



New connection on: : 09-08-2017 : 17:05:44 - Last disconnection on: : 09-08-2017 : 15:35:06

V 4.0.0.43847(LP,U,linux) (Rev:41675 2016-01-15 13:33:59 +0100#(D201706)) (RPM D201706)

Welcome to EPOQUE Rebuild under the Production Environment

[EPODOC: SS 6] (cereal or rice or wheat or oat or corn) and (grain or size or mill+ or grind+)

Results in EPODOC **49.109**

[SS 7] 6 and screw and extru+

Results in EPODOC **288**

[SS 8] 7 and temperature and pressure

Results in EPODOC **30**

[SS 9] 8 and steam

Results in EPODOC **4**

[SS 10] ..li



1/4 © EPODOC / EPO

PN - [CN101711556](#) A 20100526

PR - CN2009175747 20091016

AP - CN2009175747 20091016

DT - I

PA - HONG YUAN

TI - **Grain**-vegetable-fruit multi-nutrient **rice** and preparation method thereof

AB - The invention relates to **grain**-vegetable-fruit multi-nutrient **rice** and a preparation method thereof. The **rice** contains the following raw materials by weight percent: 8-92 percent of **cereal**, 3-87 percent of vegetable, 1-56 percent of fruit, 1-1.5 percent of white sugar, 0.5-1 percent of salt, 1-5 percent of sodium alginate, 0-5 percent of konjaku flour, 0-2 percent of alkali and 1-5 percent of palm oil. The preparation method comprises the following steps of: a. putting the raw materials in the proportioning by weight in a **screw extrusion** machine and then mixing until the water content of the mixture is 20-60 percent; b. **extruding** the mixture obtained in the step a, and regulating the **temperature** to 65-120 DEG C, wherein the **pressure** is 20-40MPa, and the **extruding** time is 20-40 seconds; c. squeezing out the **extruded** mixture from small holes with a

plurality of elliptical holes on the section of template, and cutting the squeezed-out mixture into **rice**-shaped particles with a revolving knife matched with the template; and d. polishing and drying the cut **rice** particles through rollers until the water content is 5-8 percent, thereby obtaining the finished product. The **rice** has rich nutrition, simple process, long-time storage property, **steam** resistance, no conglutination and smooth and pliable mouth feeling.

2/4 © EPODOC / EPO

PN - [JP2002337949](#) A 20021127

PNFP - JP3844049B B2 20061108

PR - JP20010177763 20010510

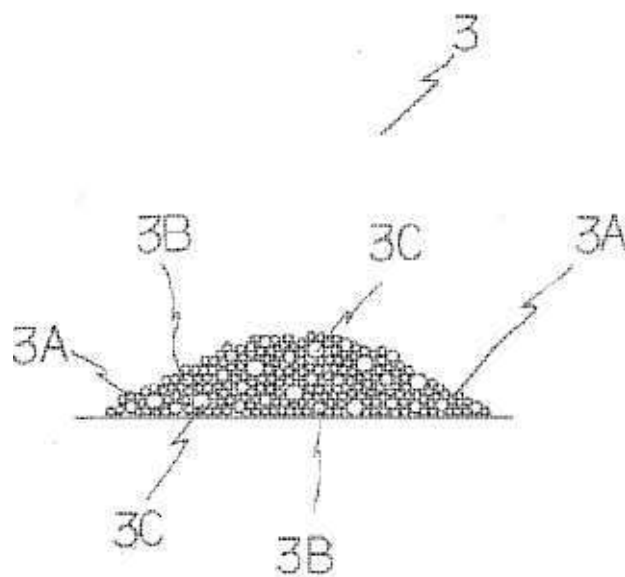
AP - JP20010177763 20010510

DT - I

CCA - [Y02W90/11](#) ; [Y02W90/13](#) ;
[Y02W90/12](#)

FI - B29C44/00; B29C44/00&E;
B29C44/20; B29C44/34;
B29C44/36; B29C44/46;
B29C44/50; B29C44/56;
B29C47/00; B29K1/00;
B29K105/04; B29K29/00;
B65D65/46+BRQ; B65D81/06&A;
B65D81/09; B65D81/12&Z;
C08J9/12+CEX; C08J9/12+CFJ;
C08L101/16; C08L3/02;
C08L3/02+ZBP

FT - 3E066/CA01; 3E066/DA01;
3E066/KA08; 3E066/MA01;
3E086/AD22; 3E086/BA02;
3E086/BA16; 3E086/BA29;
3E086/BB84; 3E086/BB90;
3E086/CA33; 3E086/DA08;
4F074/AA03; 4F074/AA42;
4F074/AA98; 4F074/BA34;
4F074/CA22; 4F074/CC22X;
4F074/DA02; 4F074/DA33;
4F207/AA01; 4F207/AA19;
4F207/AB02; 4F207/AG20;
4F207/AH81; 4F207/AK02;
4F207/KA01; 4F207/KA11;
4F207/KF04; 4F207/KK13;
4F207/KK56; 4F207/KW23;
4J002/AB041; 4J002/BE022;
4J002/DE026; 4J002/FD090;
4J002/FD326; 4J002/GT00;
4J200/AA02; 4J200/AA06;
4J200/AA24; 4J200/BA05;



