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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
12 September 2025 (12.09.2025)

WIPO | PCT

(10) International Publication Number
WO 2025/186704 A1

(51) International Patent Classification:
A61K 9/00 (2006.01) *C08L 33/24* (2006.01)

(21) International Application Number:
PCT/IB2025/052301

(22) International Filing Date:
03 March 2025 (03.03.2025)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/560,858 04 March 2024 (04.03.2024) US
63/560,860 04 March 2024 (04.03.2024) US

(71) Applicant: **ALCON INC.** [CH/CH]; Rue Louis-D'Affry 6, 1701 Fribourg (CH).

(72) Inventors: **CHANG, Frank**; 1807 Fenton Manor, Cumming, Georgia 30041 (US). **HONG, Ye**; c/o Alcon Research, LLC, 6201 South Freeway, Fort Worth, Texas 76134 (US). **HOLLAND, Troy Vernon**; c/o Alcon Research, LLC, 11460 Johns Creek Parkway, Johns Creek, Georgia 30097 (US). **SNIADY, Adam K.**; c/o Alcon Research, LLC, 11460 Johns Creek Parkway, Johns Creek, Georgia 30097 (US). **JI, Yuyang**; c/o Alcon Research, LLC, 11460 Johns Creek Parkway, Johns Creek, Georgia 30097 (US).

(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, UY, 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))*
— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:
— *with international search report (Art. 21(3))*
— *in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE*

(54) Title: MUCOADHESIVE HYDROPHILIC COPOLYMERS AND USES THEREOF

(57) Abstract: The invention is generally related to a class of water-soluble hydrophilic copolymers each of which comprises a small mole percentage of repeating monomeric units of at least one arylborono-containing vinylic monomer having a pKa of from about 6.4 to about 7.8 and a majority amount of repeating monomeric units of at least one hydrophilic vinylic monomer. The water-soluble hydrophilic copolymers can interact strongly and reversibly with membrane-bound mucins in the eye. When being used in an ophthalmic composition, they can function as a mucoadhesive hydrophilic polymer for prolonging the retention of demulcents and other drugs/comfort agents and also as active ingredients/lubricants due to their high hydrophilicity.

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