That which is claimed is:

1. A process for preparing a base stock, comprising:

(i) providing an olefinic feedstock comprising C14 to C20 olefins which comprises less than 40 wt% branched olefins and greater than 40 wt% alpha olefins;
(ii) oligomerizing the olefinic feedstock in the presence of a boron trifluoride catalyst, while controlling the reaction conditions, comprising ~~at~~ a reaction temperature in the range of from 20 – 60 °C and a residence time of from 60 to 400 minutes, ~~resulting in a saturated~~to obtain an oligomerization product comprising a dimer ~~intermediate with~~ portion having a branching proximity of 27 – 35; and
(iii) hydroisomerizing the oligomerization product obtained from step (ii) in the presence of a noble-metal impregnated one-dimensional, 10-member ring zeolite catalyst to achieve a C28+ product with BP/BI ≥ -0.6037 (Internal alkyl branching per molecule) + 2.0 and on average 0.3 – 1.5 5+ methyl branching per molecule.

2. The process of claim 1, wherein the olefinic feedstock comprises greater than 50 wt % alpha olefins.

3. The process of claim 2, wherein the olefinic feedstock comprises less than 8 wt % branched olefins.

4. The process of claim 1, wherein the olefinic feedstock comprises greater than 70 wt % alpha olefins.

5. The process of claim 2, wherein ~~oligomerization is performed using a~~ the boron trifluoride oligomerization catalyst~~,~~ is promoted with an alcohol ~~promoter,~~ and an ester ~~promoter~~.

6. The process of claim 2, wherein the residence time for the oligomerization reaction ranges from 60 – 180 minutes.

7. The process of claim 2, further comprising recovering ~~a product from~~ the oligomerization product and removing unreacted monomer from the product, prior to further processing.

8. The process of claim 7, wherein the unreacted monomer removed is recycled to an olefinic feedstock for a subsequent oligomerization reaction.

9. The process of claim 7, further comprising hydrogenating the oligomerization product from which the unreacted monomer has been removed to create a hydrogenated product, which is then subjected to the hydroisomerization; and

recovering a product from the hydroisomerization and separating the product into a product fraction comprising greater than 95 wt % dimers having a maximum carbon number of 40, and a product fraction comprising greater than 95 wt % trimers and higher oligomers having a minimum carbon number of 42.

10. The process of claim 7, wherein the oligomerization product from which the unreacted monomer has been removed is separated into a product fraction comprising greater than 95 wt % dimers having a maximum carbon number of 40, and a product fraction comprising greater than 95% trimers, and higher oligomerized compounds having a minimum carbon number of 42.

11. The process of claim 10, further comprising hydroisomerizing each of the product fractions separately.

12. The process of claim 7, wherein the oligomerization product is further hydrogenated to obtain a hydrogenated product, ~~and~~wherein the hydrogenated product comprises dimers having a maximum carbon number of 40 and a branching proximity from 28-32.

13. The process of claim 2, wherein the hydroisomerizing is conducted under a gauge pressure of 100 – 800 psi~~g~~ (6.9 – 55.2 bar); a temperature in the range of from 290 – 350 °C, and a hydrogen flow rate of 500 – 3500 scf/bbl (14.2 – 99.1 m^3/159 L).

14. The process for preparing a base stock of claim ~~2~~3, further comprising:
(i) providing the~~an~~ olefinic feedstock comprising less than 8 wt % branched monomeric olefins and greater than 50 wt % monomeric alpha olefins, with the monomeric olefins having a carbon number in the range of from C14 – C20;

(ii) conduc~~t~~ting ~~an~~the oligomerization reaction with the olefinic feedstock of (i) at a temperature in the range of from 20 to 60 °C, over the boron trifluoride catalyst and a BuOH and BuAc co-catalyst, with a reaction residence time of from 60-180 minutes, in a semi-batch or continuous stirred tank reactor;

