

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
27 October 2022 (27.10.2022)



(10) International Publication Number
WO 2022/223518 A1

(51) International Patent Classification:

A61L 27/24 (2006.01) A61L 31/04 (2006.01)
A61L 27/56 (2006.01) A61L 31/14 (2006.01)
A61L 27/52 (2006.01) A23L 13/00 (2016.01)
A61L 27/38 (2006.01)

(21) International Application Number:

PCT/EP2022/060241

(22) International Filing Date:

19 April 2022 (19.04.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

21382331.3 19 April 2021 (19.04.2021) EP

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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, 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, IT, JM, 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, 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, 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, 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:

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



WO 2022/223518 A1

(54) Title: COLLAGEN HYDROGELS USEFUL AS CELL CARRIERS

(57) Abstract: It discloses a collagen hydrogel which comprises a 3D fibrillar structure with micropores obtainable by a process comprising: providing an acidic mass of native Type I collagen fibers dispersed in water in a concentration comprised between 1-15% in weight; b) neutralizing the acidic mass to adjust the pH to physiological pH; and c) applying beta radiation in a range of up to (50) KGy; wherein the acidic mass has a pH comprised between 0.5-5; and fibers, wherein the acidic mass comprises fibers, wherein at least 90% of the total mass of the fibers have a length comprised in a range from (1) μm to 2500 μm and a fiber diameter comprised in a range from 0.1 to 150 μm measured at a pH between (1) and (2). It also discloses a process for its preparation as well as its use as support for cell tissue or as scaffold of cultured meat, as well as the hydrogel for use in biomedical applications.