What is claimed is:

1. A lubricant composition, comprising:

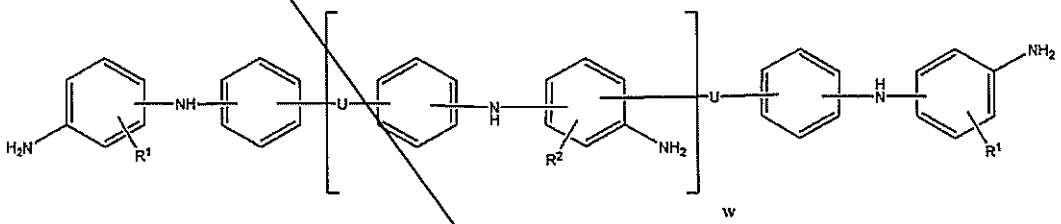
(a) an oil of lubricating viscosity;

(b) a dispersant comprising the condensation product of a carboxylic-functionalized polymer with an aromatic moiety through an amide, imide, or ester linkage; and

(c) an oil-soluble titanium compound.

2. The lubricant composition of claim 1 wherein the dispersant comprises a condensation product with an aromatic amine having at least 3 aromatic rings and at least one primary or secondary amino group.

3. The lubricant composition of claim 2 wherein the aromatic amine is represented by the structure



wherein independently each variable

R^1 and R^2 are hydrogen or C_{1-5} alkyl groups;

U is an aliphatic, alicyclic, or aromatic group; and

w is zero to about 9.

4. The lubricant composition of claim 1 wherein the dispersant comprises a condensation product with a nitro-substituted aromatic amine.

5. The lubricant composition of any of claims 1 through 4 wherein the carboxylic-functionalized polymer comprises a polyisobutylene moiety of number average molecular weight of about 500 to about 10,000 bearing at least one succinic anhydride group.

6. The lubricant composition of any of claims 1 through 4 wherein the carboxylic-functionalized polymer comprises an olefin copolymer bearing multiple carboxylic groups.

7. The lubricant composition of any of claims 1 through 6 wherein the amount of the dispersant of (b) is about 0.2 to about 5 percent by weight.

8. The lubricant composition of any of claims 1 through 7 wherein the dispersant of (b) comprises (i) a polyisobutylene moiety of number average molecular weight of about 500 to about 10,000 bearing at least one succinic anhydride group condensed with an aromatic amine having at least 3 aromatic rings and having at least one primary or secondary amino group and (ii) a condensation product of an olefin copolymer bearing multiple carboxylic groups with a nitro-substituted aromatic amine.

9. The lubricant composition of any of claims 1 through 8 wherein the oil-soluble titanium compound comprises a titanium (IV) alkoxide or carboxylate.

10. The lubricant composition of any of claim 1 through 9 wherein the oil-soluble titanium compound comprises titanium (IV) 2-ethylhexoxide.

11. The lubricant composition of any of claims 1 through 9 wherein the oil-soluble titanium compound comprises titanium neodecanoate.

12. The lubricant composition of any of claims 1 through 11 wherein the oil-soluble titanium compound is present in an amount to provide about 5 to about 10,000 parts per million by weight titanium.

13. The lubricant composition of any of claims 1 through 12 further comprising about 0.5 to about 5 percent by weight of an ashless dispersant or polymeric dispersant other than a condensation product of a carboxylic functionalized polymer with an aromatic moiety.

14. The lubricant composition of claim 13 wherein the polymeric dispersant other than a condensation product of a carboxylic functionalized polymer with an aromatic moiety comprises a condensation product of a hydrocarbyl-substituted succinic anhydride or reactive equivalent thereof with a poly(alkyleneamine).

15. The lubricant composition of any of claims 1 through 14 further comprising about 0.05 to about 3 percent by weight of a non-polymeric aromatic amine antioxidant.

16. The lubricant composition of any of claims 1 through 15 further comprising at least one additive selected from the group consisting of viscosity modifiers, pour point depressants, metal-containing detergents, zinc dialkyldithiocarbamates, and anti-wear agents.

17. A composition prepared by admixing the components of claim 1.

18. A method for lubricating a mechanical device comprising supplying to said device the lubricant composition of any of claims 1 through 17.

19. The method of claim 18 wherein the mechanical device is an internal combustion engine.

20. A method for improving the oxidative stability of a lubricant for a mechanical device, comprising including within said lubricant (b) a dispersant comprising the condensation product of a carboxylic-functionalized polymer with an aromatic moiety through an amide, imide, or ester linkage; and (c) an oil-soluble titanium compound.