(iii)recovering ~~a~~the oligomerization product from the oligomerization reaction and removing unreacted monomer by distillation;

(iv)hydrogenating the oligomerization product recovered from the distillation in (iii);

(v) recovering a hydrogenated product from the hydrogenation in (iv) and hydroisomerizing the hydrogenated product over a noble-metal impregnated, one-dimensional zeolite with a 10-member ring at a gauge pressure in the range of from 100 – 800 psi~~g~~ (6.9 – 55.2 bar); a temperature in the range of from 290 – 350°C; and at a hydrogen flow rate of 500 – 3500 scf/bbl (14.2 – 99.1 m^3/159 L);

(vi)wherein the unreacted monomer removed in (iii) is recycled in a subsequent oligomerization; and

(vii) further comprising separating dimers from trimers and higher compounds from the hydroisomerized product, with the dimers comprising greater than or equal to 95 wt % dimers having a maximum carbon number of 40.

15. The process for preparing a base stock of claim ~~2~~3, further comprising:
(i) providing ~~an~~the olefinic feedstock comprising less than 8 wt % branched monomeric olefins and greater than 50 wt % monomeric alpha olefins, with the monomeric olefins having a carbon number in the range of from C14 – C20;

(ii) conducting ~~an~~the oligomerization reaction with the olefinic feedstock of (i) at a temperature in the range of from 20 to 60 °C, over the boron trifluoride catalyst and a BuOH and BuAc co-catalyst, with a reaction residence time of from 60-180 minutes, in a semi-batch or continuous stirred tank reactor;

(iii)recovering ~~a~~the oligomerization product from the oligomerization reaction and removing unreacted monomer by distillation; and

(iv)recovering a bottoms product from the distillation in (iii) and hydroisomerizing the product over a noble-metal impregnated, one-dimensional zeolite with a 10-member ring at a gauge pressure in the range of from 100 – 800 psi~~g~~ (6.9 – 55.2 bar); a temperature in the range of from 290 – 350°C; and at a hydrogen flow rate of 500 – 3500 scf/bbl (14.2 – 99.1 m^3/159 L);

(v) wherein the unreacted monomer removed in (iii) is recycled in a subsequent oligomerization; and

(vi) further comprising recovery of a product from the hydroisomerization and separating the product into a dimer product comprising dimer having a carbon number in the range of from C28-C40, and a trimer and higher compound product comprising compounds having a carbon number of 42 and higher.

16. ~~A~~The process for preparing a base stock of claim ~~2~~3, further comprising:
(i) providing ~~an~~ the olefinic feedstock comprising less than 8 wt % branched monomeric olefins and greater than 50 wt % monomeric alpha olefins, with the monomeric olefins having a carbon number in the range of from C14 – C20;

(ii) conducting ~~an~~the oligomerization reaction with the olefinic feedstock of (i) at a temperature in the range of from 20 to 60 °C, over the boron trifluoride catalyst and a BuOH and BuAc co-catalyst, with a reaction residence time of from 60 – 180 minutes, in a semi-batch or continuous stirred tank reactor;

(iii) recovering ~~a~~the oligomerization product from the oligomerization reaction and removing unreacted monomer by distillation;

(iv) recovering a bottoms product from the distillation in (iii) and separating dimers from trimers and higher compounds from the bottoms distillation product ~~of (iii)~~, with the dimers product comprising greater than or equal to 95% compounds having a maximum carbon number of 40, and with the trimers and higher compounds product comprising compounds having a carbon number of 42 and greater;

(v) hydroisomerizing each of the dimers product and trimers product separately over a noble-metal impregnated, one-dimensional zeolite with a 10-member ring at a gauge pressure in the range of from 100 – 800 psi~~g~~ (6.9 – 55.2 bar); a temperature in the range of from 290 – 350°C; and at a hydrogen flow rate of 500-3500 scf/bbl (14.2 – 99.1 m^3/159 L).