



US006312823B1

(12) **United States Patent**
El-Afandi et al.

(10) **Patent No.:** **US 6,312,823 B1**
(45) **Date of Patent:** ***Nov. 6, 2001**

(54) **COMPOSTABLE MULTILAYER STRUCTURES, METHODS FOR MANUFACTURE AND ARTICLES PREPARED THEREFROM**

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(*) Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **09/162,523**

(22) Filed: **Sep. 29, 1998**

Related U.S. Application Data

(63) Continuation of application No. 08/642,529, filed on May 3, 1996, now Pat. No. 5,849,401, which is a continuation-in-part of application No. 08/535,706, filed on Sep. 28, 1995, now Pat. No. 5,849,374.

(51) **Int. Cl.⁷** **B32B 27/08**; B32B 27/10; B32B 27/36; B32B 31/16; B32B 31/30

(52) **U.S. Cl.** **428/480**; 428/481; 264/555; 264/563; 264/564; 264/572; 264/173.11; 264/173.12; 264/173.15; 156/244.11; 156/244.24

(58) **Field of Search** 428/215, 34.2, 428/35.7, 480, 481; 264/555, 563, 564, 572, 173.11, 173.12, 173.15; 156/294.11, 244.24; 528/354

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(57) **ABSTRACT**

A compostable multilayer film includes a core layer having a first surface and a second surface, a first blocking reducing layer covering the first surface of the core layer, and a second blocking reducing layer covering the second surface of the core layer. The core layer comprises a lactic acid residue-containing polymer having a glass transition temperature (T_g) below 20° C. At least one of the first and second blocking reducing layers comprise a semicrystalline aliphatic polyester. The core layer may be peroxide modified polylactide polymer which exhibits bridging between polylactide polymer chains.

24 Claims, 2 Drawing Sheets



