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(54) Title: ENVIRONMENTALLY FRIENDLY NATURAL OIL-BASED TONER RESIN

(57) Abstract: A method of synthesizing polyester toner resins comprises: polycondensing polycarboxylic acids, polyols and free fatty acids to form low molecular weight polyester resins with alkenyl group or hydroxyl group or a combination of both; wherein at least one of said polycarboxylic acids, said polyols or said free fatty acids derive from natural oils; crosslinking the polyester via alkenyl group with radical initiator and vinyl monomer or via hydroxyl group with diisocyanate to generate polyester of higher molecular weight and melting point; obtaining a first fraction with a molecular weight ranged between 3000 and 15000 and a second fraction with a molecular weight larger than 15000; and combining said first fraction with said second fraction to form said polyester toner resins.



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