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(54) **LAMINATED PACKAGING MATERIAL,
OUTER-LAYER ADHESIVE, AND METHOD
FOR MANUFACTURING THE SAME**

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(58) **Field of Classification Search**
None
See application file for complete search history.

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(57) **ABSTRACT**

A laminated packaging material, an outer-layer adhesive, and a method for manufacturing the same are provided. The outer-layer adhesive is a polyurethane adhesive formed by a reaction between a polyol material and an isocyanate material. The polyol material is an eco-friendly polyester polyol derived from at least one of a recycled polyester material and a biomass raw material. The eco-friendly polyester polyol has a weight-average molecular weight of between 25,000 and 75,000, a number-average molecular weight of between 18,000 and 55,000, and a glass transition temperature of between -30° C. and 60° C. The isocyanate material includes a first isocyanate component that is an adduct formed by adding toluene diisocyanate (TDI) to a polyol having a functionality of between 2 and 4, and a second isocyanate component that is formed by adding isocyanate to a polyol having a long carbon chain and a functionality of between 2 and 4.

8 Claims, 3 Drawing Sheets

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