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(72) Inventor: **Rampalli, Sitaram**  
**14441 Valley View Drive**  
**Orland Park, Illinois 60462(US)**  
Inventor: **Nudd, Hugh R.**  
**19940 Mokena Street**  
**Mokena, Illinois 60448(US)**

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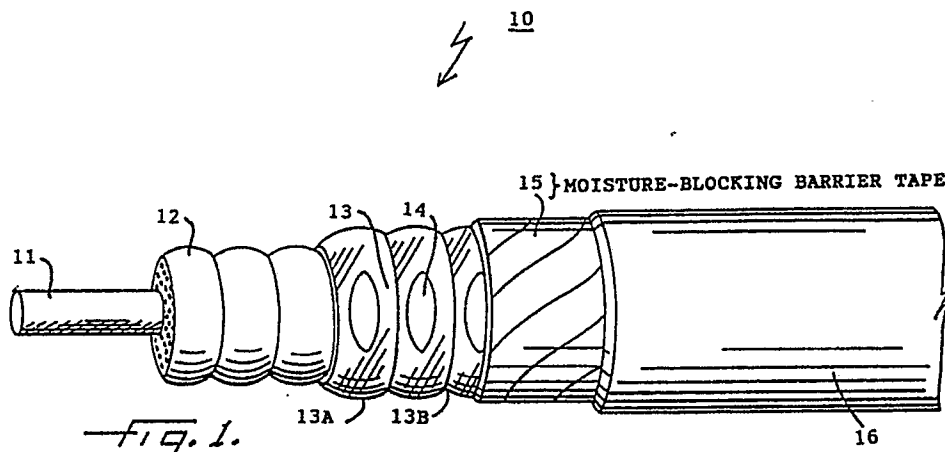
(74) Representative: **Patentanwälte Grünecker,**  
**Kinkeldey, Stockmair & Partner**  
**Maximilianstrasse 58**  
**W-8000 München 22(DE)**

(71) Applicant: **ANDREW A.G.**  
**Postfach 51, Bachliwis 2B**

(54) **Radiating coaxial cable with improved water-blocking characteristics.**

(57) A radiating cable of the foam dielectric type is provided with improved water-blocking characteristics by provision of a barrier tape between an apertured, corrugated outer conductor and the external jacket surrounding the conductor. The barrier tape is wrapped around the outer conductor in such a way as to completely cover the radiating apertures disposed thereupon. The barrier tape is composed of a hygroscopic material which is highly water absorbent and swells up in contact with any water penetrating the cable so as to form a barrier around the aperture

conductor, thereby preventing ingress of water into the apertures of the conductor. The barrier tape is particularly effective in restricting longitudinal migration of water by retaining water that contacts the tape in a high localized fashion. The improved radiating cable construction is particularly adapted to be used in conjunction with a layer of fire-retardant tape disposed over the water-blocking tape to realize a cable which is highly resistant to both water and fire and yet is economical and easy to manufacture and use.



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## EUROPEAN SEARCH REPORT

Application Number

EP 90 12 1045

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
Y,D	EP-A-0 308 111 (ANDREW CORPORATION) * abstract; figures 1, 2 & US-A-4800351 * - - - -	1-10	H 01 Q 13/20 H 01 B 7/28
Y	EP-A-0 024 631 (DOW CHEMICAL) * page 12, lines 9 - 22 ** claims 1-16; figure 3 * - - - -	1-10	
A	EP-A-0 246 726 (PIRELLI CABLE) * page 5, line 42 - page 6, line 58; figure 4 * - - - -	1-3,6-8	
A	FR-A-2 401 532 (BICC) * claims 1-8; figure * - - - - -	1,5,6,10	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl.5)  H 01 Q H 01 B  -
Place of search  The Hague		Date of completion of search  23 May 91	Examiner  ANGRABEIT F.F.K.
<div>CATEGORY OF CITED DOCUMENTS</div> <div>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention</div> <div>E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- &amp; : member of the same patent family, corresponding document</div>			