

Title (en)

Paper material and paper cup made therefrom

Title (de)

Papiermaterial und daraus hergestellter Papierbecher

Title (fr)

Matériau de papier et gobelet en papier fabriqué à partir de celui-ci

Publication

EP 2719825 A1 20140416 (DE)

Application

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Priority

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Abstract (en)

The material comprises a paper substrate and a coating having: middle coating, which comprises 40-90 wt.% of pigment, 20-55 wt.% of a binder and 0-5 wt.% of additives; and barrier coating comprising 0-20 wt.% of pigment, 80-100 wt.% of binder and 0-5 wt.% of additives. A center line is located between the paper substrate and the barrier coating, where the pigments, binder, and the additives in each line are same or different. The coating is free of polyethylene and is applied on both sides of the paper substrate. The material comprises a paper substrate and a coating having: middle coating, which comprises 40-90 wt.% of pigment, 20-55 wt.% of a binder and 0-5 wt.% of additives; and barrier coating comprising 0-20 wt.% of pigment, 80-100 wt.% of binder and 0-5 wt.% of additives. A center line is located between the paper substrate and the barrier coating, where the pigments, binder, and the additives in each line are same or different. The coating is free of polyethylene and is applied on both sides of the paper substrate. The material further comprises a primer applied between the paper substrate and the center line, where the primer comprises 75-95 wt.% of pigment, 5-20 wt.% of binder and 0-5 wt.% of additives. The middle coating, the barrier coating and the primer occupies 2-25 g/m², 2-22 g/m² and 2-20 g/m² of the entire coating respectively. The paper substrate comprises highly-glued paper having less than 10 wt.% of ash, 90-99 wt.% of pulp and 1-3 wt.% of sizing agent. The substrate further comprises 90-100 wt.% of short fiber, based on total weight of the pulp, and 40-60 wt.% alkyl ketene dimer and 40-60 wt.% of rosin based on the total weight of the sizing agent. The pigment of the middle coating comprises 50-100 wt.% of additional inorganic filler, and 0-50 wt. of clay. The glass transition temperature of the binder of the middle coating is -20[deg] c to 30[deg] C. The binder of the middle coating is a copolymer formed by reacting styrene and an ethylenically unsaturated monomer. The barrier coating is formed by coating the middle coating with an aqueous polymer or copolymer. The paper material is a heat sealable paper material. An independent claim is included for a method for making a paper material.

Abstract (de)

Die vorliegende Erfindung betrifft ein polyethylenfreies, gestrichenes Papiermaterial, umfassend ein Papiersubstrat und eine Beschichtung, wobei die Beschichtung einen Mittelstrich und einen Barrierestrich umfasst, wobei sich der Mittelstrich zwischen dem Papiersubstrat und dem Barrierestrich befindet, wobei die Pigmente, Bindemittel und die einen oder mehreren Zusatzstoffe in jedem Strich gleich oder verschieden sein können, sowie ein Verfahren zur Herstellung des Papiermaterials und geformte Artikel daraus.

IPC 8 full level

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Citation (search report)

- [I] WO 9605054 A1 19960222 - INT PAPER CO [US]
- [X] DATABASE WPI Week 199734, Derwent World Patents Index; AN 1997-370169, XP002694283

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