

Search query (2): [SP]: 1. a process for production of an instant coffee product in a high yield, comprising: extracting roast and ground coffee beans with water having a temperature of 80 degrees centigrade or less, to produce a first extract and spent coffee groundspre-treating the spent coffee grounds, wherein the pre-treatment comprises adding water to the spent coffee grounds, steam exploding the spent coffee grounds, and separating into an intermediate extract and pre-treated spent coffee grounds, and wherein the steam explosion is performed in the temperature range of 50-175 degrees centigrade, at a pressure of 0.1 to 10 bar for 0.1 to 5 hoursadding water to the pre-treated spent coffee grounds to produce an aqueous suspensionhydrolysing the aqueous suspension using a hydrolysing enzyme to produce a second extract and spent remainsadding the first extract and the intermediate extract to the second extract, optionally after concentration or drying of the intermediate or second extract, to obtain a combined extract anddrying the combined extract to obtain an instant coffee product. 2. the process according to claim 1, wherein the extraction is performed at a temperature in the range of 10-80 degrees centigrade 3. the process according to claim 1, wherein the extraction is performed in a time range of 5 min to 2 hours. 4. the process according to claim 1, wherein the hydrolysing enzyme is selected among carbohydrate hydrolysing enzymes or carboxylic ester hydrolysing enzymes or any combination of such enzymes. 5. the process according to claim 4, wherein the hydrolysis is performed on an aqueous suspension of spent coffee grounds at one or more of a temperature in the range of 40-80 degrees centigrade, at ph 4-7, or in a time range of 1-16 hours. 6. the process according to 1, wherein an auxiliary agent is present during the hydrolysis. 7. the process according to claim 6, wherein the auxiliary agent is a coffee-derived surfactant. 8. the process according to claim 1, wherein the coffee-derived agent is a surfactant obtainable by: digesting spent coffee grounds with a carbohydrate hydrolysing enzyme to obtain carbohydrate fragments, andadding to the carbohydrate fragments a coffee oil and a carboxylic ester hydrolysing enzyme at conditions allowing for transesterification. 9. the process according to claim 1, wherein the carbohydrate hydrolysing enzyme is selected from a group comprising cellulase, xylanase, hemicellulose, or any combination of these enzymes. 10. the process according to claim 1, wherein the carboxylic ester hydrolysing enzyme is selected from esterase, lipase, or any combination thereof. 11. the process according to claim 8, wherein the coffee oil is derived from green coffee beans, roast and ground coffee, or spent coffee grounds extracts. 12. the process according to claim 1, wherein the coffee-derived surfactant is obtained in-situ during the hydrolysing by the addition of a carboxylic ester hydrolysing enzyme and a coffee oil to the aqueous suspension. 13-14. (canceled) 15. the process according to claim 1, wherein the intermediate extract, either as is, concentrated or dried, is added to the combined extract. 16. (canceled) 17. the process according to claim 14, wherein the pre-treatment comprises a temperature regimen comprising: a low temperature treatment period in the temperature range of 25 to 150 degrees centigrade for 1 min to 24 hours and a high temperature treatment period in the temperature range of 100 to 200 degrees centigrade for 1 min to 24 hours. 18. the process according to claim 14, wherein the pre-treated spent coffee grounds are subjected to a washing process prior to enzymatic hydrolysis. 19. the process according to claim 1, wherein, after the hydrolysis, the second extract is post-treated by one or more of heating the second extract to a temperature above 70 degrees centigrade in a time sufficient to inactivate the enzyme, typically 120 degrees centigrade for 10-30 min ormembrane filtering to remove the enzyme, which optionally is re-used in hydrolysis. 20. the process according to claim 1, wherein the spent coffee grounds are finely divided into an average particle size in the range of 2-1000 micro m, preferably to 30-500 micro m prior to the enzyme treatment. 21. the process according to claim 1, wherein a yield of total solids in the instant coffee product, based on the amount of roasted and grounded coffee beans, is 65 percent by weight or more. 22. the process according to claim 1, wherein a yield of total solids in the instant coffee product, based on amount of roasted and grounded coffee beans, is 70 percent by weight or more. 23. the process according to claim 1, wherein a yield of total solids in the instant coffee product, based on amount of roasted and grounded coffee beans, is 75 percent by weight or more. 24. the process according to claim 1, wherein the extract is membrane filtered for recycling aqueous permeate for reuse in the process. 25. the process according to claim 1, wherein the first extract is concentrated in an aroma preserving way, such as freeze concentration. 26. the process according to claim 1, wherein the coffee beans before extraction are divided into a mean particle size in the range of 0.2-5 mm, preferably below 0.5 mm.

Results: 15

Search history

Search STAC=(coffee and instant and lipase) (Results 9)

1:

