

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
16 January 2025 (16.01.2025)



(10) International Publication Number
WO 2025/012622 A2

(51) International Patent Classification:
G02B 1/04 (2006.01)

(21) International Application Number:
PCT/GB2024/051768

(22) International Filing Date:
05 July 2024 (05.07.2024)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/526,042 11 July 2023 (11.07.2023) US
2311165.1 20 July 2023 (20.07.2023) GB

(71) Applicant: **COOPERVISION INTERNATIONAL LIMITED** [GB/GB]; Delta Park, Concorde Way, Se-gensworth North, Fareham PO15 5RL (GB).

(72) Inventors: **GIBSON, Ian**; CooperVision International Limited, 36 School Lane, Chandlers Ford Industrial Estate, Eastleigh Hampshire SO53 4LY (GB). **SIMPSON, Laura**; CooperVision International Limited, 36 School Lane, Chandlers Ford Industrial Estate, Eastleigh Hampshire SO53 4LY (GB). **PISKORCZYK, Katarzyna**; CooperVision International Limited, 36 School Lane, Chandlers Ford Industrial Estate, Eastleigh Hampshire SO53 4LY (GB). **MORSLEY, David**; CooperVision International Limited, 36 School Lane, Chandlers Ford Industrial Estate, Eastleigh Hampshire SO53 4LY (GB). **MITCHELL, William**; CooperVision International Limited, 36 School Lane, Chandlers Ford Industrial Estate, Eastleigh Hampshire SO53 4LY (GB). **BROAD, Robert Andrew**; CooperVision International Limited, 36 School Lane, Chandlers Ford Industrial Estate, Eastleigh Hampshire SO53 4LY (GB).

(74) Agent: **BECK GREENER LLP**; Fulwood House, 12 Fulwood Place, London Greater London WC1V 6HR (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, 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:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

Published:

— without international search report and to be republished upon receipt of that report (Rule 48.2(g))



WO 2025/012622 A2

(54) Title: CONTACT LENS FORMULATION AND CONTACT LENS

(57) Abstract: Silicone hydrogel contact lens formulations are described. The formulations have a silicone component and a silicone-free component. The silicone component includes two or three compounds represented by Formula 1, Formula 2, or Formula 3. The silicone-free component includes a methacrylate component and an N-vinyl amide component. The methacrylate component includes hydroxybutyl methacrylate (HOB) and isobornyl methacrylate (IBM). The N-vinyl amide component includes N-vinyl N-methyl acetamide. When the compounds of Formula 1 and Formula 2 are present in the formulations in a specified ratio to each other, providing the HOB and IBM in specific amounts to achieve the specified ratios results in desirable silicone hydrogel contact lenses. The silicone hydrogel contact lenses are also described.