CLAIMS

1. A hinged component comprising a polyethylene composition, the polyethylene composition comprising:

(1) 10 wt% to 70 wt% of a first ethylene copolymer having a melt index I_2, of from 0.1g/10min to 10 g/10min; a molecular weight distribution M_w/M_n, of less than 3.0; and a density of from 0.930g/cm^3 to 0.960 g/cm^3; and

(2) 90 wt% to 30 wt% of a second ethylene copolymer having a melt index I_2, of from 50g/10min to 10,000 g/10min; a molecular weight distribution M_w/M_n, of less than 3.0; and a density higher than the density of the first ethylene copolymer, but less than 0.966 g/cm^3;

wherein the density of the second ethylene copolymer is less than

0.037 g/cm^3 higher than the density of the first ethylene copolymer; the ratio (SCB1/SCB2) of the number of short chain branches per thousand carbon atoms in the first ethylene copolymer (SCB1) to the number of short chain branches per thousand carbon atoms in the second ethylene copolymer (SCB2) is greater than 1.0; and wherein the polyethylene composition has a molecular weight distribution M_w/M_n, of from 2.0 to 7.0; a density of at least 0.949 g/cm^3; a melt index, I_2 of greater than 10.0g/10min and up to 20.0 g/10min, a Z-average molecular weight M_Z, of less than 300,000; and a melt flow ratio I_{21}/I_2, of from 24 to 38.

2. The hinge component of claim 1 wherein the hinged component has an average hinge life of more than 4200 cycles.

3. The hinged component of claim 1 wherein the hinged component has an average hinge life of at least 4800 cycles.

4. The hinged component of claim 1 wherein the polyethylene composition has a Z-average molecular weight M_Z, of less than 250,000.

5. The hinged component of claim 1 wherein the polyethylene composition has a stress exponent of less than 1.40.

6. The hinged component of claim 1 wherein the first and second ethylene copolymers are made by polymerizing ethylene and an alpha olefin in the presence of a single site catalyst.

7. The hinged component of claim 1 wherein the density of the second ethylene copolymer is less than 0.030 g/cm^3 higher than the density of the first ethylene copolymer.

8. The hinged component of claim 1 wherein the first ethylene copolymer has a melt index I_2, of from 0.1g/10min to 3.0 g/10min.

9. The hinged component of claim 1 wherein the second ethylene copolymer has a melt index I_2, of from 100g/10min to 5000 g/10min.

10. The hinged component of claim 1 wherein the polyethylene composition has a melt index I_2, of from 10.5g/10min to 18.0 g/10min.

11. The hinged component of claim 1 wherein the polyethylene composition has a bimodal molecular weight distribution as determined by gel permeation chromatography.

12. The hinged component of claim 1 wherein the polyethylene composition has a molecular weight distribution M_w/M_n, of from 2.5 to 4.5.

13. The hinged component of claim 1 wherein the first ethylene copolymer has a density of from 0.936g/cm^3 to 0.952 g/cm^3.

14. The hinged component of claim 1 wherein the polyethylene composition has a density of from 0.950 g/cm^3 to 0.960 g/cm^3.

15. The hinged component of claim 1 wherein the polyethylene composition has no long chain branching.

16. The hinged component of claim 1 wherein the first and second ethylene copolymers have a M_w/M_n of less than 2.5.

17. The hinged component of claim 1 wherein the polyethylene composition has a composition distribution breadth index (CDBI(50)) of greater than 65 wt%.

18. The hinged component of claim 1 wherein the first and second ethylene copolymers each have a composition distribution breadth index (CDBI(50)) of greater than 65 wt%.

19. The hinged component of claim 1 wherein the polyethylene composition comprises:

from about 25 wt% to 60 wt% of the first ethylene copolymer; and

from about 75 wt% to 40 wt% of the second ethylene copolymer.

20. The hinged component of claim 1 wherein the polyethylene composition has a comonomer content of less than 0.5 mol% as determined by ^{13}C NMR.

21. The hinged component of claim 1 wherein the polyethylene composition further comprises a nucleating agent or a combination of nucleating agents.

22. The hinged component of claim 1 wherein the first and second ethylene copolymers are copolymers of ethylene and 1-octene.

23. The hinged component of claim 1 wherein the hinged component is made by compression molding or injection molding.

24. The hinged component of claim 1 wherein the hinged component is a closure.

25. The hinged component of claim 1 wherein the polyethylene composition is prepared by contacting ethylene and an alpha-olefin with a single site polymerization catalyst under solution polymerization conditions in a least two polymerization reactors.

26. The hinged component of claim 1 wherein the second ethylene copolymer has a density of less than 0.965 g/cm^3.

27. A process for preparing a hinged component wherein the process comprises at least one compression molding or injection molding step and wherein the hinged component comprises a polyethylene composition, the polyethylene composition comprising:

(1) 10 wt% to 70 wt% of a first ethylene copolymer having a melt index I_2, of from 0.1g/10min to 10 g/10min; a molecular weight distribution M_w/M_n, of less than 3.0; and a density of from 0.930g/cm^3 to 0.960 g/cm^3; and

(2) 90 wt% to 30 wt% of a second ethylene copolymer having a melt index I_2, of from 50g/10min to 10,000 g/10min; a molecular weight distribution M_w/M_n, of less than 3.0; and a density higher than the density of the first ethylene copolymer, but less than 0.966 g/cm^3;

wherein the density of the second ethylene copolymer is less than
0.037 g/cm^3 higher than the density of the first ethylene copolymer; the ratio (SCB1/SCB2) of the number of short chain branches per thousand carbon atoms in the first ethylene copolymer (SCB1) to the number of short chain branches per thousand carbon atoms in the second ethylene copolymer (SCB2) is greater than 1.0; and wherein the polyethylene composition has a molecular weight distribution M_w/M_n, of from 2.0 to 7.0; a density of at least 0.949 g/cm^3; a melt index, I_2 of greater than 10.0 g/10min and up to 20.0

g/10min, a Z-average molecular weight M_Z, of less than 300,000; a melt flow ratio I_{21}/I_2, of from 24 to 38.

28. The process of claim 26 wherein the hinge component has an average hinge life of more than 4200 cycles.