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(57) Abstract :

A skin-compatible conductive fabric comprises of: i) 6.7-10.7% w/w of an active conductive material, ii) 15.5-20.5% w/v of isopropyl alcohol, iii) 0.5-5.5% w/w of natural binder, iv) 13.5-20.5% w/w of Polymeric organosiloxane, v) 12.5-20.5% w/v of chloroform, vi) 30-40%w/v of n-propyl alcohol, and vii) 30-40 cm of cotton thread. The method for synthesis of the fabric includes: a) mixing active conductive material in isopropyl alcohol to form a suspension, a solution is prepared by adding polymeric organosiloxane in chloroform and n-propyl alcohol, b) adding suspension and binder in prepared solution to form mixture, then stirring mixture for 10-15 minutes to obtain a homogenous mixture, and c) dipping cotton thread in homogenous mixture along with stirring and heating at a pre-defined temperature for 15-20 minutes resulting in coating of mixture on thread, removing the coated thread from the mixture and dried to fabricate fabric.

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