## SUMMARY OF THE INVENTION

In accordance with one embodiment of the present invention, there is provided lubricating oil compositions which protect silver bearings and reduce friction in medium speed diesel engines. Also provided, is a method for reducing silver bearing wear and friction in medium speed diesel engines.

Also provided is a medium speed diesel engine crankcase lubricating oil composition comprising:

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

(b) 0.1 to 5.0 weight percent of a silver lubricity additive comprising:

(i) an alkoxylated fatty amine or salt thereof;

(ii) an alkoxylated fatty diamine or salt thereof; or

mixtures of (i) and (ii) above.

Also provided is a method for reducing silver bearing wear and friction in a medium speed diesel engine comprising lubricating said engine with a lubricating oil composition comprising:

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

(b) 0.1 to 5.0 weight percent of a silver lubricity additive comprising:

(i) an alkoxylated fatty amine or salt thereof;

(ii) an alkoxylated fatty diamine or salt thereof; or

mixtures of (i) and (ii) above

Among other factors, the present invention is based on the surprising discovery of lubricating oil compositions which reduce silver bearing wear and friction in medium speed diesel engines.

### Definitions:

The following terms will be used throughout the specification and will have the following meanings unless otherwise indicated.

The term "medium speed diesel engine crankcase lubricating oil composition" as used herein refers to a lubricating oil additive composition for engine oils used in medium speed diesel engines as commonly found in railroad locomotives, marine tugboats, and stationary power applications.

The term "silver protection" as used herein refers to the ability of the medium speed crankcase lubricating oil composition of the present invention to protect silver and silver-plated bearings against wear in medium speed diesel engine crankcase.

The term "a major amount" of a base oil refers to where the amount of the base oil is at least 40 wt. % of the lubricating oil composition. In some embodiments, "a major amount" of a base oil refers to an amount of the base oil more than 50 wt.%, more than 60 wt.%, more than 70 wt.%, more than 80 wt.%, or more than 90 wt.% of the lubricating oil composition.

In the following description, all numbers disclosed herein are approximate values, regardless whether the word "about" or "approximate" is used in connection therewith. They may vary by 1 percent, 2 percent, 5 percent, or, sometimes, 10 to 20 percent.

## DETAILED DESCRIPTION OF THE INVENTION

In general, provided herein is a medium speed diesel engine crankcase lubricating oil composition comprising:

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

(b) 0.1 to 5.0 weight percent of a silver lubricity additive comprising:

(i) an alkoxylated fatty amine or salt thereof;