

Title (en)  
low and middle voltage electric cable

Title (de)  
elektrische Hochspannungs- und mittelspannungskabel

Title (fr)  
Câble électrique à moyenne ou haute tension

Publication  
**EP 2498263 A1 20120912 (FR)**

Application  
**EP 12158603 A 20120308**

Priority  
FR 1151892 A 20110308

Abstract (en)  
The medium or high voltage electric cable (1) comprises an electric conductor (2), a first semiconducting layer (3) surrounding the electric conductor, a second electrically insulating layer (4) surrounding the first semiconducting layer, and a third semiconducting layer (5) surrounding the second electrically insulating layer. The layers are crosslinked layers obtained from a crosslinkable composition including 50-100 parts by weight (pbw) of polyolefin and aliphatic peroxide such as crosslinking agent. The composition comprises an aromatic compound including an aromatic ring. The medium or high voltage electric cable (1) comprises an electric conductor (2), a first semiconducting layer (3) surrounding the electric conductor, a second electrically insulating layer (4) surrounding the first semiconducting layer, and a third semiconducting layer (5) surrounding the second electrically insulating layer. The layers are crosslinked layers obtained from a crosslinkable composition including 50-100 parts by weight (pbw) of polyolefin and aliphatic peroxide such as crosslinking agent. The composition comprises: an aromatic compound including an aromatic ring; a reactive single function adapted to its grafting with the polyolefin; and a crosslinking coagent having identical or different reactive functions, which are adapted to be grafted with the polyolefin and to be crosslinked with the polyolefin and are a vinyl function of  $\text{CH}_2=\text{CH}-$ . The crosslinked layers are electrically insulating layers.

Abstract (fr)  
La présente invention concerne un câble électrique (1) comprenant un conducteur électrique (2), une première couche (3) semi-conductrice entourant le conducteur électrique (2), une deuxième couche (4) électriquement isolante, entourant la première couche (3), et une troisième couche (5) semi-conductrice entourant la deuxième couche (4), caractérisé en ce qu'au moins une de ces trois couches (3, 4, 5) est une couche réticulée obtenue à partir d'une composition réticulable comprenant au moins une polyoléfine, caractérisé en ce que la composition comprend en outre un peroxyde aliphatique en tant qu'agent de réticulation.

IPC 8 full level  
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CPC (source: EP KR)  
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Citation (applicant)  
US 5252676 A 19931012 - SUYAMA SHUJI [JP], et al

Citation (search report)  
• [X] EP 0579434 A1 19940119 - NOF CORP [JP]  
• [A] US 6586509 B1 20030701 - BOSTROEM JAN-OVE [SE], et al  
• [X] EP 1156493 A1 20011121 - SAGEM [FR]  
• [A] EP 0111043 A1 19840620 - LICENTIA GMBH [DE]  
• [A] US 5378539 A 19950103 - CHEN MARK C [US]  
• [A] GB 1303334 A 19730117  
• [A] US 2426111 A 19470819 - WILLI MERTENS

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