

What is claimed is:

1. A carbon dioxide composition comprising a major amount of carbon dioxide and at least one branched polyolefin polymer.
2. The carbon dioxide composition of the previous claim, wherein the composition has a relative viscosity at least 100% greater than supercritical carbon dioxide.
3. The composition of any previous claim, wherein the polyolefin polymer has a number average molecular weight of from 140 to 5000 as measured by gel permeation chromatography with polystyrene standard.
4. The composition of any previous claim, wherein the at least one branched polyolefin polymer is polymerized from a C2-C24 olefin or mixture thereof.
5. The composition of any previous claim, wherein the branched polyolefin polymer comprises a polyisobutylene polymer.
6. The composition of claim 1, wherein the at least one branched polyolefin polymer is polymerized from C4-C24 α -olefin or mixture thereof.
7. The composition of claim 5, wherein the branched polyolefin polymer comprises a 1000 to 5000 Mn polydecene polymer.
8. The composition of any previous claim, wherein the branching of the branched polyolefin polymer comprises at least one of an aromatic hydrocarbyl group, aliphatic hydrocarbyl group, cyclic hydrocarbyl group, and mixtures thereof.
9. The composition of any previous claim, wherein the branching of the branched polyolefin polymer comprises a hydroxyl containing aromatic group.
10. The composition of any previous claim, wherein branching of the branched polyolefin polymer comprises an amine containing aromatic group.
11. The composition of any previous claim, wherein the branching of the branched polyolefin polymer is substantially free of, or free of, succinimide or succinic anhydride functionality.
12. The composition of any previous claim, comprising from 0.01 to 5 wt.% of the branched polyolefin polymer based on the weight of the composition.
13. A method to increase the production of hydrocarbons from an underground hydrocarbon containing formation comprising injecting into the formation a composition as claimed in any

previous claim, and recovering released hydrocarbons from said hydrocarbon containing formation.

14. A method of increasing the viscosity of supercritical carbon dioxide comprising adding to the carbon dioxide a thickener comprising at least one branched polyolefin polymer that increases the relative viscosity of the combination of the carbon dioxide and thickener at least 100% compared to supercritical carbon dioxide.
15. The method of claim 13 wherein the viscosity is increased at a pressure between 500 and 10,000 psi and temperatures between 30 C and 120 C.