

## **Corner structure of a sealed and thermally insulating tank for storing a fluid**

### **ABSTRACT**

The invention relates to a corner structure which is suitable for a sealed and thermally insulating tank for storing a fluid comprising a secondary thermal insulation barrier which is retained on a carrier structure, a secondary sealing membrane, a primary thermal insulation barrier and a primary sealing membrane which is intended to be in contact with the fluid contained in the tank, the corner structure comprising:

- a first panel and a second panel (1, 2) forming a corner of the secondary thermal insulation barrier, and comprising an external face intended to move opposite the carrier structure and an internal face;

- a corner arrangement (8, 9, 10) of the secondary sealing membrane, which arrangement is fixed to the first and second panels (1, 2);

- a first insulating block and a second insulating block (13, 14) of a primary thermal insulation barrier which are fixed to the first and second panels (1, 2), respectively, and which rest against the corner arrangement (8, 9, 10) of the secondary sealing membrane; and

- a corner (15) of a primary sealing barrier comprising a first wing and a second wing (15a, 15b) which are fixed to the first and second insulating blocks (1, 2), respectively; wherein:

- the first and second panels (1, 2) each comprise a metal plate which is fixed to the internal face thereof and which carries a fixing member for an insulating block; and

- the corner arrangement of the secondary sealing membrane is of metal, has openings for the introduction of the fixing members for the insulating blocks and is welded, at the periphery of the openings, to the metal plates which carry the fixing members so as to ensure the sealing of the secondary sealing membrane.

**Figure to be published: 9**