

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
30 August 2018 (30.08.2018)



(10) International Publication Number
WO 2018/153808 A1

(51) International Patent Classification:

C08L 53/02 (2006.01) **B65B 53/02** (2006.01)
C08F 297/02 (2006.01) **C08J 5/18** (2006.01)

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

(21) International Application Number:

PCT/EP2018/054004

Published:

— with international search report (Art. 21(3))

(22) International Filing Date:

19 February 2018 (19.02.2018)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

17157206.8 21 February 2017 (21.02.2017) EP

(71) Applicant: **INEOS STYROLUTION GROUP GMBH**

[DE/DE]; Mainzer Landstraße 50, 60325 Frankfurt am
Main (DE).

(72) Inventors: **VERSWYVEL, Michiel**; Pierre Decosterstraat

119, 1000 Brussels (BE). **NIESSNER, Norbert**; Im Haag
17, 67159 Friedelsheim (DE). **WAGNER, Daniel**; Im
Röhrich 67, 67098 Bad Dürkheim (DE). **SCHUSTER,
Michael**; Portugieserring 16, 67167 Erpolzheim (DE).
VERLINDEN, Geert; Steenovenstraat 32, 9190 Stekene
(BE). **VAN-DEN-BOSSCHE, Bart**; Meikeverstraat 15,
2880 Bornem (BE). **KNOLL, Konrad**; Tannhäuserring 71,
68199 Mannheim (DE).

(74) Agent: **JACOBI, Markus**; Isenbruck Bösl Hörschler LLP

Patentanwälte, EASTSITE ONE, Seckenheimer Landstraße
4, 68163 Mannheim (DE).

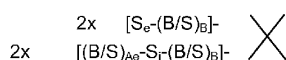
(81) Designated States (unless otherwise indicated, for every

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, 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, 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, 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: **INTRINSICALLY NON-BLOCKING SHRINK SLEEVE MATERIAL**



(57) Abstract: Polymer compositions comprising stiff and tough star shaped styrene buta-
diene block-copolymers A1 and A2 can be used for making shrink films. Block copolymer
A2 preferably has the structure (formula) with hard blocks Se and Si, hard random copolymer
blocks (B/S)_{Ae}, soft random copolymer blocks (B/S)_B coupled by a coupling agent X.

WO 2018/153808 A1