

WHAT IS CLAIMED IS:

1. A method for treating a wellbore comprising:
positioning a conduit in the wellbore, wherein the conduit is a liner hanger or a tie-
5 back liner, wherein the conduit comprises:
a conduit body; and
a reactive metal sealing element disposed on the conduit body, wherein the
reactive metal sealing element comprises a reactive metal having a first volume;
contacting the reactive metal with a fluid that reacts with the reactive metal to produce
10 a reaction product having a second volume greater than the first volume; and
contacting a surface adjacent to the reactive metal sealing element with the reaction
product.
2. The method of claim 1, wherein the reactive metal comprises a metal selected from
15 the group consisting of magnesium, calcium, aluminum, tin, zinc, beryllium, barium,
manganese, and any combination thereof.
3. The method of claim 1, wherein the reactive metal comprises a metal alloy selected
from the group consisting of magnesium-zinc, magnesium-aluminum, calcium-magnesium,
20 aluminum-copper, and any combination thereof.
4. The method of claim 1, wherein the conduit is the liner hanger; wherein the liner
hanger is expandable.
- 25 5. The method of claim 1, wherein the conduit is the liner hanger; wherein the liner
hanger is non-expandable.
6. The method of claim 1, wherein the conduit is the liner hanger; wherein the adjacent
surface is a casing.
30
7. The method of claim 1, wherein the conduit is the tie-back liner; wherein the adjacent
surface is an exterior surface of a liner hanger.

8. The method of claim 1, wherein the reactive metal sealing element further comprises a removable barrier coating.

9. The method of claim 1, wherein the conduit body comprises a recess; wherein the
5 reactive metal sealing element is disposed in the recess.

10. The method of claim 1, wherein the contacting a surface adjacent to the reactive metal sealing element with the reaction product further comprises forming a seal against the adjacent surface.

10

11. The method of claim 1, wherein the contacting a surface adjacent to the reactive metal sealing element with the reaction product further comprises anchoring the conduit to the adjacent surface.

15 12. A conduit for a wellbore, wherein the conduit is a liner hanger or a tie-back liner comprising:

a conduit body; and

a reactive metal sealing element disposed on the conduit body, wherein the reactive metal sealing element comprises a reactive metal.

20

13. The conduit of claim 12, wherein the reactive metal comprises a metal selected from the group consisting of magnesium, calcium, aluminum, tin, zinc, beryllium, barium, manganese, and any combination thereof.

25 14. The conduit of claim 12, wherein the reactive metal comprises a metal alloy selected from the group consisting of magnesium-zinc, magnesium-aluminum, calcium-magnesium, aluminum-copper, and any combination thereof.

15. The conduit of claim 12, wherein the conduit is the liner hanger; wherein the liner
30 hanger is expandable.

16. The conduit of claim 12, wherein the conduit is the liner hanger; wherein the liner hanger is non-expandable.

17. A system for forming a seal in a wellbore comprising:
a conduit, wherein the conduit is a liner hanger or a tie-back liner comprising:
a conduit body;
a reactive metal sealing element disposed on the conduit body, wherein the
5 reactive metal sealing element comprises a reactive metal; and
a liner.
18. The system of claim 17, wherein the conduit is the liner hanger; wherein the system
further comprises a casing; wherein the liner hanger is sealed to the casing with the reactive
10 metal sealing element; wherein the liner is suspended from the liner hanger.
19. The system of claim 17, wherein the conduit is the tie-back liner; wherein the system
further comprises a liner hanger; wherein the tie-back liner is sealed to the liner hanger with
the reactive metal sealing element; and wherein the liner is suspended from the liner hanger.
15
20. The system of claim 17, wherein the reactive metal comprises a metal selected from
the group consisting of magnesium, calcium, aluminum, tin, zinc, beryllium, barium,
manganese, and any combination thereof.

20