

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
03 March 2022 (03.03.2022)



(10) International Publication Number
WO 2022/043405 A1

(51) International Patent Classification:

B32B 27/30 (2006.01) **C08K 5/098** (2006.01)
B32B 27/10 (2006.01) **C08K 5/20** (2006.01)
B32B 23/08 (2006.01) **C08K 5/3412** (2006.01)
B32B 27/22 (2006.01) **C08L 29/04** (2006.01)
C08K 5/053 (2006.01)

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))

(21) International Application Number:

PCT/EP2021/073548

(22) International Filing Date:

25 August 2021 (25.08.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

20192950.2 26 August 2020 (26.08.2020) EP

(71) Applicant: **AQUAPAK POLYMERS LIMITED**

[GB/GB]; Hollymoor Point, Hollymoor Way, Rubery,
Birmingham B31 5HE (GB).

(72) Inventors: **WILLIAMS, John**; Comdon View, Chirbury

Shropshire SY15 6UD (GB). **GRIFFITHS, Sian**; Awel-
fryn, Llewelyn Avenue, Glan Conwy, Glan Conwy, Con-
wy LL28 5LU (GB). **ASHWORTH, Robert**; 2 Ashdown
Close, Colwyn Bay, Conwy LL28 5YX (GB). **MEAD-
OWS, David Lee**; Holmside Cottage, Hartpury Gloucester-
shire GL19 3BT (GB).

(74) Agent: **BROWNE, Robin Forsythe**; Hepworth Browne,

15 St Pauls Street, Leeds Yorkshire LS1 2JG (GB).

(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, DJ, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN,
KP, KR, KW, KZ, LA, LC, LK, LR, LS, 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,
SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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, ST, 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,

(54) Title: POLYVINYL ALCOHOL COATED CELLULOSIC PRODUCTS

(57) Abstract: A method of manufacture of a coated material comprising the steps of: providing a cellulosic substrate; melting a polyvinyl alcohol polymer, wherein the polyvinyl alcohol polymer has a degree of hydrolysis of 90% or greater and a melting point in the range of 180°C to 225°C; extruding the melted polyvinyl alcohol polymer to form a molten polyvinyl alcohol polymeric film; applying the molten film directly to the surface of the substrate; and allowing the film to solidify on the surface to form a coated material.

WO 2022/043405 A1