

Title (en)

Slow-wave circuit assembly for traveling-wave tube and method of manufacturing a slow-wave circuit assembly

Title (de)

Eine Verzögerungsleitung enthaltende Schaltungsanordnung für eine Wanderfeldröhre und Verfahren zum Herstellen einer, eine Verzögerungsleitung enthaltenden Schaltungsanordnung

Title (fr)

Arrangement d'un circuit à ligne à retard pour tube à onde progressive et procédé de fabrication d'un arrangement d'un circuit à ligne à retard

Publication

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Application

EP 95112960 A 19950817

Priority

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- JP 12997795 A 19950529

Abstract (en)

In a slow-wave circuit assembly for a traveling-wave tube according to this invention, an element different from the base material of dielectric support rods (12) for supporting a slow-wave line is implanted into the base material surface of each support rod (12) to a predetermined depth at a predetermined concentration, and the electrical resistance of the surface is lower than the electrical resistance of the base material itself. In addition, the slow-wave circuit assembly for the traveling-wave tube is manufactured such that the element is ion-implanted into the surface of the dielectric support rod (12) to a predetermined depth at a predetermined dose, and then the dielectric support rod (12) is subjected to annealing in a non-oxidizing atmosphere. Therefore, in the slow-wave circuit assembly for the traveling-wave tube, the dielectric support rod (12) is suppressed from being charged in a long-time operation. The manufacturing method is good in reproducibility and assembling properties. <IMAGE>

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CPC (source: EP)

H01J 23/165 (2013.01); **H01J 23/24** (2013.01); **H01J 2223/26** (2013.01)

Citation (applicant)

- US 5038076 A 19910806 - SMITH BURTON H [US], et al
- US 5071055 A 19911210 - GRAULEAU DIDIER [FR], et al
- DE 3235753 A1 19840329 - SIEMENS AG [DE]
- JP H0589788 A 19930409 - NEC CORP

Citation (search report)

- [DYA] FR 2646732 A1 19901109 - RAYTHEON CO [US]
- [DA] DE 3235753 A1 19840329 - SIEMENS AG [DE]
- [XAY] PATENT ABSTRACTS OF JAPAN vol. 015, no. 209 (E - 1072) 28 May 1991 (1991-05-28)

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