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(54) Title: A COATING COMPOSITION FOR FORMING A FLEXIBLE DIELECTRIC COAT WITH HIGH DIELECTRIC PERMITTIVITY

(57) Abstract: The present invention reveals an improved coating composition for the production of necessary dielectric layers with-
in the radio frequency identification (RFID) tag antennas, that can be applied by spraying, printing, or any other suitable graphic
technology. The composition essentially consists of dielectric material such as barium titanate (BaTiO₃), of particles size 48-500 nm,
10.00-40.00% w/w, polyvinylpyrrolidone (PVP) as a polymeric dispersant and polyvinyl alcohol (PVOH) as a polymeric binder per
1.00-10.00% w/w each, a water-miscible solvent such as isopropanol, 30.00-55.00% w/w, and up to 100% w/w of demineralized water.
The composition according to the present invention is used for forming a flexible dielectric coating in the manufacturing of RFID tags.