WE CLAIM:

1. A lubricating composition comprising:
an oil of lubricating viscosity;
a phenolic antioxidant;
a sulfurized organic compound with an active sulfur content of no more than 8 wt. %;
optionally, one or more performance additives selected from:
a succinimide dispersant, and
a detergent.

2. The lubricating composition according to claim 1, wherein the lubricating composition is at least substantially free of substituted diphenylamine (SDPA) antioxidants.

3. The lubricating composition according to any prior claim, wherein the phenolic antioxidant is no more than 8 wt. % of the lubricating composition, or no more than 6 wt. %, or no more than 5 wt. %, or no more than 4 wt. %, or no more than 3 wt. % of the lubricating composition.

4. The lubricating composition according to any prior-claim, wherein the phenolic antioxidant is selected from the group consisting of a hindered phenol, a hindered alkyl phenol ester, a hindered alkoxy phenol, a hindered phenol acetate, a hindered bisphenol, a polyphenol, a 4-*tert*-butylphenol-formaldehyde condensate, a 4-*tert*-butylphenol-acetaldehyde condensate, and mixtures thereof.

5. The lubricating composition according to any prior claim, wherein the sulfurized organic compound provides the lubricating composition with at least 0.01 wt.%, or at least 0.03 wt.%, or at least 0.05 wt. %, or up to 0.12 wt.%, or up to 0.09 wt. % sulfur, or up to 0.07 wt. % sulfur.

6. The lubricating composition according to any prior claim, wherein active sulfur accounts for no more than 25 wt. %, or no more than 22 wt. %, or no more than 20 wt. %, or no more than 19 wt. % of total sulfur in the sulfurized organic compound, or at least 1 wt. %, or at least 1.5 wt. %, or at least 6 wt. % of the total sulfur in the sulfurized organic compound.

7. The lubricating composition according to any prior claim, wherein the sulfurized organic compound is selected from the group consisting of an oligomeric polysulfide, an alkyl polysulfide, a sulfurized ester, a sulfurized cycloaliphatic dialkylester, a sulfurized cycloaliphatic dialkenyl ester, and mixtures thereof.

8. The lubricating composition according to any prior claim, wherein the sulfurized organic compound comprises alkyl polysulfide or mixture thereof having a total sulfur content of at least 5 wt. % and/or up to 20 wt. %, and an active sulfur content of at least 0.5 wt. % and/or up to 45 wt. %.

9. The lubricating composition according to any prior claim, wherein the sulfurized organic compound comprises a sulfurized fatty acid ester of an aliphatic alcohol.

10. The lubricating composition according to any prior claim, wherein the succinimide dispersant is at least 0.2 wt. %, or at least 0.5 wt. %, or at least 1.0 wt. %, or up to 7.0 wt. %, or up to 6.0 wt. of the lubricating composition.

11. The lubricating composition according to any prior claim, wherein the detergent is at least 0.1 wt. %, or at least 0.2 wt. %, or at least 0.25 wt. %, or at least 0.4 wt. %, or up to 3.0 wt. %, or up to 2.0 wt. %, or up to 1.5 wt. %, or up to 1.25 wt. % of the lubricating composition.

12. The lubricating composition according to any prior claim, wherein the detergent provides the lubricating composition with at least 0.04 wt. %, or at least 0.08 wt. %, or up to 0.4 wt.%, or up to 0.3 wt. % of calcium.

13. The lubricating composition according to any prior claim, wherein the detergent is selected from the group consisting of an alkaline earth metal sulfonate, an alkaline earth metal salicylate, an alkaline earth metal saligenin, an alkaline earth metal salixarate, an alkaline earth metal hydrocarbyl-substituted hydroxybenzoate, and mixtures thereof.

14. The lubricating composition according to any prior claim, further comprising at least one of the group consisting of an antiwear agent, a corrosion inhibitor, a viscosity modifier, a pour point depressant, an antifoam agent, an extreme pressure agent, a friction modifier, a viscosity modifier, and combinations thereof wherein the antiwear agent provides the lubricating

composition with 300 - 850 ppm phosphorus by weight, based upon a total weight of the lubricating composition.

15. A method for improving oxidative stability of a lubricating oil in an engine comprising supplying the lubricating composition according to any prior claim to the engine.

16. The method of claim 15, wherein when the engine is a Volvo T-13 engine and is run for 360 hours, the kinematic viscosity at 40°C (KV_40) increase from 300 hours to 360 hours is less than 75 or less than 50 and/or the oxidation at the end of test is less than 125 A/cm, as measured by the IR peak height.