CLAIMS

What is claimed is:

1. A polymeric composition, comprising:

a first ethylene-based copolymer having a weight percent of ethylene-derived units based on a weight of the polymeric composition (E_A) ranging from about ~~35~~ 47 wt% to about 52 wt% and a weight-average molecular weight (Mw_A) of ~~less than or equal~~ from 60,000 to 130,000; and

a second ethylene-based copolymer having a weight percent of ethylene-derived units based on the weight of the polymeric composition (E_B) ranging from about 65 wt% to about 85 wt% and a weight-average molecular weight (Mw_B) of from 70,000 to less than 130,000~~.~~;

wherein the molecular weight distribution (MWD) of the first ethylene-based copolymer is less than 2.4 and the MWD of the second ethylene-based copolymer is less than 2.4,

wherein the polymeric composition comprises the first ethylene-based copolymer in an amount of at least 33 wt%, based on the combined weight of the first and second ethylene-based copolymers,

wherein the polymeric composition comprises from about 51.6 wt% to about 62.7 wt% ethylene-derived units, based on the weight of the polymeric composition, and

wherein the polymeric composition has a weight average molecular weight (Mw) of from about 77,000 to about 88,000 and a MWD of from about 1.9 to about 2.15.

2. The polymeric composition of claim 1, wherein at least one of the first ethylene-based copolymer and the second ethylene-based copolymer has a substantially linear structure.

~~3. The polymeric composition of claims 1 or 2, wherein the first ethylene-based copolymer is present in an amount of at least 33 wt%, based on the combined weight of the first and second ethylene-based copolymers.~~

~~4.~~3. The polymeric composition according to ~~any one of claims 1-3~~ claim 1, wherein the first ethylene-based copolymer has a heat of fusion on a first melt of the first ethylene-based copolymer (H_A) of less than 10 J/g.

~~5. The polymeric composition according to any one of claims 1-4, wherein the first ethylene-based copolymer has an ethylene content of less than about 50 wt%, based on the weight of the first ethylene-based copolymer.~~

~~6.~~4. The polymeric composition according to ~~any one of claims 1-5~~ claim 1, wherein at least one of the first ethylene-based copolymer and the second ethylene-based copolymer has a molecular weight distribution (MWD) of about ~~2.4~~ 2.2 or less.

~~7.~~5. The polymeric composition according to ~~any one of claims 1-6~~ claim 1, wherein ~~at least one of~~ the molecular weight distribution (MWD) of the first ethylene-based copolymer and the molecular weight distribution (MWD) of the second ethylene-based copolymer is in the range from greater than or equal to 1.80 to less than or equal to ~~1.95~~ 2.2.

~~8. The polymeric composition according to any one of claims 1-7, wherein the weight percent of ethylene-derived units of the first ethylene-based copolymer (E_A) is less than the weight percent of ethylene-derived units of the second ethylene-based copolymer (E_B).~~

~~9.~~6. The polymeric composition according to ~~any one of claims 1-8~~ claim 1, wherein a difference between the weight percent of ethylene-derived units of the second ethylene-based copolymer (E_B) and weight percent of ethylene-derived units of the first ethylene-based copolymer (E_A) is greater than or equal to ~~5~~ 17.

~~10.~~7. The polymeric composition according to ~~any one of claims 1-9~~ claim 1, wherein a ratio of a melt index of the first ethylene-based copolymer (MI_A) to a melt index of the second ethylene-based copolymer (MI_B) is less than or equal to 3.0.

~~11. The polymeric composition according to any one of claims 1-10, wherein the weight percent of the first ethylene-based copolymer in the polymeric composition is less than the weight percent of the second ethylene-based copolymer in the polymeric composition, based on the combined weight of the first and second copolymers.~~

~~12.~~8. The polymeric composition according to ~~any one of claims 1-11~~ claim 1, wherein the weight-average molecular weight of the first ethylene-based copolymer (Mw_A) ranges from about ~~60,000~~ 70,000 to about 130,000.

~~13.~~9. The polymeric composition according to ~~any one of claims 1-12~~ claim 1, wherein the weight-average molecular weight of the second ethylene-based copolymer (Mw_B) ranges from about ~~60,000~~ 75,000 to about ~~130,000~~ 115,000.

~~14.~~10. The polymeric composition according to ~~any one of claims 1-13~~ claim 1, wherein at least one of the first ethylene-based copolymer and the second ethylene-based copolymer comprise ethylene and a comonomer selected from the group consisting of propylene, butene, hexene, octene, and mixtures thereof.

~~15.~~11. The polymeric composition according to ~~any one of claims 1-14~~ claim 1, wherein at least one of the first ethylene-based copolymer and the second ethylene-based copolymer comprise ethylene and a comonomer selected from the group consisting of propylene, butene, hexene, octene, and mixtures thereof, and wherein the comonomer of at least one of the first ethylene-based copolymer and the second ethylene-based copolymer further comprises a polyene monomer, and the polymeric composition further comprises up to 5 mol% polyene-derived units.