Search [SP]: 1. a process for production of an instant coffee product in a high yield, comprising: extracting roast and ground coffee beans with water having a temperature of 80 degrees centigrade or less, to produce a first extract and spent coffee groundspre-treating the spent coffee grounds, wherein the pre-treatment comprises adding water to the spent coffee grounds, steam exploding the spent coffee grounds, and separating into an intermediate extract and pre-treated spent coffee grounds, and wherein the steam explosion is performed in the temperature range of 50-175 degrees centigrade, at a pressure of 0.1 to 10 bar for 0.1 to 5 hoursadding water to the pre-treated spent coffee grounds to produce an aqueous suspensionhydrolysing the aqueous suspension using a hydrolysing enzyme to produce a second extract and spent remainsadding the first extract and the intermediate extract to the second extract, optionally after concentration or drying of the intermediate or second extract, to obtain a combined extract anddrying the combined extract to obtain an instant coffee product. 2. the process according to claim 1, wherein the extraction is performed at a temperature in the range of 10-80 degrees centigrade 3. the process according to claim 1, wherein the extraction is performed in a time range of 5 min to 2 hours. 4. the process according to claim 1, wherein the hydrolysing enzyme is selected among carbohydrate hydrolysing enzymes or carboxylic ester hydrolysing enzymes or any combination of such enzymes. 5. the process according to claim 4, wherein the hydrolysis is performed on an aqueous suspension of spent coffee grounds at one or more of a temperature in the range of 40-80 degrees centigrade, at ph 4-7, or in a time range of 1-16 hours. 6. the process according to 1, wherein an auxiliary agent is present during the hydrolysis. 7. the process according to claim 6, wherein the auxiliary agent is a coffee-derived surfactant. 8. the process according to claim 1, wherein the coffee-derived agent is a surfactant obtainable by: digesting spent coffee grounds with a carbohydrate hydrolysing enzyme to obtain carbohydrate fragments, andadding to the carbohydrate fragments a coffee oil and a carboxylic ester hydrolysing enzyme at conditions allowing for transesterification. 9. the process according to claim 1, wherein the carbohydrate hydrolysing enzyme is selected from a group comprising cellulase, xylanase, hemicellulose, or any combination of these enzymes. 10. the process according to claim 1, wherein the carboxylic ester hydrolysing enzyme is selected from esterase, lipase, or any combination thereof. 11. the process according to claim 8, wherein the coffee oil is derived from green coffee beans, roast and ground coffee, or spent coffee grounds extracts. 12. the process according to claim 1, wherein the coffee-derived surfactant is obtained in-situ during the hydrolysing by the addition of a carboxylic ester hydrolysing enzyme and a coffee oil to the aqueous suspension. 13-14. (canceled) 15. the process according to claim 1, wherein the intermediate extract, either as is, concentrated or dried, is added to the combined extract. 16. (canceled) 17. the process according to claim 14, wherein the pre-treatment comprises a temperature regimen comprising: a low temperature treatment period in the temperature range of 25 to 150 degrees centigrade for 1 min to 24 hours and a high temperature treatment period in the temperature range of 100 to 200 degrees centigrade for 1 min to 24 hours. 18. the process according to claim 14, wherein the pre-treated spent coffee grounds are subjected to a washing process prior to enzymatic hydrolysis. 19. the process according to claim 1, wherein, after the hydrolysis, the second extract is post-treated by one or more of heating the second extract to a temperature above 70 degrees centigrade in a time sufficient to inactivate the enzyme, typically 120 degrees centigrade for 10-30 min ormembrane filtering to remove the enzyme, which optionally is re-used in hydrolysis. 20. the process according to claim 1, wherein the spent coffee grounds are finely divided into an average particle size in the range of 2-1000 micro m, preferably to 30-500 micro m prior to the enzyme treatment. 21. the process according to claim 1, wherein a yield of total solids in the instant coffee product, based on the amount of roasted and grounded coffee beans, is 65 percent by weight or more. 22. the process according to claim 1, wherein a yield of total solids in the instant coffee product, based on amount of roasted and grounded coffee beans, is 70 percent by weight or more. 23. the process according to claim 1, wherein a yield of total solids in the instant coffee product, based on amount of roasted and grounded coffee beans, is 75 percent by weight or more. 24. the process according to claim 1, wherein the extract is membrane filtered for recycling aqueous permeate for reuse in the process. 25. the process according to claim 1, wherein the first extract is concentrated in an aroma preserving way, such as freeze concentration. 26. the process according to claim 1, wherein the coffee beans before extraction are divided into a mean particle size in the range of 0.2-5 mm, preferably below 0.5 mm. (Results 15)

1) Family number: 480055 (GB1200700A)

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Title: COFFEE EXTRACTION

Abstract: Source: GB1200700A 1,200,700. Coffee extracts; coffee gum. DIA BEE CORP. 18 June, 1968 [14 July, 1967], No. 28966/68. Heading A2B. In the extraction of roasted coffee with an extracting fluid, there is present an effective amount of water soluble coffee gum, whereby the yield of soluble coffee is increased. The coffee gum may be obtained by subjecting coffee or coffee grounds to enzymatic treatment with cellulose, hemicellulose, or pectinase, or by treatment with an alkaline

aqueous liquid for example calcium hydroxide or ammonia, whereby a substantially neutral solution consisting only of coffee extractives and coffee gum is obtained, the extractives being thereafter separated. The gum may be recovered by freeze drying or by solvent precipitation, if desired after treatment with cellulose, hemicellulose, or pectinase to reduce tendency to gelatinise.

Classifications:

International (IPC 8-9): A23F5/26 (Advanced/Invention);
A23F5/24 (Core/Invention)

International (IPC 1-7): A23F1/08 A23F1/12

CPC: A23F5/267

European: A23F5/26K

Family:

Publication number	Publication date	Application number	Application date
DE1792037 A1	19711021	DE19681792037	19680711
GB1200700 A	19700729	GB19680028966	19680618

Priority:

US19670653328 19670714

Probable Assignee:

DIA BEE CORP

Assignee(s): (std):

DIA BEE CORP

Inventor(s): (std):

T LENDVAY ANDREW

2) Family number: 29353637 (US4983408A)

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Title: Method for producing coffee extracts

Abstract: Source: US4983408A A method for producing a coffee extract which comprises: (1) contacting an aqueous mixture of ground roast coffee with steam under pressure at elevated temperatures followed by rapid decompression at atmospheric levels; and (2) treatment of the resulting mixture with a hydrolytic enzyme or with a mixture of hydrolytic enzymes. The coffee extract thus obtained is a concentrated liquid which can be made into a beverage by the addition of water or it may be dried to a soluble solid and reconstituted with water to provide instant coffee.