What is claimed is:

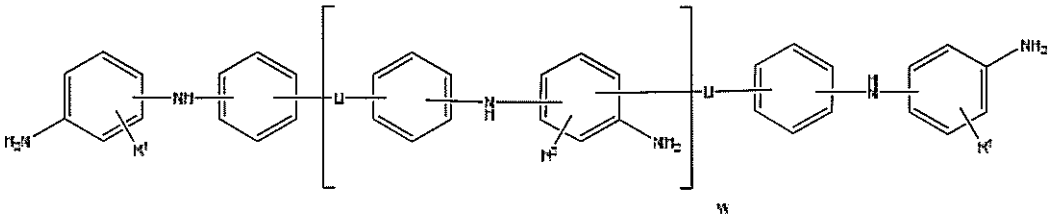
1. A lubricant composition, comprising:

(a) an oil of lubricating viscosity;

(b) a dispersant comprising the condensation product of a carboxylic-functionalized polymer with an aromatic moiety through an amide, imide, or ester linkage; wherein the dispersant comprises a condensation product with an aromatic amine having at least 3 aromatic rings and at least one primary or secondary amino group; and

(c) an oil-soluble titanium compound.

2. The lubricant composition of claim 1 wherein the aromatic amine is represented by the structure



wherein independently each variable

R^1 and R^2 are hydrogen or $C_{1\text{-}5}$ alkyl groups;

U is an aliphatic, alicyclic, or aromatic group; and

w is zero to about 9.

3. The lubricant composition of claim 1 wherein the dispersant comprises a condensation product with a nitro-substituted aromatic amine.

4. The lubricant composition of claim 1 wherein the carboxylic-functionalized polymer comprises a polyisobutylene moiety of number average molecular weight of about 500 to about 10,000 bearing at least one succinic anhydride group.

5. The lubricant composition of claim 1 wherein the carboxylic-functionalized polymer comprises an olefin copolymer bearing multiple carboxylic groups.

6. The lubricant composition of claim 1 wherein the amount of the dispersant of (b) is about 0.2 to about 5 percent by weight.

7. The lubricant composition of f claim 1 wherein the dispersant of (b) comprises (i) a polyisobutylene moiety of number average molecular weight of about 500 to about 10,000 bearing at least one succinic anhydride group con-

densed with an aromatic amine having at least 3 aromatic rings and having at least one primary or secondary amino group and (ii) a condensation product of an olefin copolymer bearing multiple carboxylic groups with a nitro-substituted aromatic amine.

8. The lubricant composition of claim 1 wherein the oil-soluble titanium compound comprises a titanium (IV) alkoxide or carboxylate.

9. The lubricant composition of claim 1 wherein the oil-soluble titanium compound comprises titanium (IV) 2-ethylhexoxide.

10. The lubricant composition of claim 1 wherein the oil-soluble titanium compound comprises titanium neodecanoate.

11. The lubricant composition of claim 1 wherein the oil-soluble titanium compound is present in an amount to provide about 5 to about 10,000 parts per million by weight titanium.

12. The lubricant composition of claim 1 further comprising about 0.5 to about 5 percent by weight of an ashless dispersant or polymeric dispersant other than a condensation product of a carboxylic functionalized polymer with an aromatic moiety.

13. The lubricant composition of claim 12 wherein the polymeric dispersant other than a condensation product of a carboxylic functionalized polymer with an aromatic moiety comprises a condensation product of a hydrocarbyl-substituted succinic anhydride or reactive equivalent thereof with a poly(alkyleneamine).

14. The lubricant composition of claim 1 further comprising about 0.05 to about 3 percent by weight of a non-polymeric aromatic amine antioxidant.

15. The lubricant composition of claim 1 further comprising at least one additive selected from the group consisting of viscosity modifiers, pour point depressants, metal-containing detergents, zinc dialkyldithiocarbamates, and anti-wear agents.

16. A composition prepared by admixing the components of claim 1.

17. A method for lubricating a mechanical device comprising supplying to said device the lubricant composition of claim 1.

18. The method of claim 17 wherein the mechanical device is an internal combustion engine.

19. A method for improving the oxidative stability of a lubricant for a mechanical device, comprising including within said lubricant (b) a dispersant comprising the condensation product of a carboxylic-functionalized polymer with an aromatic moiety through an amide, imide, or ester linkage; wherein the dispersant comprises a condensation product with an aromatic amine having at least 3 aromatic rings and at least one primary or secondary amino group; and (c) an oil-soluble titanium compound.