



(51) International Patent Classification:

A23J 1/00 (2006.01) A23L 13/00 (2016.01)
A23J 3/14 (2006.01) A23L 33/185 (2016.01)
A23J 3/22 (2006.01)

(21) International Application Number:

PCT/US2022/025620

(22) International Filing Date:

20 April 2022 (20.04.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/177,153 20 April 2021 (20.04.2021) US

(71) Applicant: **IMPOSSIBLE FOODS INC.** [US/US]; 400
Saginaw Drive, Redwood City, California 94063 (US).

(72) Inventors; and

(71) Applicants: **COHN, Elysia** [US/US]; 400 Saginaw Drive,
Redwood City, California 94063 (US). **GRESSWELL,
Carolyn** [US/US]; 400 Saginaw Drive, Redwood City,
California 94063 (US). **PURUSHOTHAMAN, Sowmya**
[US/US]; 400 Saginaw Drive, Redwood City, California
94063 (US). **WYSONG, Kelsie** [US/US]; 400 Saginaw
Drive, Redwood City, California 94063 (US).

(72) Inventors: **BOULET-AUDET, Maxime**; 400 Sagi-
naw Drive, Redwood City, California 94063 (US).
KHATAYEVICH, Dmitriy; 400 Saginaw Drive, Red-
wood City, California 94063 (US). **LI, Xin**; 400 Saginaw
Drive, Redwood City, California 94063 (US). **NAZARI-
NASRABAD, Behzad**; 400 Saginaw Drive, Redwood City,
California 94063 (US). **GOIZUETA, Ines Resano**; 400
Saginaw Drive, Redwood City, California 94063 (US).
SOLOMATIN, Sergey; 400 Saginaw Drive, Redwood
City, California 94063 (US). **WANG, Hui**; 400 Saginaw
Drive, Redwood City, California 94063 (US).

(74) Agent: **BERNARD, Eugene J.** et al.; 1100 Peachtree
Street, Suite 2800, Mailstop: IP Docketing-22, Atlanta,
Georgia 30309 (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, 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,

(54) Title: NON-ANIMAL-BASED WHOLE-CUT FOOD PRODUCTS

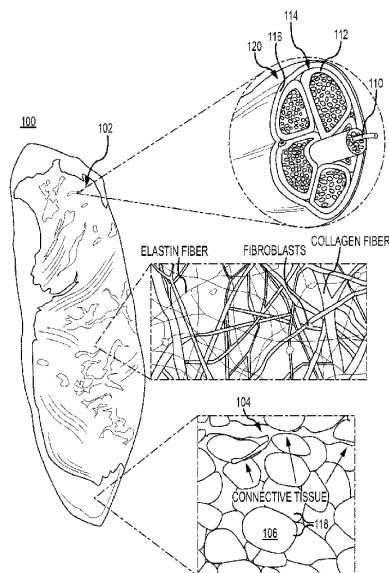


FIG.1

(57) Abstract: Non-animal-based food products are described that simulate whole cuts of meat from an animal. In embodiments, the food products may include a group of aligned fibers, where the fibers have an average fiber diameter of less than or about 500 μm , and where the fibers comprise a non-animal-based protein. The food products may also include at least one binding agent in an interstitial space between at least a portion of the group of aligned fibers. In additional embodiments, the food products may include a scaffolding having one or more membranes that have a three-dimensional porous structure, where the scaffolding comprises one or more non-animal-based proteins. These food products may also include a gelling agent filling one or more pores in the scaffolding, where the gelling agent includes water, at least one non-animal-based protein, and at least one non-animal-based polysaccharide.

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 the identity of the inventor (Rule 4.17(i))*

Published:

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