

Title (en)  
CLAMPING ASSEMBLY

Publication  
**EP 0309683 B1 19910102 (DE)**

Application  
**EP 88112529 A 19880802**

Priority  
DE 3732964 A 19870930

Abstract (en)  
[origin: US4881595A] In a clamping connection between a plastic water tank equipped with at least one flange and a heat-exchanger tube sheet carrying a deformable edge region, an elastic sealing device being retained therebetween under prestress, and the deformable edge region, before its deformation, extends parallel to the outer contour of the flange and, after its deformation to make the clamping connection, it has first partial regions deformed in an approximately wave-shaped manner over the flange of the plastic water tank, and non-deformed further partial regions extending parallel to the outer contour of the flange. The first partial regions deformed over the flange of the plastic water tank make a positive connection, in which the lower edges of the deformed first partial regions rest on the top side of the flange under prestress. To make deformation easier, the deformable first partial regions are cut free parallel to and at a distance from an outer edge at the height of the flange top edge. In order to guarantee a leak-proof connection even with wide production tolerances it is proposed to form on the top side of the flange of the plastic water tank, at least partially, a sloping face in the region of the deformed first partial regions, the sloping face descending toward the outer contour of the flange, and the lower edges of the respective deformed first partial regions being deformed over this sloping face.

IPC 1-7  
**F28F 9/02**

IPC 8 full level  
**F28F 9/02** (2006.01)

CPC (source: EP US)  
**F28F 9/0226** (2013.01 - EP US); **Y10T 403/49** (2015.01 - EP US)

Cited by  
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