

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/(m²/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/m² when water resistance layer is present; and has an oxygen transmission rate of less than 200 (preferably less than 150, especially less than 100) cm²/(m²/24 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)

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Cited by

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

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