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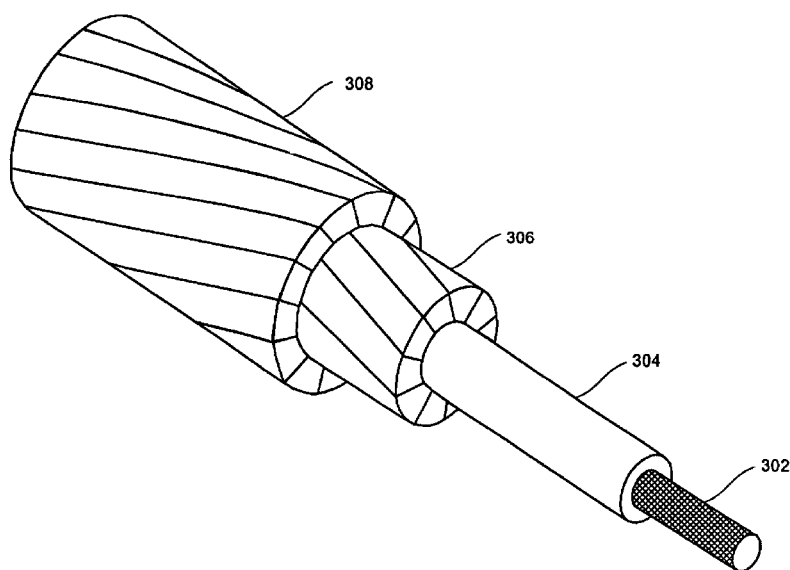
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(54) Title: ALUMINUM CONDUCTOR COMPOSITE CORE REINFORCED CABLE AND METHOD OF MANUFACTURE



(57) Abstract: This invention relates to an aluminum conductor composite core reinforced cable (ACCC) (300) and method of manufacture. An ACCC cable having a composite core (302, 304) surrounded by at least one layer of aluminum conductor (306, 308). The composite core comprises at least one longitudinally oriented substantially continuous reinforced fiber type in a thermosetting resin matrix having an operating temperature capability within the range of about 90 to about 230 °C, at least 50% fiber volume fraction, a tensile strength in the range of about 160 to about 240 Ksi, a modulus of elasticity in the range of about 7 to about 30 Msi and a thermal expansion coefficient in the range of about 0 to about 6×10^{-6} m/m/C.



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