

Title (en)  
Coaxial cable manufacturing process

Title (de)  
Herstellungsverfahren für Koaxialkabel

Title (fr)  
Procédé de fabrication de câbles coaxiaux

Publication  
**EP 0797219 A1 19970924 (FR)**

Application  
**EP 97104224 A 19970313**

Priority  
FR 9603526 A 19960321

Abstract (en)  
The method is for manufacturing a coaxial cable which comprises a core (1) made of copper, copper-coated steel to copper-coated aluminium, since the surface conductivity is most important for high frequency transmissions. The outside section of the core is perfectly circular, but this section is obtained by wrapping a flat sheet of conducting material around the surface, the edges being joined together (2,3). A region (4) is formed where a laser fuses the edges together. The metallurgical structure of this joint region is different from that of the rest of the sheet. The core is surrounded by a thin layer of material (5), between 0.04 and 0.08 mm thick, which helps to ensure a low degree of eccentricity for the core. This is surrounded by a thicker insulation material (6) which may be plastic foam. This is enclosed by a thin protective skin (7) and the outer conductor (8) formed from a material similar to that of the core.

Abstract (fr)  
Le procédé de confection d'âme comprend les étapes suivantes : fournir une bande en un matériau électriquement conducteur, former la bande en un tube, les deux bords de la bande étant sensiblement en contact, et la face constituée de cuivre étant à l'extérieur, et souder ensemble les deux bords de la bande formée en tube par soudage laser, pour constituer l'âme (1). De préférence le procédé est réalisé en continu à partir d'une bande continue de grande longueur. Avantageusement, le tube formé et soudé subit un calibrage, puis un traitement de surface destiné à promouvoir l'adhérence de la matière isolante (6) destinée à isoler l'âme par rapport au conducteur extérieur (8) du câble coaxial. <IMAGE>

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Citation (search report)

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- [A] FR 1261740 A 19610519 - WESTERN ELECTRIC CO, et al

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