CLAIMS

What is claimed is:

1. A lubricating oil composition, comprising:

a) a major amount of an oil of lubricating viscosity;

b) 0.4 wt.% to 2.0 wt.%, based on the total weight of the lubricating oil composition, of a non-dispersant comb polymethacrylate (PMA) having a weight average molecular weight (Mw) of 390,000 g/mol to 460,000 g/mol; and

c) 0.08 wt.% to 0.4 wt.%, based on the total weight of the lubricating oil composition, of a non-dispersant ethylene-based olefin copolymer having a weight average molecular weight (Mw) of 90,000 g/mol to 160,000 g/mol,

the lubricating oil composition having a Kinematic Viscosity at 100° C of less than 9.3 mm^2/s.

2. The lubricating oil composition of claim 1, wherein the non-dispersant comb PMA has a Shear Stability Index (SSI) of 0.3 to 0.8, as measured in accordance with ASTM D7109.

3. The lubricating oil composition of claim 1, wherein the non-dispersant ethylene-based olefin copolymer has a Shear Stability Index (SSI) of 10 to 70 as measured in accordance with ASTM D7109.

4. The lubricating oil composition of claim 1, wherein the non-dispersant ethylene-based olefin copolymer:

(i) has a total ethylene content of 45 wt. % to 60 wt. %, based on the total weight of the non-dispersant ethylene-based olefin copolymer; or

(ii) is an ethylene propylene copolymer.

5. The lubricating oil composition of claim 1, wherein the non-dispersant comb PMA is present in an amount of 0.76 wt. % to 1.33 wt. %, and the non-dispersant ethylene-based olefin copolymer is present in an amount of 0.08 to 0.4 wt. %, based on the total weight of the lubricating oil composition.

6. The lubricating oil composition of claim 1, wherein the non-dispersant comb PMA and the non-dispersant ethylene-based olefin copolymer are present in a total amount of 0.4 wt. % to 4 wt. %, based on the total weight of the lubricating oil composition.

7. The lubricating oil composition of claim 1, wherein the oil of lubricating viscosity is an API Group III base oil.

8. The lubricating oil composition of claim 1, wherein the composition further comprises a molybdenum compound, optionally wherein:

(i) the molybdenum compound is molybdenum dithiocarbamate (MoDTC); or

(ii) the molybdenum compound provides the lubricating oil composition with an amount of molybdenum ranging from 50 ppm to 1200 ppm.

9. The lubricating oil composition of claim 1, wherein lubricating oil composition has a viscosity grade of SAE 0W-20, 0W-16, or 0W-12.

10. The lubricating oil composition of claim 1, wherein the lubricating oil composition has a High Temperature High Shear (HTHS) viscosity at 150° C of 2.55 cP to less than 2.9 cP.

11. The lubricating oil composition of claim 1, wherein the lubricating oil composition has a viscosity index of 200 to 240.

12. A method for reducing wear in an internal combustion engine comprising lubricating said engine with a lubricating oil composition having a Kinematic Viscosity at 100° C of less than 9.3 mm^2/s, the lubricating oil composition including:

a) a major amount of an oil of lubricating viscosity ;

b) 0.4 wt.% to 2.0 wt.%, based on the total weight of the lubricating oil composition, of a non-dispersant comb polymethacrylate (PMA) having a weight average molecular weight (Mw) of 390,000 g/mol to 460,000 g/mol; and

c) 0.08 wt.% to 0.4 wt.%, based on the total weight of the lubricating oil composition, of a non-dispersant ethylene-based olefin copolymer having a weight average molecular weight (Mw) of 90,000 g/mol to 160,000 g/mol.

13. The lubricating oil composition of claim 1, wherein:

the non-dispersant comb polymethacrylate (PMA) is present in an amount of 0.4 wt. % to 1.9 wt.%, based on the total weight of the lubricating oil composition; and

the non-dispersant ethylene-based olefin copolymer is present in an amount of 0.08 wt. % to 0.36 wt. %, based on the total weight of the lubricating oil composition.

14. The method for reducing wear in an internal combustion engine according to claim 12, wherein:

the non-dispersant comb polymethacrylate (PMA) is present in an amount of 0.4 wt. % to 1.9 wt.%, based on the total weight of the lubricating oil composition; and

the non-dispersant ethylene-based olefin copolymer is present in an amount of 0.08 wt. % to 0.36 wt. %, based on the total weight of the lubricating oil composition.

15. The method of claims 12 or 14, wherein the engine includes roller follower rocker arms.