~~16.~~12. The polymeric composition according to ~~any one of claims 1-15~~ claim 1, wherein a weight percent of the first ethylene-based copolymer is less than or equal to 66 wt% of the total weight of the first ethylene-based copolymer and the second ethylene-based copolymer.

~~17. The polymeric composition according to any one of claims 1-16, wherein ethylene-derived units in the total amount of the first ethylene-based copolymer and the second ethylene-based copolymer ranges from about 70 mol% to about 85 mol%.~~

~~18.~~13. The polymeric composition according to ~~any one of claims 1-17~~ claim 1, wherein a heat of fusion on a first melt of the first ethylene-based copolymer (H_A) is less than a heat of fusion on a first melt of the second ethylene-based copolymer (H_B).

~~19. The polymeric composition according to any one of claims 1-18, wherein a heat of fusion on the first melt of the first ethylene-based copolymer (H_A) ranges from about 0 J/g to about 10 J/g.~~

~~20.~~14. A lubrication oil composition comprising a base oil; and the polymeric composition according to claim 1.

~~21.~~15. The lubrication oil composition of claim ~~20~~ 14 having at least one of: a TE of greater than or equal to 1.5; a SSI of less than 55; a complex viscosity at -31°C of less than or equal to 500 cSt; and a Mini Rotary Viscometer (MRV) viscosity at -35°C in a 10 W-50 formulation of less than 60,000 cps according to ASTM 1678.

~~22. A polymeric composition, comprising:~~

~~a first ethylene-based copolymer having a heat of fusion on a first melt of the first ethylene-based copolymer (H_A) ranging from about 0 J/g to about 15 J/g and a weight-average molecular weight (Mw_A) of less than 130,000; and~~

~~a second ethylene-based copolymer having a heat of fusion on a first melt of the second ethylene-based copolymer (H_B) ranging from about 30 J/g to about 60 J/g and a weight-average molecular weight (Mw_B) of less than or equal to 130,000.~~

~~23. A lubrication oil composition comprising a base oil; and the polymeric composition according to claim 22.~~

~~24. The lubrication oil composition of any one of claims 22-23 having at least one of: a TE of greater than or equal to 1.5; a SSI of less than 55; a complex viscosity at -~~

~~31°C of less than or equal to 500 cSt; and a Mini Rotary Viscometer (MRV) viscosity at -35°C in a 10-W-50 formulation of less than 60,000 cps according to ASTM 1678.~~

~~25.~~16. A method for making ~~the composition of any of claims 1-24~~ a polymer composition comprising the steps of:

(a) combining (i) a first ethylene-based copolymer having a weight percent of ethylene-derived units based on a weight of the polymeric composition (E_A) ranging from about ~~35~~ 47 wt% to about 52 wt% and a weight-average molecular weight (Mw_A) of ~~less than or equal~~ from 60,000 to 130,000 with (ii) a second ethylene-based copolymer having a weight percent of ethylene-derived units based on the weight of the polymeric composition (E_B) ranging from about 65 wt% to about 85 wt% and a weight-average molecular weight (Mw_B) of from 70,000 to less than 130,000, wherein the molecular weight distribution (MWD) of the first ethylene-based copolymer is less than 2.4 and the MWD of the second ethylene-based copolymer is less than 2.4; and

(b) forming the composition~~.~~, wherein the composition comprises the first ethylene-based copolymer in an amount of at least 33 wt%, based on the combined weight of the first and second ethylene-based copolymers, wherein the polymeric composition comprises from about 51.6 wt% to about 62.7 wt% ethylene-derived units, based on the weight of the polymeric composition, and wherein the polymeric composition has a weight average molecular weight (Mw) of from about 77,000 to about 88,000 and a MWD of from about 1.9 to about 2.15.

17. The polymeric composition according to claim 1, wherein the polymeric composition has a Mw/Mn of 1.95 to 2.15.

18. The polymeric composition according to claim 1, wherein the polymeric composition has an ethylene content of greater than or equal to 53.3 wt% to less than or equal to 62.7 wt%, based on the weight of the polymeric composition.

19. The polymeric composition according to claim 1, wherein the composition comprises the first ethylene-based copolymer in an amount of at least 50 wt% to less than or equal to 80 wt%, based on the combined weight of the first and second

ethylene-based copolymers, and the second ethylene-based copolymer in an amount of from at least 20 wt% to less than or equal to 50 wt%.

20. The polymeric composition according to claim 1, wherein the composition comprises the first ethylene-based copolymer in an amount of at least 50 wt% to less than or equal to 70 wt%, based in the combined weight of the first and second ethylene-based copolymers, and the second ethylene-based copolymer in an amount of from at least 30 wt% to less than or equal to 50 wt%.

21. The polymeric composition according to claim 1, wherein the composition comprises the first ethylene-based copolymer in an amount of at least 60 wt% to less than or equal to 80 wt%, based on the combined weight of the first and second ethylene-based copolymers, and the second ethylene-based copolymer in an amount of from at least 20 wt% to less than or equal to 40 wt%.