

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
22 February 2024 (22.02.2024)



(10) International Publication Number
WO 2024/038035 A3

(51) International Patent Classification:

C08F 112/08 (2006.01) C07F 9/40 (2006.01)
C08F 120/14 (2006.01) C07F 9/53 (2006.01)
C08F 4/08 (2006.01) C07F 1/02 (2006.01)
C08F 2/06 (2006.01) C09D 125/06 (2006.01)
B01J 27/18 (2006.01) C09D 133/10 (2006.01)
C07F 9/28 (2006.01) C07F 9/30 (2006.01)
C07F 9/32 (2006.01) C07F 9/16 (2006.01)

(21) International Application Number:

PCT/EP2023/072428

(22) International Filing Date:

15 August 2023 (15.08.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/371,670 17 August 2022 (17.08.2022) US

(71) Applicant: **MERCK PATENT GMBH** [DE/DE]; Frankfurt
furter StraÙe 250, 64293 Darmstadt (DE).

(72) Inventors: **RAHMAN, Md S**; c/o EMD Performance Ma-
terials Corp., 70 Meister Avenue, Branchburg, New Jer-
sey 08876 (US). **BOBADE, Sachin**; c/o EMD Performance
Materials Corp., 70 Meister Avenue, Branchburg, New Jer-
sey 08876 (US). **JEONG, EunJeong**; c/o EMD Perfor-
mance Materials Corp., 70 Meister Avenue, Branchburg,
New Jersey 08876 (US). **NG, Edward W.**; c/o EMD Per-
formance Materials Corp., 70 Meister Avenue, Branchburg,
New Jersey 08876 (US). **BASKARAN, Durairaj**; c/o EMD
Performance Materials Corp., 70 Meister Avenue, Branch-
burg, New Jersey 08876 (US).

(74) Agent: **RIPPEL, Hans Christoph**; Patentanwälte Isen-
bruck Bösl Hörschler PartG mbB, Seckenheimer Land-
straÙe 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, 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).

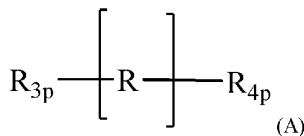
Published:

- with international search report (Art. 21(3))
- 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:

04 April 2024 (04.04.2024)

(54) Title: POLYMER BRUSHES WITH CHAIN-ENDS FUNCTIONALIZED WITH METAL COORDINATING TWO HETERO
ELEMENTS FOR SELECTIVE SURFACE MODIFICATION



(57) Abstract: A polymer of structure (A) with two end group $\text{R}_{3\text{p}}$ and $\text{R}_{4\text{p}}$, and a polymer
chain (R) which has either repeat units of structures (Ip) or (IIp). $\text{R}_{3\text{p}}$ is either a C-1 to C-8
alkyl, a moiety of structure (IIIp), or a moiety of structure (IIIp1). $\text{R}_{3\text{p}}$ is a C-1 to C-8 alkyl
if the repeat unit is (IIp). $\text{R}_{3\text{p}}$ is structure (IIp) or structure (IIIp1) if the repeat unit has (Ip).
 $\text{R}_{4\text{p}}$ is either a terminating moiety such as H, a moiety of structure (IVp), a moiety of structure
(IVp1), or a moiety of structure (IVp2). $\text{R}_{3\text{p}}$ and $\text{R}_{4\text{p}}$ cannot respectively, both simultaneously, be
moieties of structure (IIIp) and (IVp), simultaneously be moieties of structure (IIIp) and (IVp1),
or simultaneously be moieties of structure (IIIp) and (IVp2). The polymer of structure (A) must
contain, one grafting end group moiety selected from structures (IIp), (IVp), (IVp1) or (IVp2).
Composition of this with a solvent are used in DSA processing.

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