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(54) Title: MECHANICALLY COUPLED SCREEN AND METHOD

(57) Abstract: A particulate excluder tool (10) includes a basepipe (12) having one or more retention features (14,16); a screen jacket (22) disposed radially outwardly of the basepipe; one or more end housings (28,30) at the screen jacket; and a deformable element (40) disposed between a portion of the one or more end housings and one or of the one or more retention features and method.

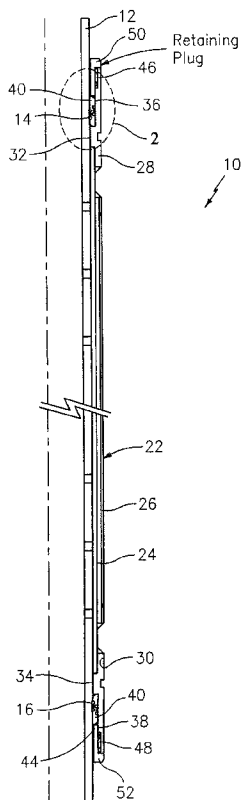


FIG. 1

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AMENDED CLAIMS

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1. A particulate exculder tool comprising:

a basepipe having one or more retention features;

a screen jacket disposed radially outwardly of the basepipe;

one or more end housings at the screen jacket;

a single-piece deformable element disposed between a portion of the one or more end housings and one or of the one or more retention features, the element in one position locking one of the one or more end housings to one of the one or more retention features and in another position being in a non locked condition.
2. The tool as claimed in claim 1 wherein the retention features include one or more undercuts.
3. The tool as claimed in claim 2 wherein the one or more undercuts each include at least one shoulder.
4. The tool as claimed in claim 3 to wherein the at least one shoulder inhibits deformable element movement axially of the tool.
5. The tool as claimed in claim 1 wherein the one or more retention features include surface preparation to enhance friction thereof.
6. The tool as claimed in claim 5 wherein the surface preparation is longitudinal grooves.
7. The tool as claimed in claim 6 wherein the grooves are knurled.
8. The tool as claimed in claim 6 wherein the grooves are splines.
9. The tool as claimed in claim 5 wherein the surface preparation is helical grooves.
10. The tool as claimed in claim 5 wherein the surface preparation is roughness.

11. The tool as claimed in claim 1 wherein the deformable element is a metal element.
12. The tool as claimed in claim 1 wherein the deformable element is deformable by axial compression.
13. The tool as claimed in claim 12 wherein the axial compression is created by a threaded collar and is thereby maintained indefinitely.
14. The tool as claimed in claim 1 wherein the element is in contact with the at least one retention feature for less than 360°.
15. The tool as claimed in claim 1 wherein the element forms an annular seal between the base pipe and one of the one or more end housings.
16. A method for attaching a screen jacket to a base pipe comprising:

disposing the screen jacket radially outwardly of the base pipe;

deforming a single-piece deformable element at, at least one end of the screen jacket;

contacting the deformable element to both of the screen jacket and the basepipe.
17. The method as claimed in claim 16 wherein the deforming is by compressing the element.
18. The method as claimed in claim 17 wherein the compressing is axial.
19. The method as claimed in claim 18 wherein the method further comprises configuring the base pipe with at least one retention feature.
20. The method as claimed in claim 19 wherein the contacting occurs between the screen jacket and the undercut.