

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
09 May 2019 (09.05.2019)



(10) International Publication Number
WO 2019/090011 A1

(51) International Patent Classification:

A23L 1/29 (2006.01) A23L 1/305 (2006.01)
A23L 1/30 (2006.01)

Paige; 4909 Abbott Avenue South, Minneapolis, Minnesota 55410 (US). MITACEK, Rachel; 8810 Old Southwick Pass, Alpharetta, Georgia 30022 (US).

(21) International Application Number:

PCT/US2018/058830

(74) Agent: JENKINS, Jihan A. R.; 15407 McGinty Road West, MS 24, Wayzata, Minnesota 55391 (US).

(22) International Filing Date:

02 November 2018 (02.11.2018)

(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, 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, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/581,359 03 November 2017 (03.11.2017) US

(71) Applicant: CARGILL, INCORPORATED [US/US]; 15407 McGinty Road West, MS 24, Wayzata, Minnesota 55391 (US).

(72) Inventors: HAN, Sonia; 1697 Fulham Street, Unit G, Lauderdale, Minnesota 55113 (US). ISMAIL, Pam; 5670 Turtle Lake Road, Shoreview, Indiana 55126 (US). TIES,

(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,

(54) Title: PEA PROTEIN HYDROLYSATE

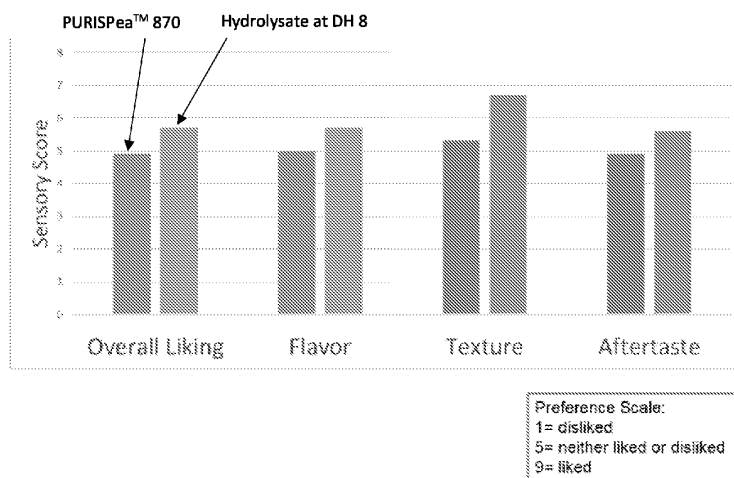


FIG. 1

(57) Abstract: A composition and method of preparing a pea protein hydrolysate includes obtaining a pea protein composition, adding a fungal protease to the pea protein composition, and hydrolyzing the pea protein composition to a degree of hydrolysis of about 4% or greater to obtain a pea protein hydrolysate. In an example, the degree of hydrolysis can range from about 4% to about 25% at a pH ranging from about 5 to about 7.5 and at a temperature ranging from about 30 °C to about 60 °C. The resulting pea protein hydrolysate has a solubility of at least 30% at pH 3.4, a viscosity of at least 65 cPs at pH 3.4, a dispersibility of at least 115 seconds at about neutral pH, and a suspendability of at least 1.5 TSI Global at pH 3.4.

[Continued on next page]

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).

Published:

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