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Patent Search

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Abstract:

ABSTRACT The present invention relates to a novel capacitor design utilizing dielectric insulation banana fiber paper, aluminum, and zinc electrodes. The capacitor's c involves layers of banana fiber paper serving as z; dielectric material, with aluminum and zinc electrodes sandwiched between the layers. This unique configuration r improved capacitance, dielectric strength, and thermal stability compared to cohventional capacitors. Additionally, the invention encompasses a detailed process for manufacturing banana fiber paper from banana tree trunk sheath fibers, ensuring optimal dielectric properties and environmental sustainability.

Complete Specification

FIELD OF INVENTION

This invention pertains to the field of capacitor technology, specifically focusing on the development and manufacturing of dielectric capacitors utilizing bariana fiber-biased paper as the dielectric material. This innovative approach addresses both performance optimization and environmental sustainabiliw in capacitor design and production.

BACKGROUND

Traditional capacitors commonly employ materials such as plastics or ceramics for dielectric insulation, which can be costly to produce and may pose environmental concerns during manufacturing and disposal. Banana fiber paper has emerged as a sustainable alternative due to its abundance, renewability, and favorable dielectric properties. However; its applicatioh in capacitor design remains limited' Therefore, there is a need for an innovative capacitor configuration that leverages the benefits of banana fiber paper while optimizing performance and cost-efficiency. This invention not only introduces a novel capacitor design but also provides insights into the manufacturing process of banana fiber paper, ensuring quality and consistency in dielectric performance

View Application Status