

Title (en)  
Insulation penetration connector

Title (de)  
Isolations-Perforiervorbinder

Title (fr)  
Connecteur à perforation d'isolant

Publication  
**EP 0860899 B1 20020403 (FR)**

Application  
**EP 98410006 A 19980130**

Priority  
FR 9701699 A 19970210

Abstract (en)  
[origin: EP0860899A1] Electrical connector that penetrates insulation, to connect insulated wires to e.g. a plug or an actuator. It includes perforators mounted on a support. These make the connection to the equipment on one side. On the other side, they are moved towards a conductor, cutting through the insulation to complete the connection. In the new design, the perforator includes a spike (27) with cylindrical (28) and conical sections terminating in a point (29). The diameter D of the cylindrical section (28) is linked to the diameter d of the conductors by the relationship  $0.78 (0.91) \times d < D < 1.56 (1.38) \times d$ . This applies to flexible conductors between 0.75 mm<2> and 6 mm<2>. Preferably the cable insulation is polyvinyl chloride.

IPC 1-7  
**H01R 4/24**; **H01R 12/08**; **H01R 12/38**

IPC 8 full level  
**H01R 4/24** (2006.01); **H01R 12/67** (2011.01); **H01R 25/00** (2006.01); **H01R 25/14** (2006.01)

CPC (source: EP US)  
**H01R 4/2406** (2018.01 - EP US); **H01R 25/003** (2013.01 - EP); **H01R 25/142** (2013.01 - EP); **H01R 25/145** (2013.01 - EP)

Citation (examination)  
• EP 0573368 A1 19931208 - MERLIN GERIN [FR]  
• FR 2331167 A1 19770603 - SABIR [FR]

Cited by  
EP1710496A1; DE10133659A1; TWI731648B

Designated contracting state (EPC)  
AT CH DE DK ES GB IT LI SE

DOCDB simple family (publication)  
**EP 0860899 A1 19980826**; **EP 0860899 B1 20020403**; AT E215749 T1 20020415; DE 69804524 D1 20020508; DE 69804524 T2 20020926; DK 0860899 T3 20020722; ES 2175639 T3 20021116; FR 2759499 A1 19980814; FR 2759499 B1 19990312; NO 314739 B1 20030512; NO 980554 D0 19980209; NO 980554 L 19980811

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