

We Claim:

1. A packing system for use in a wellbore comprising:
 - a plugging tool configured to carry a packing element;
 - at least one first anti-extrusion assembly having petals, wherein the at least one first anti-extrusion assembly is coupled to the plugging tool;
 - a packing element carried by the plugging tool and configured to expand radially to seal the wellbore; and
 - at least one second anti-extrusion assembly having petals with gaps therebetween, wherein the second anti-extrusion assembly is coupled to the packing element;
 - wherein the at least one first anti-extrusion assembly and the at least one second anti-extrusion assembly are not coupled, but are aligned so that at least one of the petals on the at least one first anti-extrusion assembly extends over at least one gap in the at least one second anti-extrusion assembly;
 - wherein either the first anti-extrusion assembly or the second anti-extrusion assembly further comprises a locating tang extending between adjacent petals of the other of the first anti-extrusion assembly or the second to align the anti-extrusion assemblies.
2. The packing system of claim 1, wherein the packing element comprising an elastomeric material.
3. The packing system of claim 2, wherein the elastomeric packing element comprises at least one of rubber, plastic, nitriles, hydrogenated nitriles, fluoroelastomers, and poly(p-phenylene sulfide).
4. The packing system of claim 3, wherein the fluoroelastomers are chosen from at least one of vinylidene fluorides, tetrafluoroethylenes, polytetrafluoroethylenes, and perfluoroelastomers.
5. The packing system of claim 1, wherein the at least one first and the at least one second anti-extrusion assemblies are configured to be both protracted and retracted.
6. The packing system of claim 1, wherein the aligning structure is chosen from at least one of physical structures, magnetic structures, and optical structures.
7. The packing system of claim 5, wherein the petals on one of the at least one first or second anti-extrusion assembly petals abut a locating tang to align the least one of the petals on the first anti-extrusion assembly extends over at least one gap in the second anti-extrusion assembly.
8. The packing system of claim 1, wherein the plugging tool is chosen from a bridge plug, a permanent or retrievable tension packer, a retrievable or permanent compression packer, a retrievable hydraulic-set packer, a single string packer, or a dual string packer.
9. The packing system of claim 1, wherein the second anti-extrusion assembly is coupled to the packing element by adhesive bonding.

10. A method for limiting the vertical expansion of a packing element while sealing an annulus in a hydrocarbon wellbore, the method comprising,

providing a plugging tool coupled to at least one first anti-extrusion assembly having gaps and petals;

providing an elastomeric packing element coupled to at least one second anti-extrusion assembly having gaps and petals;

aligning the at least one first anti-extrusion assembly and the at least one second anti-extrusion assembly so that at least one of the petals on the at least one first anti-extrusion assembly extends over at least one gap in the at least one second anti-extrusion assembly without interlocking, wherein either the first anti-extrusion assembly or the second anti-extrusion assembly further comprises a locating tang extending between adjacent petals of the other of the first anti-extrusion assembly or the second to align the anti-extrusion assemblies;

deploying the plugging tool into the wellbore; and

deforming the elastomeric packing element to provide a seal in the annulus.

11. The method of claim 10, wherein the elastomeric packing element is deformed by subjecting the packing element to pressure, by placing the packing element into contact with a hydrocarbon swelling fluid to expand the element or, by inflating the packing element using an appropriate liquid or gas medium.

12. The method of claim 10, wherein the elastomeric packing element comprises at least one of rubber, plastic, nitriles, hydrogenated nitriles, fluoroelastomers, and poly(p-phenylene sulfide).

13. The method of claim 10, wherein the petals of the at least one first and at least one second anti-extrusion assemblies are protracted during the deforming step to extend to the wall of the wellbore.

14. The method of claim 10, wherein the petals of the at least one first and at least one second anti-extrusion assemblies are in a retracted position prior to deformation.

15. The method of claim 10, wherein aligning is accomplished by rotating either the element or the tool until at least one petal abuts the locating tang.

16. The method of claim 10, wherein the second anti-extrusion assembly is coupled to the packing element by adhesive bonding.

17. The method of claim 10, wherein the aligning comprises optical or magnetic alignment.

18. The method of claim 10, wherein the elastomeric packing element is deformed by bringing the element into contact with a swelling fluid.