alkyl groups containing 1-30 carbon atoms.

2. The lubricating oil composition of claim 1, wherein the diarylamine antioxidant is selected from the group comprising diphenylamine, phenyl-α-naphthylamine, and alkylated diarylamines.

3. The lubricating oil composition of claim 2, wherein the diarylamine antioxidant is diphenylamine.

4. The lubricating oil composition of claim 1, wherein the concentration of the diarylamine antioxidant in the lubricating oil composition is at least about 0.01 wt. %.

5. The lubricating oil composition of claim 1, wherein the concentration of the diarylamine antioxidant in the lubricating oil composition is 0.01 to 10 wt. %.

6. The lubricating oil composition of claim 1, wherein the concentration of the diarylamine antioxidant in the lubricating oil composition is 0.2 to 10 wt. %.

7. The lubricating oil composition of claim 1, wherein the concentration of the diarylamine antioxidant in the lubricating oil composition is 0.1 to 5 wt. %.

8. The lubricating oil composition of claim 1, wherein the concentration of the amidine compound in the lubricating oil composition is from greater than 0.5 to 5 wt. %.

9. The lubricating oil composition of claim 1, wherein the concentration of the amidine compound in the lubricating oil composition is from greater than 0.5 to 2 wt. %.

10. A lubricating oil composition in claim 1 further comprises a molybdenum-containing antioxidant.

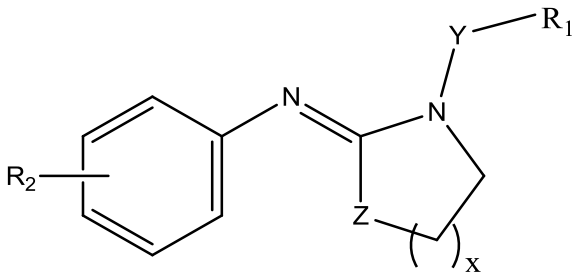
11. A lubricating oil composition in claim 10, wherein the molybdenum-containing antioxidant is a molybdenum succinimide.

12. A method for lubricating an engine comprising lubricating the engine with a lubricating oil composition comprising:

(a) a major amount of a lubricating oil,

(b) a diarylamine antioxidant, and

(c) an amidine compound of Formula (I),



Formula (I)

wherein R_1 is hydrogen, an alkyl or an aromatic group containing 1-30 carbon atoms; x is from 1 to 5; Y is an optional linking alkyl group; Z is carbon or nitrogen; and R_2 is hydrogen or alkyl groups containing 1-30 carbon atoms.

13. The method of claim 12 wherein the concentration of the diarylamine antioxidant in the lubricating oil composition is 0.01 to 10 wt. %.

14. The method of claim 12 wherein the concentration of the amidine compound in the lubricating oil composition is from greater than 0.5 to 5 wt. %.

15. The method of claim 12 wherein the lubricating oil composition further comprises a molybdenum-containing antioxidant.

16. The method of claim 12 wherein the molybdenum-containing antioxidant is a molybdenum succinimide.