Classifications:

International (IPC 8-9): A23F5/10 A23F5/24 A23F5/26 A23F5/36

C12S3/00 (Advanced/Invention);

C12S3/00 (Advanced/Non-invention);

A23F5/24 C12S3/00 (Core/Invention);

A23N (Subclass/Invention)

International (IPC 1-7): A23F5/10 A23F5/24 A23F5/26 A23F5/28

A23F5/36 A23F5/46 A23K1/14 A23N C12N9/04 C12N9/18 C12N9/24

C12N9/42 C12N9/50 C12R1/885 C12S3/00

CPC: A23F5/246 A23F5/26 C12Y301/01003 C12Y302/01004

C12Y302/01015

European: A23F5/24D A23F5/26 C12Y301/01003 C12Y302/01004 C12Y302/01015

US: 426/425 426/432 426/433 426/434 426/447 426/45 426/594

試料No.	水蒸気処理	温度	圧力	時間	酵素	収率
A	水蒸気爆発	225 ℃	370psi	4分	セルラーゼ	44.1%
B	水蒸気爆発	200 ℃	225.6psi	4分	セルラーゼ	24.4%
C	加圧煮沸	121 ℃	15psi	60分	セルラーゼ	21.7%
D	なし	—	—	—	セルラーゼ	20.7%
(コントロール)						
E	なし	—	—	—	なし	18.9%
(コントロール)						

Family:

Publication number	Publication date	Application number	Application date
AU199168622 A1	19920716	AU19910068622	19910102
AU637294 B2	19930520	AU19910068622	19910102
CA2031362 AA	19920604	CA19902031362	19901203
CA2031362 C	20020212	CA19902031362	19901203
DE4040034 A1	19920617	DE19904040034	19901214
DE4040034 C2	20000120	DE19904040034	19901214
FR2670992 A1	19920703	FR19910000006	19910102
FR2670992 B1	19990521	FR19910000006	19910102
GB2251364 A1	19920708	GB19910000208	19910105
GB2251364 B2	19950705	GB19910000208	19910105
GB9100208 A0	19910220	GB19910000208	19910105
IT1244616 B	19940808	IT1991TO00001	19910103
ITTO910001 A0	19910103	IT1991TO00001	19910103
ITTO910001 A1	19920704	IT1991TO00001	19910103
JP3065670 B2	20000717	JP19900418991	19901229
JP7000115 A2	19950106	JP19900418991	19901229
US4983408 A	19910108	US19880280945	19881207

Priority:

AU19910068622 19910102

CA19902031362 19901203

IT1991TO00001 19910103

JP19900418991 19901229

US19880280945 19881207

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Inventor(s): (std):

COLTON RALPH L ; COLTON RALPH LESTER ; RALPH L COLTON ; RARUFU ERU KORUTON

Inventor(s):

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Agent(s):

GRIFFITH HACK; GOUDREAU GAGE DUBUC

3) Family number: 8563391 (US5714183A)

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Title: Hydrolysis of the galactomannans of coffee extract with immobilized beta-mannanase

Abstract: Source: US5714183A Hydrolysis of the galactomannans of a liquid coffee extract, in which this extract is

hydrolyzed at a temperature of 20 DEG -80 DEG C. with immobilized beta-mannanases.

Classifications:

International (IPC 8-9): A23F5/00 A23F5/16 A23F5/18 A23F5/24
C12N11/00 C12N9/24 C12N9/26 C12P19/02 C12P19/14
C12S3/00 (Advanced/Invention);
A23F5/24 C12N11/00 C12N9/24 C12N9/26
C12R1/685 (Advanced/Non-invention);
A23F5/00 A23F5/24 C12N11/00 C12N9/24 C12N9/26
C12P19/00 (Core/Invention)
International (IPC 1-7): A23F5/00 A23F5/10 A23F5/16 A23F5/18
A23F5/24 A23F5/26 C12N11/00 C12N11/02 C12N11/08 C12N9/00
C12N9/24 C12N9/26 C12P19/02 C12P19/14 C12R1/685 C12S3/00
CPC: A23F5/163 C12Y302/01025
European: A23F5/16D C12Y302/01025
US: 426/330.3 426/44 426/45 426/590 426/594

PatBase - US5714183_A

U.S. Patent Feb. 3, 1998 Sheet 1 of 4 5,714,183

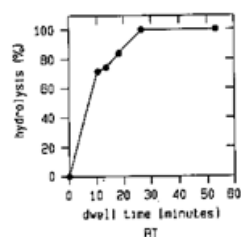


FIG. 1a

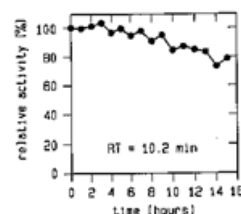


FIG. 1b

Family:

Publication number	Publication date	Application number	Application date
AT183886 E	19990915	AT19940105366T	19940407
AU199514885 A1	19951019	AU19950014885	19950316
AU681001 B2	19970814	AU19950014885	19950316
BRPI9501477 A	19951107	BR1995PI01477	19950406
CA2144707 AA	19951008	CA19952144707	19950315
CN1068503 C	20010718	CN19951003639	19950406
CN1117349 A	19960228	CN19951003639	19950406
DE69420390 D1	19991007	DE19946020390	19940407
DE69420390 T2	19991216	DE19946020390T	19940407
DK0676145 T3	20000313	DK19940105366T	19940407
EP0676145 A1	19951011	EP19940105366	19940407
EP0676145 B1	19990901	EP19940105366	19940407
ES2137277 T3	19991216	ES19940105366T	19940407
FI951568 A	19951008	FI19950001568	19950403
FI951568 A0	19950403	FI19950001568	19950403
GR3031962 T3	20000331	GR19990403055T	19991125
JP7274833 A2	19951024	JP19950081119	19950406
NO951224 A	19951009	NO19950001224	19950330
NO951224 A0	19950330	NO19950001224	19950330
NZ270694 A	19960126	NZ19950270694	19950313
PH31646 A	19990112	PH19950050118	19950313
RU2157407 C2	20001010	RU19950104978	19950405
RU95104978 A	19971010	RU19950104978	19950405
US5714183 A	19980203	US19950418240	19950406
ZA9502131 A	19951218	ZA19950002131	19950315

