CLAIMS

1. An assembly for transferring fluids between a vessel and a turret structure mounted in said vessel for a rotation around a substantially vertical turret axis, wherein said turret structure comprises a swivel having at least one fluid path and wherein the fluid path is connected with one end of a fluid piping of which the second end is connected to the vessel, wherein the assembly further comprises a flexible bridge member connecting a part of the turret structure with the vessel, wherein a rotation of said part of the turret structure around the turret axis is substantially locked to the rotation of the vessel while a relative displacement between said part of the turret structure and the vessel is allowed, and wherein said bridge member supports the fluid piping to substantially take away the loads from the fluid piping on the said swivel and its outlets.

2. The assembly according to claim 1, wherein the bridge member is provided with at least one hinge member for allowing said relative displacement between said part of the turret structure and the vessel or the structure fixed to the vessel.

3. The assembly according to claim 2, wherein the at least one hinge member is positioned at an end of the bridge member connecting to said part of the turret structure or connecting to the vessel or the structure fixed to the vessel.

4. The assembly according to claim 2, wherein the at least one hinge member is positioned intermediate two opposite ends of the bridge member.

5. The assembly according to claim 2, wherein the hinge member comprises a classic hinge or by a weakened part of the

bridge member or a component connected therewith simulating a hinge.

6. The assembly according to claim 1, wherein the bridge member is sufficiently long for achieving its flexibility for allowing said relative displacement between said part of the turret structure and the vessel or the structure fixed to the vessel without the need for hinge members.

7. The assembly according to claim 1, wherein said part of the turret structure is a swivel tower mounted around the swivel and engaging the remainder of the turret structure by a swivel tower bearing, such that the swivel tower does not follow a rotation of the remainder of the turret structure around the turret axis.

8. The assembly according to claim 7, wherein the bridge member engages the swivel tower in such a manner that a rotation of the swivel tower around the turret axis is locked to the rotation of the vessel.

9. The assembly according to claim 7, wherein the swivel tower is connected to the vessel by a torsion lock mechanism which substantially ensures that the swivel tower and the vessel rotate in unison.

10. The assembly according to claim 7, wherein the fluid piping is attached to the swivel tower in a stationary manner to substantially take away the loads from the fluid piping on the said swivel and its outlets.

11. The assembly according to claim 7, wherein the fluid piping connects to the swivel through a piping loop present in or around the swivel tower.

12. The assembly according to claim 7, wherein the swivel tower bearing is located above the level of a fluid inlet of the swivel.

13. The assembly according to claim 7, wherein the swivel tower bearing is located below the level of a fluid inlet of the swivel.

14. The assembly according to claim 7, wherein the swivel tower bearing is located substantially at the level of a fluid inlet of the swivel.

15. The assembly according to claim 7, wherein the bridge member or part thereof rotates around a vertical axis.

16. The assembly according to claim 15, wherein the bridge member is connected to said structure fixed to the vessel through a joint allowing rotations but preventing translations of the bridge member relative to said structure fixed to the vessel.

17. The assembly according to claim 7, wherein the swivel tower bearing is positioned on a swivel base part.

18. The assembly according to claim 1, wherein said part of the turret structure is defined by rotating part(s) of the swivel.

19. The assembly according to claim 18, wherein the bridge member engages the rotating parts of the swivel in such a manner that their rotation around the turret axis is substantially locked to the rotation of the vessel.

20. The assembly according to claim 18, wherein the rotating part(s) of the swivel are substantially locked in rotation with the vessel by a torsion lock mechanism.