

Title (en)

GAS TUBE FAIL SAFE DEVICE FOR TELEPHONE PROTECTOR MODULES.

Title (de)

BETRIEBSSICHERE GASROHRVORRICHTUNG FÜR SCHUTZMODULE FÜR FERNSPRECHANLAGEN.

Title (fr)

DISPOSITIF DE TUBE A GAZ A SECURITE INTEGREE DESTINE AUX MODULES DE PROTECTION DE TELEPHONES.

Publication

**EP 0471006 A4 19911217 (EN)**

Application

**EP 90907659 A 19900427**

Priority

- US 9002348 W 19900427
- US 47842490 A 19900212
- US 34544689 A 19890501

Abstract (en)

[origin: WO9013904A1] A gas tube fail safe device for elongated three element gas tubes having a centrally disposed electrode and a pair of end electrodes. The device includes an elongated planar body (21) having bent up end edges (26-27) forming end electrical contact terminal insulation sleeves (30-31) forming fusible elements. Centrally disposed tabs (33-34) resiliently engage a pin carried by the center electrode of the gas tube. In a second embodiment, a pair of shorting plates (50-51) overlie an air gap insulative member (60) having lines of small orifices (66) which provide air gaps through which excess voltage surges may arc to provide a backup function equivalent to that of the gas tube.

IPC 1-7

**H01T 1/14**

IPC 8 full level

**H01T 1/14** (2006.01)

CPC (source: EP)

**H01T 1/14** (2013.01)

Citation (search report)

- [Y] US 4649456 A 19870310 - DE LUCA PAUL V [US], et al
- [Y] FR 2622047 A1 19890421 - TUBES LAMPES ELECTRIQ CIE INDL [FR]

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB IT LI SE

DOCDB simple family (publication)

**WO 9013904 A1 19901115**; AT E124814 T1 19950715; DE 69020735 D1 19950810; EP 0471006 A1 19920219; EP 0471006 A4 19911217; EP 0471006 B1 19950705; ES 2074572 T3 19950916; MX 172972 B 19940126

DOCDB simple family (application)

**US 9002348 W 19900427**; AT 90907659 T 19900427; DE 69020735 T 19900427; EP 90907659 A 19900427; ES 90907659 T 19900427; MX 2047190 A 19900426