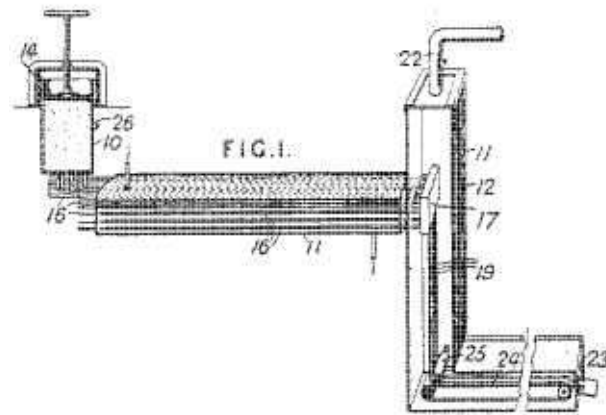
4J200/BA07; 4J200/BA25;
4J200/BA37; 4J200/CA09;
4J200/DA17; 4J200/EA07;
4J200/EA11; 4J200/EA21;
4J200/EA22

- PA - (A)
OGURA TRADING CO LTD; CORP
KK J
- TI - (A)
BIODEGRADABLE CUSHION
MATERIAL AND MANUFACTURING
METHOD THEREFOR
- AB - (A)
PROBLEM TO BE SOLVED: To
provide a biodegradable cushion
material whose composition
comprises a **corn** starch, a
polyvinyl alcohol and residual
moisture, which can be filled in
a gap from an outer package to
protect an object to be
transported during
transportation and handling and
can biodegrade under natural
environments after use, and a
manufacturing method therefor.
SOLUTION: The biodegradable
cushion material has a
composition comprising 65 to 75
wt.% of a **corn** starch, 25 to 30
wt.% of a polyvinyl alcohol and
2.5 to 5.0 wt.% of residual
moisture at a weight ratio, which
is expanded to 35 to 70 times by
open cells and cut into a
required diameter and length.
The method of manufacturing the
biodegradable cushion material
comprises steps of, using a
biodegradable material
comprising a **corn** starch powder
and a polyvinyl alcohol powder
blended at a required ratio and
further 20 to 25 wt.% of
degradable pellets with a
larger **grain size** blended into the
total amount, pouring 1.0 to 3.0
wt.% of water for the material to

a **screw** delivery section with a low **temperature** and a low internal **pressure** of an **extrusion** molding machine, forming an open cell structure by kneading the material with heat and **pressure** applied with a **temperature** gradient from an ordinary **temperature** to 200 deg.C and reducing the **pressure** by discharging to effuse heated and pressurized **steam**, and cutting and cooling to float in a cooling and floating cage.

3/4 © EPODOC / EPO

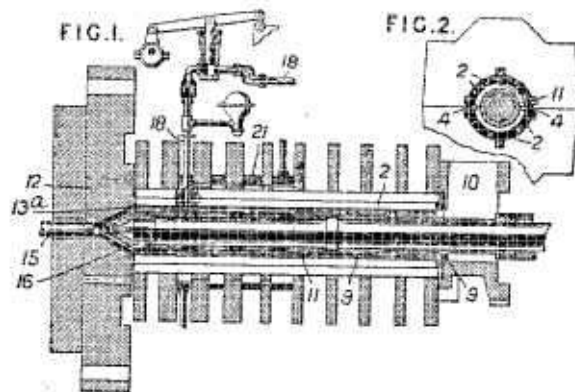
- PN - [GB232543](#) A 19260121
- PR - USX232543 19240421
- AP - GB19240014982 19240721
- DT - *; Rep
- CCI - [A23P30/32](#)
- PA - ANDERSON PUFFED RICE COMPANY
- TI - Improvements in methods and apparatus for making puffed products, and the product obtained therefrom
- AB - 232,543. Anderson Puffed **Rice** Co., (Assignees of Anderson, A. P.). April 21, 1924, [Convention date]. **Extrusion** machines.- Plastic substances, such as starchy food products, are puffed or rendered porous by subjecting them to **pressure** and heat in admixture with an expansible material, such as gas or moisture, and passing the material through an orifice so that the **pressure** is suddenly reduced. In treating flour or **milling**-stock of any grade, the material is mixed with water up to 25-35 per cent and placed in a chamber 10 to which a **pressure** of 500 to 5000 lb, per sq. in. can be applied, as by an hydraulic



or **screw** plunger 14. The material is forced through pipes 16 in a **steam** cooker 11 at a **temperature** of 225-400 F., at which **temperature** the starch becomes plastic. The material then emerges from the header 17 through apertures having a total cross-section substantially less than that of the pipes 16 and of any desired form to produce filaments, ribbons, or sheets 19 resembling macaroni &c. The chamber 12 surrounding the header 17 is heated to about 600 F. by air supplied from a pipe 22 and escaping at 23, the **temperature** being less at the outlet end. The filament &c. that expand and form a porous mass on leaving the header 17 are rapidly dried and set, being guided by a roller 25 on to an endless conveyer 24. The product may be cut into suitable lengths during or after drying.

