CLAIMS

1. A sheet metal part for use in a housing for accommodating devices such as electrical, electronic and optical devices, the sheet metal part comprising a penetrable opening that comprises an area in the metal sheet part that has been weakened by having weakened boundaries, through which penetrable opening the shank of a screw may be provided to bring the penetrable opening from an unpenetrated state to a penetrated state in order to mechanically and/or electrically connect a device or other part to the sheet metal part, wherein the penetrable opening in the unpenetrated state is covered by an airtight coating layer, has a central area configured to accommodate a threaded shank of the screw and a lug extending radially outward from the central area over some distance, and the lug of the penetrable opening is configured to bent back around its connection with the sheet metal part together with the central area without coming loose from the sheet metal part when the penetrable opening is brought in the penetrated state by the shank of the screw.

2. Sheet metal part according to claim 1, wherein the airtight coating layer is provided at ~~a side~~ one or both sides of the sheet metal part ~~from which the screw should be provided~~.

~~3. Sheet metal part according to claim 1 or 2, wherein the airtight coating layer is provided at a side of the sheet metal part that is opposite to the side from which the screw should be provided.~~

~~4~~3. Sheet metal part according to any one of the preceding claims, wherein the central area is circular.

~~5~~4. Sheet metal part according to any one of the preceding claims, wherein the penetrable opening extends over part of a thickness of the sheet metal part or extends over the complete thickness of the sheet metal part.

~~6. Sheet metal part according to any one of the preceding claims, wherein the penetrable opening extends over the complete thickness of the sheet metal part.~~

~~7~~5. Sheet metal part according to any one of the preceding claims, wherein the airtight coating layer has a thickness and the penetrable opening in the unpenetrated state extends over the thickness of the sheet metal part and ~~over~~, optionally, over part of~~,~~ the thickness of the airtight coating layer.

~~8~~6. Sheet metal part according to any one of the preceding claims, wherein the airtight coating layer comprises a coating layer selected from a powder coating layer, a wet paint coating layer, a low-emissivity coating ~~(E~~ layer, an Electro-coating~~)~~ layer, a hot dipped galvanizing layer, a zinc coating layer, and/or a plastic dip coating layer.

~~9~~7. Sheet metal part according to any one of the preceding claims, wherein the lug extends radially outward from the central area over a distance of at least the diameter of the central area of the penetrable opening, more preferably of at least 1.5 the diameter of the central area of the penetrable opening.

~~10~~8. Sheet metal part according to any one of the preceding claims, wherein the penetrable opening comprises one lug only.

~~11~~9. Sheet metal part according to any one of the preceding claims, wherein the lug has rounded edges.

~~12~~10. Sheet metal part according to any one of the preceding claims, wherein the lug is shaped such that the penetrable opening has a shape of a tennis racket and/or has a drop-like shape.

~~13. Sheet metal part according to any one of the preceding claims, wherein the lug is shaped such that the penetrable opening has a drop-like shape.~~

~~14~~11. Sheet metal part according to any one of the preceding claims, wherein the penetrable opening has been provided in the sheet metal part by laser cutting the boundaries of the weakened area to weaken the boundaries by a reduced thickness or by being cut through the complete thickness of the sheet metal part and obtain a flush outer surface between the penetrable opening and other parts of the sheet metal part, and/or by punching the weakened area with a punching tool that has the shape of the area defining the penetrable opening and weaken the boundaries by deforming these boundaries out of a

plane of the sheet metal part.

~~15. Sheet metal part according to any one of the preceding claims, wherein the sheet metal part comprises a protective electrically insulating layer on a side facing a head of the screw to be provided through the penetrable opening, and the head is at a shank side thereof provided with a cutting edge that cuts through the electrically insulating layer when tightening the screw, thereby providing an electrical connection between the screw and the sheet metal part to bring them to the same voltage level or for grounding purposes, wherein, preferably, the airtight layer comprises or is the protective electrically insulating layer.~~

~~16~~12. Sheet metal part according to any one of the preceding claims, wherein the lug of the penetrable opening is configured to be bent back plastically upon tightening the screw.

~~17~~13. Sheet metal part according to any one of the preceding claims, wherein the sheet metal part comprises a plurality of the penetrable openings arranged along a side edge of the sheet metal part.

~~18~~14. Sheet metal part according to one of the preceding claims, wherein the wall thickness of the sheet metal part does not exceed 3 mm, and more preferably does not exceed 1.1 mm.

~~19~~15. Assembly of a sheet metal part according to any one of the preceding claims and a device or other part connected thereto, the connection being provided by a screw with a head from which a shank emanates that is provided through the penetrable opening.

16. Assembly according to claim 15, wherein the sheet metal part comprises a protective electrically insulating layer on a side facing a head of the screw to be provided through the penetrable opening, and the head is at a shank side thereof provided with a cutting edge that cuts through the electrically insulating layer when tightening the screw, thereby providing an electrical connection between the screw and the sheet metal part to bring them to the same voltage level or for grounding purposes, wherein, preferably, the airtight layer comprises or is the protective electrically insulating layer.

~~20~~17. Assembly according to claim ~~19~~15 or 16, wherein the shank is received and tightened in a cavity of the device or other part.

~~21~~18. Housing for accommodating devices such as electrical, electronic and optical devices, comprising at least one sheet metal part according to any one of claims 1-~~18~~14 and/or an assembly in accordance with any one of claims ~~19~~16-~~20~~17.

~~22~~19. Housing according to claim ~~21~~18, wherein the sheet metal part comprises a wall of the housing, selected from an upstanding front, back or corridor wall, a floor wall or a roof wall of the housing.