Claims

What is claimed is:

1. A downhole device for a wellbore comprising:

a body portion sized and shaped to fit within a side pocket of a completion string; and

a first end that is sized and shaped to couple to a downhole tool for removing from, and inserting the downhole device into, the side pocket of the completion string while the completion string is downhole, wherein the downhole device is an electronic device.

2. The downhole device of claims 1 or 12, wherein the downhole device is a sensor.

3. The downhole device of claims 1 or 12, wherein the downhole device comprises a generator for powering itself.

4. The downhole device of claim 1 or 12, wherein the downhole device is a valve assembly.

5. The downhole device of claim 4, wherein the valve assembly includes a generator for powering the valve assembly.

6. The downhole device of claims 4 or 5, further comprising a screen assembly positioned around at least a portion of the completion string along a length of the

completion string, and wherein the valve assembly includes a pair of seals for defining a seal between the valve assembly and the completion string.

7. The downhole device of claims 1 or 12, wherein the downhole device is a downhole power generator for powering an additional downhole device.

8. The downhole device of claim 7, the downhole device further comprising a first pair of power couplers for forming a power coupling connection to a second pair of power couplers positioned on the completion string, wherein the first pair and the second pair of power couplers are capacitive couplers or inductive couplers.

9. The downhole device of claims 1 or 12, wherein the downhole device is an actuator.

10. The downhole device of claim 1, wherein the downhole device is powered by a downhole power generator.

11. The downhole device of claim 12, wherein the downhole power generator is positioned within an additional side pocket of the completion string and coupled to the downhole device via an electric line.

12. A wellbore assembly comprising:

the downhole device of claim 1; and

the completion string, wherein the completion string includes the side pocket, and

wherein the downhole device is positioned within the side pocket of the completion string.

13. The wellbore assembly of claim 12, wherein the downhole device is secured in the side pocket by an outer wall of the completion string and an inner wall of the side pocket.