

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
06 September 2024 (06.09.2024)



(10) International Publication Number
WO 2024/180164 A1

(51) International Patent Classification:

C12C 11/00 (2006.01) C12N 1/18 (2006.01)
C12C 12/04 (2006.01) C12N 3/00 (2006.01)

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

(21) International Application Number:

PCT/EP2024/055170

Published:

— with international search report (Art. 21(3))
— with (an) indication(s) in relation to deposited biological material furnished under Rule 13bis separately from the description (Rules 13bis.4(d)(i) and 48.2(a)(viii))
— with sequence listing part of description (Rule 5.2(a))
— in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE

(22) International Filing Date:

29 February 2024 (29.02.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

23159456.5 01 March 2023 (01.03.2023) EP

(71) Applicant: CARLSBERG A/S [DK/DK]; J.C. Jacobsens Gade 1, 1799 København V (DK).

(72) Inventors: FÖRSTER, Jochen; Halmtorvet 7, 5, 1700 København V (DK). FENNESSY, Ross; Walkürengasse 3/21, 1150 Vienna (AT). KATZ, Michael; c/o Carlsberg A/S, J.C. Jacobsens Gade 1, 1799 Copenhagen V (DK). LARSEN, Isabella Jane; c/o Carlsberg A/S, J.C. Jacobsens Gade 1, 1799 Copenhagen V (DK).

(74) Agent: HØIBERG P/S; Adelgade 12, 1304 Copenhagen K (DK).

(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).

(54) Title: LOW DIACETYL YEAST PROGENY STRAINS

(57) Abstract: The present invention relates to progeny yeast strains with the useful characteristic of producing low levels of diacetyl during fermentation. Said progeny yeast strains may be of the species *Saccharomyces cerevisiae*. Also provided are methods of producing these progeny yeast strains, methods of producing a malt and/or cereal based beverage with these strains, as well as beverages produced by this method.

WO 2024/180164 A1