

Title (en)

Electrical connector including surge protection for a plurality of circuits and method of making same.

Title (de)

Elektrischer Verbinder mit Schutz gegen Überspannung für mehrere Schaltkreise und dessen Herstellungsverfahren.

Title (fr)

Connecteur électrique incluant la protection contre un excès de tension pour plusieurs circuits, et sa méthode de fabrication.

Publication

EP 0033814 A2 19810819 (EN)

Application

EP 80401536 A 19801029

Priority

US 10448479 A 19791217

Abstract (en)

Electrical connector including surge protection for a plurality of circuits, this connector (10) having a plurality of electrical contacts (300) extending through a connector shell (100) and mounted by insulating members (210, 220) to the shell (100), the insulating members (210, 220) defining a sealed chamber (500) within an intermediate portion of the shell (100); a ground plane (400) is mounted to the shell (100) within the sealed chamber (500) and includes a plurality of apertures (410), each aperture (410) receiving a contact (300) Therethrough with the contact (300) being smaller than the aperture (410) to provide a spacing (415) between the contact (300) and the ground plane aperture (410), the spacing (415) and the sealed chamber (500) being filled with a low pressure inert gas having a small amount of ionizable gas; in response to an electrical potential surge on the contact (300) (e.g., from lightning), the ionizable gas breaks down and allows a arc to pass between the contact (300) and the ground plane (400) to thereby dissipate electrical energy of said electrical potential surge.

IPC 1-7

H01R 13/658

IPC 8 full level

H01R 13/66 (2006.01); **H01R 31/06** (2006.01); **H01T 4/08** (2006.01); **H01R 31/00** (2006.01)

CPC (source: EP)

H01R 13/6666 (2013.01); **H01R 13/713** (2013.01); **H01T 4/08** (2013.01); **H01R 31/00** (2013.01)

Cited by

EP0881457A3; EP0854552A1; FR2754637A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0033814 A2 19810819; **EP 0033814 A3 19810909**; JP S5697981 A 19810807

DOCDB simple family (application)

EP 80401536 A 19801029; JP 17868180 A 19801217