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Electrophysical setup for the electroforming of polymeric materials onto dielectric materials by reversing the polarity

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The paper presents and implements circuit solutions for power supply of a setup for obtaining nonwoven materials by electroforming on dielectric-coated collectors. By means of several high-voltage commutators, a periodic change of polarity of polymer solution is achieved, which makes it possible to carry out deposition of polymer jet in the absence of charge leakage from the molded material. Typical electrical characteristics of the process are given and possible modifications of the unit are shown.

Keywords: electrospinning, pulse voltage, polymers.

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