

Title (en)
AIRTIGHT ELECTRICAL SOCKET

Title (de)
LUFTDICHTE ELEKTRISCHE BUCHSE

Publication
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Application
EP 08718499 A 20080219

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Abstract (en)
[origin: WO2008119871A1] The invention relates to an electrical socket (110) that is water and/or airtight. In particular, the invention relates to a water and/or airtight electrical socket (110) for portable electronic devices (500). The invention involves sealing elements (200, 210, 220 and 230) that are shaped like an arc, and arranged to seal only a portion of the perimeter of the socket-plug interface (300, 310). When this arc element experiences pressure, it will mechanically relay the force caused by the pressure only to that section of the perimeter of the socket- plug interface (300, 310) that it is arranged to seal. It will not relay mechanical forces any further. This way, the mechanical effect of any extra asymmetric pressure will simply be limited to increasing the pressure of the seal in the perimeter section of that particular sealing element (200, 210, 220 and 230), thereby tightening the seal further still. The methods and arrangements of the invention allow the socket opening (100) to be sealed in an water- and/or airtight manner even in asymmetric pressure conditions, for example when pressed with fingers, both when there is no plug (700) in the socket (110) and also when a plug (700) is inside the socket (110).

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