

(19) World Intellectual Property
Organization
International Bureau



WIPO | PCT



(10) International Publication Number

WO 2023/159053 A9

(43) International Publication Date
24 August 2023 (24.08.2023)

(51) International Patent Classification:

A23C 20/00 (2006.01) A23L 27/12 (2016.01)
A23L 19/12 (2016.01) A23P 30/10 (2016.01)

(21) International Application Number:

PCT/US2023/062643

(22) International Filing Date:

15 February 2023 (15.02.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/311,567 18 February 2022 (18.02.2022) US

(71) Applicant: **MCCAIN FOODS LIMITED** [CA/CA]; 8800
Main Street, Florenceville-Bristol, New Brunswick E7L
1B2 (CA).

(72) Inventors: **HOLT, Celia Jane**; East Lodge, Ousden, New-
market, Suffolk CB8 8TW (GB). **DALE, Christopher Si-
mon**; 10 Oatlands Road, Reading, Shinfield RG2 9DW
(GB). **KIRTLEY, Nigel**; 110 Lakewood Drive, Glencoe,
Illinois 60022 (US). **LAUDANO, Raymond J.**; 2101 So.
Meridian Road, Lot # 88, Apache Junction, Arizona 85120
(US). **SPORS, Derek E.**; 2830 Duke Circle, Boulder, Col-
orado 80305 (US). **SPIZZIRRI, Lora Nicolette**; 2012 Ab-
botsford Dr., Inverness, Illinois 60010 (US).

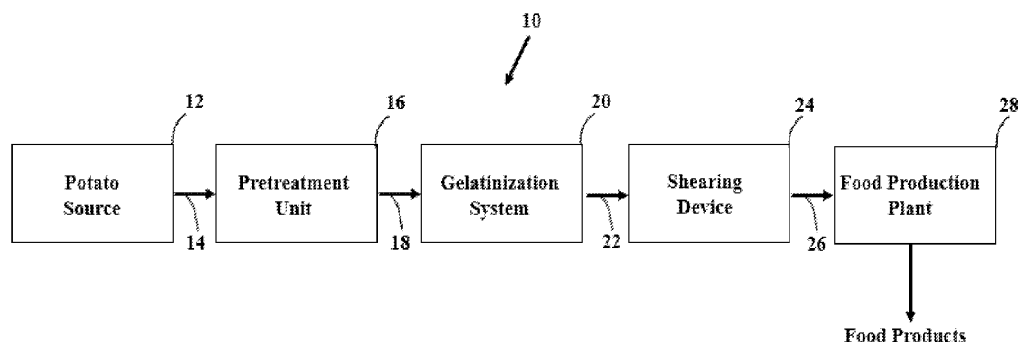
(74) Agent: **KELLY, Kameron D.**; Hovey Williams LLP,
10801 Mastin Blvd, Ste. 1000, 84 Corporate Woods, Over-
land Park, Kansas 66210 (US).

(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, 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: FOOD PRODUCTS FROM ROOT VEGETABLES

FIG. 1



(57) Abstract: A hard cheese analogue may be produced from a root vegetable-derived product. This liquid potato product may be formed from raw potatoes, which are subsequently treated and subjected to a high shear processing step, which allows for the formation of a liquid potato product exhibiting non-Newtonian rheological properties. Subsequently, this liquid potato product may be solidified over time to form the hard cheese analogue. Unlike certain other dairy-free cheese analogues, the present cheese analogue may be sliced, cut, shredded, and melted.

[Continued on next page]

Published:

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

(48) Date of publication of this corrected version:

16 May 2024 (16.05.2024)

(15) Information about Correction:

see Notice of 16 May 2024 (16.05.2024)