Priority:

CA19952144707 19950315 EP19940105366 19940407

Probable Assignee: NESTEC SA

Assignee(s): (std): NESTLE SA ; SCOIETE DES PRODUITS NESTLE S ; NESTEC SA ; SOS ETE DE PRODJUI NESTLE S A ; DE PRODUITS NESTLE SA SOC ; DES PRODUITS NESTLE S A SOC

Assignee(s): NESTEC AVENUE NESTLE SA ; NESTEC S A ; DES PRODUITS NESTLE SA SOC ; DES PRODUITS NESTLE SOC SA ; SCOIETE DES PRODUITS NESTLE SA ; SOS ETE DE PRODJUI NESTLE SA ; SCOIETE DES PRODUITS NESTLE S A ; SOC PROD NESTLE SA ; SOCIETE DES PRODUITS NESTLE S A ; SOCIETE DES PRODUITS NESTLE SA ; SOCIETE DES PRODUITS NESTLE S A VEVEY ; SOS'ETE DE PRODJUI NESTLE S.A. ; REYMOND SYLVIANE ; NICOLAS PIERRE ; SAUVAGEAT JEAN LUC ; RAETZ ERIC ; PROD NESTLE SA SOC

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Inventor(s): E RAETZ ; P'ER NIKOLA ; ERICK RAETZ ; ZHAN-LJUK SOVAZHA ; SIL'V'JAN REJMON ; S REYMOND ; P NICOLAS

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; BORDEN LADNER GERVAIS LLP

Designated states: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

Title: SOLID-LIQUID SEPARATION METHOD FOR CONTINUOUSLY EXTRACTING AND/OR PRESSING EDIBLE FOOD AND DRINK

Abstract: Source: US2006257547A A method for producing an extract and/or a squeezed liquid, which comprises: feeding a food to be extracted and/or squeezed into a crushing apparatus; adding a solvent into the crushing apparatus immediately after and/or while milling the food; extracting and/or squeezing a useful food component of the food into the solvent; and carrying out liquid-solid separation by removing the resulting extracted residue and/or squeezed residue with a continuous solid-liquid separation apparatus.

Classifications:

International (IPC 8-9): A23F3/16 A23F3/18 A23F5/00 A23F5/08 A23F5/10 A23F5/24 A23F5/26 A23F5/48 A23L1/212 A23L1/221 A23L1/28 A23L2/02 A23L2/04 (Advanced/Invention);

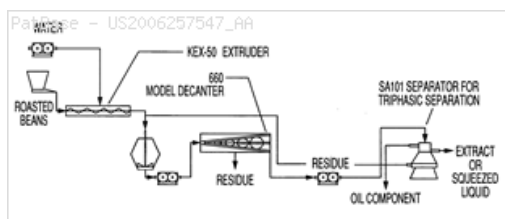
A23F5/24 (Advanced/Non-invention); A23F3/00 A23F5/00 A23F5/24 A23F5/46 A23L1/212 A23L1/221 A23L1/28 A23L2/02 (Core/Invention)

International (IPC 1-7): A23F3/16 A23F5/08 A23F5/10 A23F5/24 A23L1/212 A23L1/221 A23L2/02

CPC: A23L27/11 A23F5/48 A23F3/16 A23F3/18 A23F5/24 A23F5/265 A23L2/02 A23L2/04

European: A23F3/16 A23F3/18 A23F5/24 A23F5/26D A23F5/48 A23L1/221E A23L2/02 A23L2/04

US: 426/431 426/432 426/433 426/435 426/594 426/597 426/655



Family:

Publication number	Publication date	Application number	Application date
AT453325 E	20100115	AT20040706814T	20040130
AU2004208619 AA	20040812	AU20040208619	20040130
AU2004208619 BB	20091001	AU20040208619	20040130
BRPI0407160 A	20060207	BR2004PI07160	20040130
BRPI0407160 B1	20150526	BR2004PI07160	20040130
CA2513657 AA	20050718	CA20042513657	20040130
CA2513657 C	20120626	CA20042513657	20040130
CN1744825 A	20060308	CN200480003130	20040130
CN1744825 B	20100526	CN200480003130	20040130
DE602004024866 D1	20100211	DE200460024866T	20040130
EP1595458 A1	20051116	EP20040706814	20040130
EP1595458 A4	20060315	EP20040706814	20040130
EP1595458 B1	20091230	EP20040706814	20040130
JP2004261009 A2	20040924	JP20030021879	20030130
JP4284437 B2	20090624	JP20030021879	20030130
KR101010300 B1	20110125	KR20057014104	20040130
KR20050101542 A	20051024	KR20057014104	20040130
TH35102 B	20130219	TH20041000294	20040130
TH70434 A	20050907	TH20041000294	20040130
TW200501885 A	20050116	TW20040102110	20040130
TWI260204 B	20060821	TW20040102110	20040130
US2006257547 AA	20061116	US20040543891	20040130
US7771764 BB	20100810	US20040543891	20040130
VN9035 A1	20110227	VN20050001038	20050721
WO04066745 A1	20040812	WO2004JP00913	20040130

Priority:

JP20030021879 20030130 WO2004JP00913 20040130

Probable Assignee: MEIJI DAIRIES CORP

Assignee(s): (std): MEIJI CO LTD ; MEIJI DAIRIES CORP ; TANAKA TAKAMUNE ; TOMITA TAKAO ; ORII NAOKI ; NAKATSUBO TADASHI ; MEIJI MILK PROD CO LTD ; MEIJI DIARIES CORP ; NAKAYSUBO TADASHI ; HONDA TAKESHI ; IMAZAKA TAKESHI ; IMAZAWA TAKESHI ; KUBOTA YASUSHI

