

Title (en)

Method of producing a multilayer coated substrate having improved barrier properties

Title (de)

Verfahren zur Herstellung eines Mehrschicht beschichtete Substrat mit verbesserten Barriereigenschaften

Title (fr)

Procédé de fabrication d'un substrat revêtu par couches multiples avec propriétés de barrière améliorées

Publication

**EP 1416087 B1 20100929 (EN)**

Application

**EP 03023090 A 20031015**

Priority

US 0232938 W 20021015

Abstract (en)

[origin: EP1416087A1] Production of a coated substrate involves contacting a multilayer free flowing curtain with a continuous web substrate. Production of a coated substrate involves contacting a multilayer free flowing curtain with a continuous web substrate. The multilayer free flowing curtain comprises at least two layers imparting at least two different barrier functionalities selected from oil and/or grease barrier, water vapor barrier, water resistance or oxygen barrier functionality. The coated substrate has a kit value of at least 5 (preferably at least 8, especially at least 11) in the flat-test when an oil and/or grease barrier layer is present; has a water vapor transmission rate of less than 50 (preferably less than 40, especially less than 30) g/(m<sup>2</sup>/day) (50% relative humidity, 23[deg]C) when a water vapor barrier layer is present; has a 10 minute Cobb value of less than 20 (preferably less than 12, especially 1.5) g/m<sup>2</sup> when water resistance layer is present; and has an oxygen transmission rate of less than 200 (preferably less than 150, especially less than 100) cm<sup>2</sup>/(m<sup>2</sup>/24 hour/bar) (1 atm, 23[deg]C, 90% relative humidity) when an oxygen barrier layer is present.

IPC 8 full level

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CPC (source: EP)

**D21H 19/82** (2013.01); **D21H 23/48** (2013.01); **B05C 9/06** (2013.01)

Cited by

US9200409B2; EP3943661A1; US7473333B2; CN105665222A; US9903072B2; US11504952B2; US11220788B2; WO2005028750A1; WO2008148934A1; US11549216B2; WO2010042162A1; WO2022049286A1; EP3733406B1; EP3286378B1; EP1664219A2

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**EP 1416087 A1 20040506**; **EP 1416087 B1 20100929**; AT E483065 T1 20101015; AU 2002335033 A1 20040504; BR 0305415 A 20040615; BR 0305415 B1 20131210; CN 1323766 C 20070704; CN 1500563 A 20040602; DE 60334356 D1 20101111; JP 2004148307 A 20040527; JP 4903359 B2 20120328; WO 2004035929 A1 20040429

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