

WHAT IS CLAIMED IS:

1. A method for forming a seal in a wellbore comprising:
positioning an expandable metal sealing element in the wellbore; wherein the
5 expandable metal sealing element comprises a reactive metal and is disposed in a location,
actuating a washout prevention element,
contacting the expandable metal sealing element with a fluid that reacts with the
reactive metal to produce a reaction product having a volume greater than the reactive metal,
and
10 allowing the washout prevention element to prevent at least a portion of the reaction
product from flowing away from the location.
2. The method of claim 1, wherein the washout prevention element comprises a cup seal.
- 15 3. The method of claim 1, wherein the washout prevention element comprises a
swellable elastomer.
4. The method of claim 1, wherein the washout prevention element comprises an
absorbent polymer.
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5. The method of claim 4, wherein the washout prevention element further comprises a
bladder.
6. The method of claim 1, wherein the washout prevention element comprises an
25 inflatable bladder and a gas-emitting material.
7. The method of claim 1, wherein the washout prevention element comprises two rows
of petals.
- 30 8. The method of claim 1, 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.

9. 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, aluminum-copper, and any combination thereof.
- 5 10. A sealing apparatus for a wellbore, the apparatus comprising:
an expandable metal sealing element comprising a reactive metal and disposed
downhole in a location, wherein the reactive metal is reactive with a fluid to produce a
reaction product having a volume greater than the reactive metal; and
a washout prevention element actuatable to prevent at least a portion of the reaction
10 product from flowing away from the location.
11. The apparatus of claim 10, wherein the washout prevention element comprises a cup seal.
- 15 12. The apparatus of claim 10, wherein the washout prevention element comprises a swellable elastomer.
13. The apparatus of claim 10, wherein the washout prevention element comprises an absorbent polymer.
- 20 14. The apparatus of claim 13, wherein the washout prevention element further comprises a bladder.
15. The apparatus of claim 10, wherein the washout prevention element comprises an
25 inflatable bladder and a gas-emitting material.
16. The apparatus of claim 10, wherein the washout prevention element comprises two rows of petals.
- 30 17. A system for forming a seal in a wellbore, the system comprising:
an expandable metal sealing element comprising a reactive metal and disposed on a
conduit in a location, wherein the reactive metal is reactable with a fluid to produce a reaction
product having a volume greater than the reactive metal,

a washout prevention element and actuatable to prevent at least a portion of the reaction product from flowing away from the location, and
the conduit disposed in the wellbore.

5 18. The system of claim 17, wherein the washout prevention element comprises a cup seal.

19. The system of claim 17, wherein the washout prevention element comprises an inflatable bladder and a gas-emitting material.

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20. The system of claim 17, wherein the washout prevention element comprises two rows of petals.

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