Assignee(s): MEIJI CO

Inventor(s): (std): NAKAYSUBO TADASHI ; NAOKI ORII ; TADASHI NAKATSUBO ; TAKAMUNE TANAKA ; TAKAO TOMITA ; TAKESHI HONDA ; TAKESHI IMAZAWA ; TANAKA T ; TOMITA T ; YASUSHI KUBOTA ; TOMITA TAKAO ; TANAKA TAKAMUNE ; ORII NAOKI ; NAKATSUBO TADASHI ; KUBOTA YASUSHI ; IMAZAWA TAKESHI ; HONDA KENJI ; HONDA TAKESHI IMAZAWA TAKESHI TANAKA TAKAMUNE TOMI ; IMAZAKA TAKESHI ; IMAZAWA T ; KUBOTA Y ; HONDA TAKESHI ; TADA HONDA TAKESHI IMAZAWA TAK

Inventor(s): KUBOTA YASUSHI AND ; HONDA TAKESHI IMAZAWA TAKESHI TANAKA TAKAMUNE... ; HONDA TAKESHI PRODUCT DEV DEP MEIJI DAIRIES CORP ; HONDA TAKESHI IMAZAWA TAKESHI TANAKA TAKAMUNE TOMITA TAKAO KUBOTA YASUSHI ORII NAOKI NAKATSUBO TADASHI

Agent(s): SPRUSON AND FERGUSON; BERESKIN AND PARR; BERESKIN AND PARR LLP SENCRL SRL; HOFFMANN EITL; SUGHRUE MION PLLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: ENZYME-ASSISTED SOLUBLE COFFEE PRODUCTION

Abstract: Source: US2008311245A The invention relates to a coffee beverage composition being devoid of significant contents of oil and insoluble particulates, comprising (a) at least 15 percent based on the total weight of coffee solids of total mannose, wherein the free mannose content is less than 50 percent by weight of the total mannose content, and (b) less than 1,000 ppm on a total coffee solids basis of 5-hydroxymethyl furfural, and to a process for producing a soluble coffee extract, comprising the steps: (i) combining roast and ground coffee with water, (ii) adding hydrolase enzymes, (iii) wet-milling to a mean particle size of about 10 to about 250 mum, (iv) treating the reaction mixture by exposing it to a temperature in the range of about 20 degrees centigrade to about 90 degrees centigrade, preferably about 50 degrees centigrade to about 60 degrees centigrade, and (v) circulating the reaction mixture through a cross-flow semi-permeable

membrane separation device where the soluble coffee extract is obtained as permeate.

Classifications:
International (IPC 8-9): A23F5/00 A23F5/08 A23F5/14 A23F5/16 A23F5/24 A23F5/26 (Advanced/Invention); A23F5/24 A23F5/26 (Advanced/Non-invention); A23F5/00 A23F5/24 (Core/Invention)
International (IPC 1-7): A23F5/24
CPC: A23F5/246 A23F5/265
European: A23F5/24D A23F5/26D
US: 426/52 426/594 426/594P

Family:

Publication number	Publication date	Application number	Application date
AR054562 AA	20070627	AR2006P103058	20060717
AT411738 E	20081115	AT20050106563T	20050718
BRPI0613409 A2	20121127	BR2006PI13409	20060707
CA2614668 AA	20080109	CA20062614668	20060707
CA2614668 C	20150324	CA20062614668	20060707
CN101267743 A	20080917	CN200680034154	20060707
CN101267743 B	20140212	CN200680034154	20060707
DE602005010568 D1	20081204	DE200560010568T	20050718
EP1745702 A1	20070124	EP20050106563	20050718
EP1745702 B1	20081022	EP20050106563	20050718
ES2315801 T3	20090401	ES20050106563T	20050718
IN00797CN2008 A	20081128	IN2008CN00797	20080218
IN257932 B	20131122	IN2008CN00797	20080218
JP2009501545 T2	20090122	JP20080522801T	20060707
JP4744602 B2	20110810	JP20080522801T	20060707
KR101307709 B1	20130912	KR20087003732	20060707
KR20080033986 A	20080417	KR20087003732	20060707
MY140512 A	20091231	MY20060003351	20060713
RU2008105914 A	20090827	RU20080105914	20060707
RU2402222 C2	20101027	RU20080105914	20060707
UA94415 C2	20110510	UA20080001944	20060707
US2008311245 AA	20081218	US20060995913	20060707
US2011281013 AA	20111117	US20110155015	20110607
WO07011531 A1	20070125	WO2006US26288	20060707

Priority:
EP20050106563 20050718 US20080995913 20080902 WO2006US26288 20060707
US20110155015 20110607

Probable Assignee: INTERCONTINENTAL GREAT BRANDS LLC

Assignee(s): (std): PERKINS DANIELLE E ; PLUMB SIAN ; WHALEN PEDERSEN ERIK ; KRAFT FOODS HOLDINGS INC ; SILVER RICHARD S ; KRAFT FOODS GLOBAL BRANDS LLC ; KRAFT FUDZ KHOLDINGS INK ; WRAGG ANTHONY ; CERIAI STEFANO ; CERIAI STEFANO

Assignee(s): INTERCONTINENTAL GREAT BRANDS LLC

Inventor(s): (std): ANTHONY WRAGG ; CERIAI STEFANO ; PERKINS DANIELLE E ; PLUMB SIAN ; SIAN PLUMB ; SILVER RICHARD S ; WHALEN PEDERSEN ERIK ; WRAGG ANTHONY ; CERIAI STEFANO ; VRAGG EHNTONI ; VALEN PEDERSEN EHRIK ; SIL VER RICHARD S ; SERIALI STEFANO ; PLAMB SIAN ; PERKINS DEHNNIEL EH ; STEFANO CERIAI

Inventor(s): VALEN-PEDERSEN EHRIK ; STEFANO CERIAI ; RICHARD S SILVER ; ERIK WHALEN PEDERSEN ; DANIELLE E PERKINS ; SIL'VE RICHARD S. ; SILVER RICHARD

Agent(s): MCFADDEN FINCHAM; OSLER HOSKIN AND HARCOURT LLP; MORF JAN STEFAN ET AL; FITCH EVEN TABIN AND FLANNERY

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

6) Family number: 39337236 (US2007237857A) © PatBase

Title: STABILIZED ENZYME COMPOSITIONS

Abstract: Source: US2007237857A Enzyme compositions stabilized with coffee-derived materials are provided. The stabilized enzyme compositions are especially useful in the production of soluble coffee from roast coffee solids.

