CLAIMS

1. Floating LNG plant (1, T, 100) comprising a converted LNG carrier with a hull and a plurality of LNG storage tanks (4, 104) wherein in that the floating LNG plant (1, T, 100) comprises:

at least one sponson (2, 2', 3, 3', 102, 103) on the side of the hull, for creating additional hull volume, process equipment (110) for LNG processing on the floating LNG plant (1, 1', 100), and a storage reservoir for storing fluids separated during the LNG processing, wherein said storage reservoir is formed in a space in the interior of the at least one sponson under additional deck space created by the adding of the at least one sponson (2, 2', 3, 3', 102, 103) on the side of the hull, wherein the space in the interior of the at least one sponson is combined with space reserved for the ballast tank of the original LNG carrier.

2. Floating LNG plant (1, T, 100) according to claim 1, wherein the at least one sponson of the floating LNG plant (1, T, 100) provides double hull protection.

3. Floating LNG plant (1, T, 100) according to any of claims 1-2, wherein the process equipment (110) for LNG processing on the floating LNG plant (1, T, 100) is installed on the additional deck space and wherein a part of the process equipment weight is supported by the existing vessel with the outboard process equipment supports connected to the at least one sponson (2, 2', 3, 3').

4. Floating LNG plant (1, T, 100) according to claim 3, wherein the sponson (2, 2', 3, 3', 102, 103) is used for supporting LNG transfer devices (111) for loading or unloading LNG.

5. Floating LNG plant (1, T, 100) according to claim 3, wherein the LNG plant is provided with two sponsons (2, 2', 3, 3', 102, 103) each on one side of the vessel, the first sponson (2, 2', 102) is used for supporting LNG transfer devices (111) and the second sponson (3, 3', 103) is used for supporting LNG process equipment (110).

6. Floating LNG plant (1, T, 100) according to claim 4 or 5, wherein the sponson (2, 2', 3, 3', 102, 103) is used for storage of a floating offloading hose (19).

7. Floating LNG plant (1, T, 100), according to any of the claims 1-6, wherein a power generation unit is placed within the sponson (2, 2', 3, 3', 102, 103).

8. Floating LNG plant (1, T, 100) according to any of the claims 1-7, wherein the LNG plant (1, T, 100) further comprises a mooring system and a fluid transfer system, the fluid transfer system including a swivel and piping connecting the swivel to process equipment for LNG processing.

9. Floating LNG plant (1, T, 100) according to claim 8, comprising an external turret (10) in order to allow the floating LNG plant (1, T, 100) to be weathervaning moored to the seabed via said external turret (10).

10. Floating LNG plant (1, T, 100) according to claim 8, comprising an offloading buoy in order to allow the floating LNG plant (1, T, 100) to be weathervaning moored to the seabed via said offloading buoy.

11. Floating LNG plant (1, T, 100) according to any of the preceding claims wherein the outer shell of the at least one sponson (2, 2', 3, 3', 102, 103) is provided with a collision protection (40).

12. Floating LNG plant (1, T, 100) according to claim 11, wherein the outer shell of the at least one sponson (2, 2', 3, 3', 102, 103) is protected against collision damage using SPS.

13. Method for converting a LNG carrier into a Floating LNG plant (1, T, 100), wherein the LNG carrier comprises at least a hull, a plurality of LNG storage tanks (4, 104) and at least one ballast tank for stabilizing the LNG carrier and wherein the method comprises the steps of:

adding at least one sponson (2, 2', 3, 3', 102, 103) on the side of the hull, for creating additional hull volume, and creating a storage reservoir for storing fluids separated during the LNG processing in a space in the interior of the at least one sponson, wherein the space in the interior of the at least one sponson is combined with space reserved for the ballast tank of the original LNG carrier.

14. Method according to claim 13, further comprising the step of installing process equipment (110) for LNG processing on the vessel on the additional deck space created by the adding of the at least one sponson (2, 2', 3, 3', 102, 103) on the side of the hull.

15. Method according to claim 14, wherein a part of the process equipment weight is supported by the existing vessel with the outboard process equipment supports connected to the at least one sponson (2, 2', 3, 3').

16. Method according to any one of preceding claims 13 - 15, wherein the method comprises the step of providing the outer shell of the at least one sponson (2, 2', 3, 3', 102, 103) with a collision protection (40).