

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

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2024/069244 A1

(43) International Publication Date
04 April 2024 (04.04.2024)

(51) International Patent Classification:

C08J 5/18 (2006.01) B32B 17/10 (2006.01)
C08F 210/02 (2006.01) H01L 31/048 (2014.01)

(21) International Application Number:

PCT/IB2023/020065

(22) International Filing Date:

29 September 2023 (29.09.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/412,127 30 September 2022 (30.09.2022) US
63/412,199 30 September 2022 (30.09.2022) US

(71) Applicant: **BRASKEM S.A.** [BR/BR]; Rua Eteno, 1561,
Complexo Petroquímico de Camaçari, Camaçari - BA
42810-000 (BR).

(72) Inventors: **SANSON, Murilo Lauer**; Rua Lemos Mon-
teiro, 120, 23rd floor, Sao Paulo City - SP 05501-050 (BR).
MOHAMMADI, Hadi; 1735 Market Street, 28th Floor,
Philadelphia, PA 19103 (US). **DOMINGUES JUNIOR,**
Nei Sebastião; Rua Lemos Monteiro, 120, 23rd floor, São
Paulo City - SP 05501 -050 (BR).

(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, CV, CZ, DE, DJ, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG,
KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY,
MA, MD, MG, MK, MN, MU, 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, CV,
GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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))

(54) Title: POLYETHYLENE COPOLYMERS AND TERPOLYMERS FOR SOLAR CELL ENCAPSULATION AND METHODS THEREOF

(57) Abstract: Provided is a film comprising a polymer composition comprising a polymer produced from ethylene, one or more branched vinyl ester monomers, and optionally, vinyl acetate, with an ethylene content in an amount ranging from 40 to 99.9 wt%, and having a melt index (I₂) from 0.1 to 100 g/10 min ASTM D1238 (190°C and load of 2.16 kg). Also provided are a method of producing a film, an article comprising a film, a solar cell encapsulant comprising a film, a laminate comprising a film and a method of manufacturing an article.



WO 2024/069244 A1