



(51) International Patent Classification:

*D21H 19/20* (2006.01)     *D21H 19/22* (2006.01)  
*D21H 27/10* (2006.01)     *D21H 21/16* (2006.01)

(21) International Application Number:

PCT/EP2013/001932

(22) International Filing Date:

2 July 2013 (02.07.2013)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

EP 12004929     3 July 2012 (03.07.2012)     EP

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,

BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

3 April 2014



WO 2014/005697 A3

(54) Title: A RECYCLABLE SHEET MATERIAL AND A CONTAINER THEREOF

(57) Abstract: The present invention relates to a recyclable sheet material and a container, preferably cup, formed of such recyclable sheet material comprising 1a) a paper board coated with a water barrier coating on at least one of its uncoated surfaces having a smoothness of equal or less than 500 ml/min according to Bendtsen ISO 8791-2 or 1b) a paper board which is coated on at least one of its uncoated surfaces with a first surface coating comprising at least one mineral pigment and at least one polymeric binder, preferably with polar groups, said coated surface having a smoothness of 100 ml/min or less according to Bendtsen ISO 8791-2 and on top of said first surface coating a water barrier coating, wherein said water barrier coatings being based on at least one polymer having a melting point of at least 120 °C is applied in an amount of providing a COBB value of the water barrier coated paper board of equal or less 8 g/m<sup>2</sup> per 600 sec and a surface energy equal or greater 38 mJ/m<sup>2</sup> at 20 °C (test liquid:water) and 2) optionally a sealable coating based on at least on polymer with polar groups.

**INTERNATIONAL SEARCH REPORT**

International application No  
PCT/EP2013/001932

A. CLASSIFICATION OF SUBJECT MATTER  
INV. D21H19/20 D21H27/10 D21H19/22 D21H21/16  
ADD.  
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED  
Minimum documentation searched (classification system followed by classification symbols)  
D21H  
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT		
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Y	page 2, line 30 - page 3, line 2; claims 1-22; examples 1-9	1
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Y	paragraphs [0020], [0030] - [0039], [0070]; claims 1-35	1
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Y	paragraph [0046]; claims 1-20; examples 1-4	1
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Further documents are listed in the continuation of Box C.

See patent family annex.

\* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search <b>30 January 2014</b>	Date of mailing of the international search report <b>06/02/2014</b>
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer <b>Karlsson, Lennart</b>
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