Classifications:
International (IPC 8-9): A23F5/00 A23F5/24 A23F5/26 A23F5/28 A23J3/34 C12N9/00 C12N9/14 C12N9/22 C12N9/24 C12N9/80 C12N9/96 (Advanced/Invention); C12N9/00 C12N9/14 C12N9/22 C12N9/24 C12N9/80 (Advanced/Non-invention); A23F5/00 A23F5/24 A23J3/00 C12N9/00 C12N9/14 C12N9/22 C12N9/24 C12N9/78 C12N9/96 (Core/Invention)
International (IPC 1-7): C12N9/96
CPC: A23F5/246
European: A23F5/24D
US: 426/45 426/45P

Family:

Publication number	Publication date	Application number	Application date
AT495673 E	20110215	AT20070105686T	20070404
BRPI0701536 A	20071211	BR2007PI01536	20070409
BRPI0701536 B1	20151208	BR2007PI01536	20070409
CN101200713 A	20080618	CN200710103585	20070409
CN104814225 A	20150805	CN201510257661	20070409
DE602007012007 D1	20110303	DE200760012007T	20070404

EP1844661 A1	20071017	EP20070105686	20070404
EP1844661 B1	20110119	EP20070105686	20070404
ES2358539 T3	20110511	ES20070105686T	20070404
IN00754CH2007 A	20081128	IN2007CH00754	20070410
IN283274 B	20170519	IN2007CH00754	20070410
JP2007275065 A2	20071025	JP20070100325	20070406
JP5066384 B2	20121107	JP20070100325	20070406
KR101502620 B1	20150316	KR20070035037	20070410
KR101597034 B1	20160224	KR20140065395	20140529
KR20070101152 A	20071016	KR20070035037	20070410
KR20140081772 A	20140701	KR20140065395	20140529
RU2007113102 A	20081220	RU20070113102	20070409
RU2434528 C2	20111127	RU20070113102	20070409
US2007237857 AA	20071011	US20060279157	20060410

Priority:

CN200710103585 20070409 US20060279157 20060410

Probable Assignee: INTERCONTINENTAL GREAT BRANDS LLC

Assignee(s): (std): INC ; INTERCONTINENTAL GREAT BRANDS LLC ; KRAFT FOODS GLOBAL BRANDS LLC ; WHALEN PEDERSON ERIK ; SILVER RICHARD S ; KRAFT FOODS HOLDINGS INC ; KRAFT FUDZ GLOBAL BREHND S EHLEHLSI

Assignee(s): DOUWE EGBERTS BV KONINKLL

Inventor(s): (std): SILVER RICHARD S ; SILVER RICHARD STUART ; SILVER RICHARD STUART ; STUART SILVER RICHARD ; VALEN PEDERSEN EHRIK ; WHALEN PEDERSEN ERIK ; WHALEN PEDERSON ERIK

Inventor(s): ERIK WHALEN PEDERSEN ; RICHARD STUART SILVER ; SILVER RICHARD ; VALEN-PEDERSEN EHRIK

Agent(s): SMAGGASGALE GILLIAN HELEN; FITCH EVEN TABIN AND FLANNERY

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL PL PT RO SE SI SK TR YU

7) Family number: 40798431 (US2007259084A)

© PatBase

Title: COFFEE-DERIVED SURFACTANTS

Abstract: Source: US2007259084A Coffee-derived surfactants are provided by transesterification reactions of sugars and coffee oil. The coffee-derived surfactants are especially useful in the production of coffee oil emulsions for use with, or incorporation into, coffee products.

Classifications:

International (IPC 8-9): A23C15/14 A23F5/00 A23F5/40 A23F5/46 A23L3/34 B01F17/56 C07H13/06 C07H15/04 C09K3/00 C12P19/04 (Advanced/Invention);

A23F5/24 C07B61/00 (Advanced/Non-invention);

A23C15/00 A23F5/46 B01F17/56 C07H13/00 C09K3/00 (Core/Invention);

A23F5/24 (Core/Non-invention)

CPC: A23F5/40 C07H13/06

European: C07H13/06

US: 426/417 426/45 426/532 426/594 426/595 426/595P 426/596 426/596S 426/613 435/101

Family:

Publication number	Publication date	Application number	Application date
EP1854805 A2	20071114	EP20070106777	20070424
EP1854805 A3	20071128	EP20070106777	20070424
EP1854805 B1	20160622	EP20070106777	20070424
ES2579759 T3	20160816	ES20070106777T	20070424
JP2007297628 A2	20071115	JP20070122056	20070507
JP2014087348 A2	20140515	JP20130246410	20131128
JP5429841 B2	20140226	JP20070122056	20070507
JP6023035 B2	20161109	JP20130246410	20131128
PL1854805 T3	20170929	PL20070106777T	20070424
US2007259084 AA	20071108	US20060381622	20060504
US2009252850 AA	20091008	US20090487296	20090618
US2014065282 AA	20140306	US20130072978	20131106
US8603562 BB	20131210	US20090487296	20090618

Priority:

