CLAIMS

What is claimed is:

1. A dynamic hang-off assembly for supporting a riser string from an off-shore drilling rig including a dynamic tensioning system, including:

a housing dynamically supportable by the tensioning system, the housing including a passage through the housing;

an adapter positionable within the housing passage, the adapter including a profile on an outer surface, the riser string being attachable to the adapter; and

the housing further including a locking mechanism actuatable to engage the adapter profile and secure the adapter to the housing;,

wherein the assembly dynamically supports the riser string when the housing is supported by the tensioning system, the riser string is attached to the adapter, and the adapter is secured in the housing.

2. The dynamic hang-off assembly of claim 1, further comprising more than one locking mechanism.

3. The dynamic hang-off assembly of claim 2, wherein the locking mechanisms are hydraulically actuated.

4. The dynamic hang-off assembly of claim 1, wherein the housing is ring-shaped.

5. The dynamic hang-off assembly of claim 1, wherein the adapter profile extends around the outer surface of the adapter.

6. The dynamic hang-off assembly of claim 1, wherein the housing comprises a tension ring of the dynamic tensioning system.

7. An off-shore drilling rig including:

a platform including a moon pool;

a riser string;

a dynamic tensioning system;

a dynamic hang-off assembly including:

a housing dynamically supportable by the tensioning system, the housing including a passage through the housing;

an adapter positionable within the housing passage, the adapter including a profile on an outer surface, the riser string being attachable to the adapter; and

the housing further including a locking mechanism engageable with the adapter profile to secure the adapter to the housing; and

wherein the assembly is capable of dynamically supporting the riser string.

8. The off-shore drilling rig of claim 7, further comprising more than one locking mechanism.

9. The off-shore drilling rig of claim 8, wherein the locking mechanisms are hydraulically actuated.

10. The off-shore drilling rig of claim 7, wherein the housing is ring-shaped.

11. The off-shore drilling rig of claim 7, wherein the adapter profile extends around the outer surface of the adapter.

12. The off-shore drilling rig of claim 7, wherein the dynamic tensioning system comprises a tension ring and the tension ring comprises the housing of the dynamic hang-off assembly.

13. A drilling system for an off-shore drilling rig including:

a riser string;

a dynamic tensioning system;

a dynamic hang-off assembly including:

a housing dynamically supportable by the tensioning system, the housing including a passage through the housing;

an adapter positionable within the housing passage, the adapter including a profile on an outer surface, the riser string being attachable to the adapter; and

the housing further including a locking mechanism engageable with the adapter profile to secure the adapter to the housing; and

wherein the tensioning system is capable of dynamically supporting the riser string.

14. The system of claim 13, further comprising more than one locking mechanism.

15. The system of claim 14, wherein the locking mechanisms are hydraulically actuated.

16. The system of claim 13, wherein the housing is ring-shaped.

17. The system of claim 13, wherein the adapter profile extends around the outer surface of the adapter.

18. The system of claim 13, wherein the dynamic tensioning system comprises a tension ring and the tension ring comprises the housing of the dynamic hang-off assembly.

7. A method of dynamically supporting a riser string from an offshore drilling rig, comprising:

detaching the riser from a diverter while maintaining the remaining portion of the riser string intact;

attaching a riser adapter to the riser string;

locking a housing to the riser adapter; and

dynamically supporting the riser by dynamically applying tension to the housing.

8. The method of claim 7, wherein attaching a riser adapter to the riser string comprises attaching a riser adapter to a flex joint that is part of the riser string.

9. The method of claim 7, wherein locking the housing to the riser adapter comprises locking a tension ring of a dynamic tensioning system to the adapter.

10. The method of claim 7, wherein dynamically supporting the riser comprises dynamically applying tension to the housing with a dynamic tensioning system.