

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
27 March 2025 (27.03.2025)



(10) International Publication Number
WO 2025/063899 A1

(51) International Patent Classification:

C07C 247/18 (2006.01) C07F 9/12 (2006.01)
C07C 321/14 (2006.01) C08J 11/06 (2006.01)
C07C 321/28 (2006.01) C08J 11/10 (2006.01)
C07D 493/10 (2006.01) C08K 5/28 (2006.01)

(21) International Application Number:

PCT/SG2024/050606

(22) International Filing Date:

20 September 2024 (20.09.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

10202302676U 21 September 2023 (21.09.2023) SG

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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, 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).

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

Published:

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

(54) Title: A DYNAMIC CROSSLINKER, COVALENT ADAPTABLE NETWORK COMPRISING POLYMER NETWORK CROSSLINKED BY SAID DYNAMIC CROSSLINKER AND RELATED METHODS THEREOF

(57) Abstract: There is provided a dynamic crosslinker comprising at least two aryl azide groups coupled together via one or more dynamic covalent moiety, wherein the dynamic covalent moiety comprises one or more dynamic covalent bonds that reversibly exchange, break and/or form under suitable conditions. Also provided are a covalent adaptable network (CAN) comprising polymer chains coupled to said dynamic crosslinker via dynamic crosslinks, a method of preparing said dynamic crosslinker, a method of preparing said covalent adaptable network (CAN), and a method of recycling said covalent adaptable network (CAN).



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