4/4 © EPODOC / EPO

- PN - [GB278653](#) A 19271222
- PR - US19260140658 19261009
- AP - GB19270007648 19270319
- DT - **
- CCI - [A23L5/10](#) ; [A23L7/117](#) ;
[A23L7/17](#)
- PA - ANDERSON CO V D
- TI - Improvements in process and apparatus for producing **cereal** and other food products
- AB - 278,653. Anderson Co., V. D., (Assignees of Anderson, R. T.). Oct. 9, 1926, [Convention date]. Pug-mills. - **Cereal** and other human and animal food products are made by subjecting food to high **pressure**, to generate heat therein, and forcing water into the mass



while it is under compression and hot. Supplied to a hopper 10, the dry material is advanced by a worm or a series of worms 9 into a shell composed of longitudinal edged bars 2 associated with knife bars 4 which extend into the shell and prevent rotation of the material as a whole between the separated screws or worms 11 serving to place the material under increasing **pressure**. At its end remote from the hopper the shell opens into a fixed internally-tapered part 12 fitted with an **extrusion** pipe 15 and the end of the shaft carries a correspondingly-coned portion 16, which may be ribbed, as at 13<a>, or be formed with a **screw** thread. While the material is hot, due to the friction and high compression, water under regulated **pressure** is introduced by a pipe 18. The heat generated is sufficient to convert the water into **steam**. The **temperature** around the discharge end of the press way be controlled by a water jacket 21.

[SS 10] 8 and milk

Results in EPODOC 2

[SS 11] ..li



1/2 © EPODOC / EPO

PN - [CN104544139](#) A 20150429

PNFP - CN104544139B B 20160706

PR - CN20141840924 20141230

AP - CN20141840924 20141230

DT - I

CT - || STSE (A)

[CN104000138](#) A 20140827 [Y] (FARM PRODUCT PROC & NUCLEAR AGRICULTURAL TECH INST HUBEI AAS);

[CN1484991](#) A 20040331 [Y] (HUNAN JINJIAN CEREALS INDUSTRY [CN]);
[CN103989103](#) A 20140820 [A] (FARM PRODUCT PROC & NUCLEAR AGRICULTURAL TECH INST HUBEI AAS)

- PA - (A)
 FARM PRODUCT PROC & NUCLEAR AGRICULTURAL TECH INST HUBEI AAS
- TI - (A)
 Preparation method of dietary fiber contained broken **rice milk**
- AB - (A)
 The invention discloses a preparation method of dietary fiber contained broken **rice milk**. A preparation process mainly comprises preparation of dietary fiber and preparation of **rice milk**, wherein **wheat** bran dietary fiber is prepared through procedures of puffing pretreatment by a twin-**screw extruder**, starch hydrolysis by amylase, protein hydrolysis by alkaline protease, bleaching, absolute ethyl alcohol precipitation, filtering, drying and the like; preparation of the dietary fiber contained broken **rice milk** mainly comprises steps of soaking and cooking of broken **rice**, **grinding** of cooked broken **rice**, peanuts or/and red dates, adding of white granulated sugar, xanthan gum and monostearin, blending, filling and ultrahigh **pressure** sterilization. Byproducts produced in **rice** and **wheat** processing industry are sufficiently utilized, and accordingly, broken **rice** and **wheat** bran are effectively utilized; a food additive, a stabilizer and a thickener can be reduced by means of the dietary fiber added to the **rice milk**, and besides, the **rice milk** has good physiological efficacy; through ultrahigh **pressure** sterilization, loss of nutritional ingredients and degradation of color, flavor and taste of the **rice milk** due to high **temperature** are reduced to the greatest extent.

2/2 © EPODOC / EPO

- PN - [DE3308375](#) A1 19840913
- PR - DE19833308375 19830309
- AP - DE19833308375 19830309
- DT - **
- CCI - [A23L7/109](#) ; [A23L7/111](#) ; [A23L7/17](#)
- PA - ECKARDT KG PFANNI WERK OTTO [DE]
- AB - Mixture for Semmelknödel (type of bread dumplings) made with **wheat** flour, optionally with **wheat** semolina, breadcrumbs and conventional additives, such as eggs, salt, spices, characterized in that it is obtained by thermo-**extrusion** of the starting mixture, the **extruder** having before the **extrusion** head a **temperature** comprised between 110 and 170°C and a **pressure** between 150 and 200 bar in the case of an **extruder** with one **screw**, respectively 35 to 100 bar in the case of a dual **extruder**, the water content of the **extrusion** mixture before the **extrusion** operation being comprised between 12 and 22 % during the swelling of the **extrusion** product which becomes twice to five times larger and the cutting of the **extrusion** product to a **grain size** from 2 to 13 mm, optionally after filtering the cut material to said **size**, optionally after agglomeration with eggs and/or fat and/or **milk** and conventional additives.