JP20070122056 20070507 US20060381622 20060504 US20090487296 20090618

US20130072978 20131106

Probable Assignee: INTERCONTINENTAL GREAT BRANDS LLC

Assignee(s): (std): BRADBURY ALLAN ; DOUWE EGBERTS BV ; DOUWE EGBERTS BV KONINKLL ; GAONKAR ANILKUMAR G ; INTERCONTINENTAL GREAT BRANDS LLC ; KRAFT FOODS HOLDINGS INC ; WRAGG ANTHONY ; ZELLER BARY L ; ZELLER BARY LYN

Assignee(s): KRAFT FOODS GLOBAL BRANDS LLC

Inventor(s): (std): BRADBURY ALLAN ; GAONKAR ANILKUMAR ; GAONKAR ANILKUMAR G ; WRAGG ANTHONY ; ZELLER BARY L ; ZELLER BARY LYN

Inventor(s): ZELLER BARY

Agent(s): SMAGGASGALE GILLIAN HELEN; UNGRIA JAVIER; TANI AND ABE PC; FITCH EVEN TABIN AND FLANNERY; FITCH EVEN TABIN AND FLANNERY LLP

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL PL PT RO SE SI SK TR YU

Title: COFFEE PROCESS

Abstract: Source: US2012027900A Methods and/or processes for obtaining coffee extracts and/or processing coffee beans. In certain embodiments, improved methods and/or processes for producing desirable and usable extracts from coffee beans which can be used for instant coffee type powders or liquids, for example. In certain other embodiments, improved coffee extraction techniques which permit or allow retainment or capture of desirable levels of aroma products and/or bio-actives from coffee beans.

Classifications:

International (IPC 8-9): A23F5/02 A23F5/04 A23F5/08 A23F5/24

A23F5/26 A23F5/28 A23F5/32 A23F5/36 A23F5/48 A23F5/50

A23L1/30 A61K36/74 (Advanced/Invention);

A23L1/30 A61K36/74 (Advanced/Non-invention);

A23F5/00 A23F5/24 A23F5/46 (Core/Invention)

CPC: A23L33/105 A23F5/02 A23F5/04 A23F5/08 A23F5/26 A23F5/285

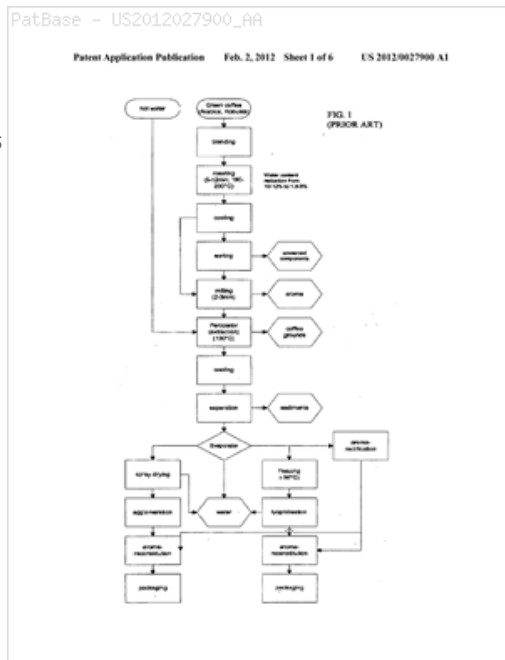
A23F5/32 A23F5/486 A23F5/505 A61K36/74

European: A23F5/02 A23F5/04 A23F5/08 A23F5/26 A23F5/28D

A23F5/32 A23F5/48H A23F5/50H A23L1/30B A61K36/74

US: 426/385 426/385P 426/392 426/392S 426/422 426/422S

426/424 426/424S 426/432 426/432S



Family:

Publication number	Publication date	Application number	Application date
DE602009023552 D1	20140605	DE200960023552T	20091224
EP2378891 A1	20111026	EP20090805827	20091224
EP2378891 B1	20140423	EP20090805827	20091224
US2012027900 AA	20120202	US20090141846	20091224
WO10073114 A1	20100701	WO2009IB07883	20091224

Priority:

EP20090805827 20091224 US20080140842P 20081224 WO2009IB07883 20091224
US20090141846 20091224

Probable Assignee: ZUERCHER HOCHSCHULE F ANGEWANDTE WISSENSCHAFTEN

Assignee(s): (std): HUEHN TILO ; LAUX ROLAND ; ZUERCHER HOCHSCHULE F ANGEW ; ZUERCHER HOCHSCHULE F ANGEWANDTE WISSENSCHAFTEN ; ZUERCHER HOCHSCHULE FUER ANGEWANDTE WISSENSCHAFTEN

Assignee(s): ZUERCHER HOCHSCHULE F ANGEWANDTE WISSENSCHAFTEN

Inventor(s): (std): HUEHN TILO : LAUX ROLAND

Agent(s): RENTSCH PARTNER AG; IPRIS GMBH

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VN VC VZ ZA ZM ZW

Title: COLD-BREWED INSTANT COFFEE

Abstract: Source: US2014178559A Embodiments of the invention are directed to instant coffee and methods of preparing the same, wherein the methods include adding water having a temperature of less than 117 degrees Fahrenheit to ground coffee beans to result in a slurry with liquid and solid components, maintaining the slurry at a temperature below 117 degrees Fahrenheit for at least one hour, separating the liquid component of the slurry from the solid component, to yield a liquid coffee extract, and subjecting the liquid coffee extract to a drying process to remove water from the liquid coffee extract, to yield a solid coffee extract which can be used as an instant coffee. Embodiments of the invention are also directed to blended instant coffees and methods of preparing the same.

Classifications:

International (IPC 8-9): A23F5/24 A23F5/26 A23F5/28 A23F5/36 A23F5/40 (Advanced/Invention)

CPC: A23F5/36 A23F5/26 Y02A40/924

US: 426/432 426/594

Family:

Publication number	Publication date	Application number	Application date
AU2012290313 AA	20130207	AU20120290313	20120727
CA2843018 AA	20140123	CA20122843018	20120727
CN103781364 A	20140507	CN201280037305	20120727
EP2736350 A2	20140604	EP20120819205	20120727
US2014178559 AA	20140626	US20120235343	20120727

WO13019676 A2	20130207	WO2012US48705	20120727
WO13019676 A3	20130613	WO2012US48705	20120727

Priority:

US20110513436P 20110729 US20120235343 20120727 WO2012US48705 20120727

Probable Assignee: BEAN LOGIC LLC

Assignee(s): (std): BEAN LOGIC LLC ; BEAN LOGIK LLC ; NEACE ROBERT JR ; NEACE JR ROBERT

Inventor(s): (std): NEACE JR ROBERT ; NEACE ROBERT JR

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; MBM INTELLECTUAL PROPERTY LAW LLP; GIBSON MARK; HUNT DALE C ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

10) Family number: 54271842 (US2013177672A)

© PatBase

Title: BEVERAGES AND EXTRACTS WITH ENHANCEMENTS

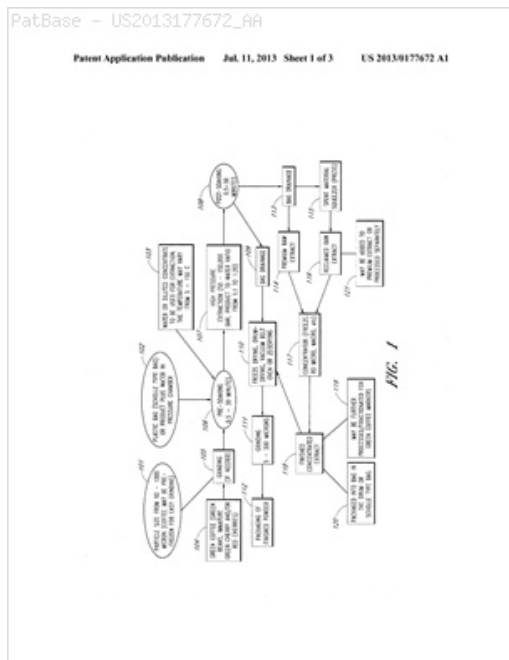
Abstract: Source: US2013177672A Generally described are extracts and beverages with enhanced nutrients, flavors and textures and methods of making the same. Some embodiments relate to extracts and beverages produced through high pressure extraction techniques.

Classifications:

International (ipc 8-9): A23F3/00 A23F3/16 A23F3/18 A23F5/00 A23F5/24 A23F5/26 A23G1/00 A23L1/01 A23L1/28 A23L1/30 A23L1/302 A23L1/308 A23L2/00 A23L2/38 A23L2/52 A23L3/40 A23L3/44 A23L3/46 (Advanced/Invention)

CPC: A23L2/52 A23F3/30 A23F5/02 A23F5/28 A23L33/105 A23L2/38

US: 426/392 426/431 426/432 426/435 426/541 426/590 426/593 426/594 426/597 426/598 426/655 426/72



Family:

Publication number	Publication date	Application number	Application date
AR089680 AA	20140910	AR2013P100054	20130104
AU2012363772 AA	20130711	AU20120363772	20121205
CA2862815 AA	20140702	CA20122862815	20121205
CL2014001775 A1	20141010	CL20140001775	20140702
CN104105410 A	20141015	CN201280069514	20121205
CO7020905 A2	20140811	CO20140161226	20140724
EP2800475 A1	20141112	EP20120864671	20121205
EP2800475 A4	20151216	EP20120864671	20121205
IN05827CN2014 A	20160701	IN2014CN05827	20140728
JP2015503355 T2	20150202	JP20140551247T	20121205
KR20140111304 A	20140918	KR20147020707	20121205
MX2014008301 A1	20140821	MX20140008301	20121205
PE21002014 A1	20141224	PE20140001060	20121205
RU2014132180 A	20160227	RU20140132180	20121205
SG11201403742U A1	20140730	SG20141103742	20121205
TW201332453 A	20130816	TW20130100093	20130103
US2013177672 AA	20130711	US20120344520	20120105
WO13103465 A1	20130711	WO2012US68040	20121205

Priority:

US20120344520 20120105 WO2012US68040 20121205

Probable Assignee: STARBUCKS CORP D B A STARBUCKS COFFEE CO

Assignee(s): (std): STARBUCKS CORP D ; STARBUCKS CORP D B A STARBUCKS COFFE CO ; STARBUCKS CORP D B A STARBUCKS COFFEE CO ; VU DIEN VAN ; DA CRUZ J MARCIO ; KUO JOSEPH ; ROBINSON URANO A ; STARBUCKS CORP DBA STARBUCKS COFFEE CO

Assignee(s): STARBUCKS D B A STARBUCKS COFFEE CO CORP ; STARBUCKS D B A STARBUCKS COFFEE CO CORP2401 UTAH AVENUE SOUTHMS: S-LA1SEATTLEWA98134-1435US ; STARBUCKS D CORP ; STARBUCKS D B A STARBUCKS COFFE CO CORP

Inventor(s): (std): CRUZ J MARCIO DA ; VU DIEN VAN ; VAN VU DIEN ; ROBINSON URANO A ; KUO JOSEPH ; DA CRUZ J MARCIO

Inventor(s): DA CRUZ J ; DA CRUZ J MARCIOUS ; DIEN VAN VU ; J MARCIO DA CRUZ ; JOSEPH KUO ; KUO JOSEPHUS ; ROBINSON URANO AUS ; URANO A ROBINSON ; VU DIEN VANUS

Agent(s): MINTER ELLISON; GOWLING LAFLEUR HENDERSON LLP; PORZIO RIOS AND ASOCIADOS; ALICIA LLOREDA RICAURTE; GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAEUSSER; SWEENEY CHRISTOPHER T

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

11) Family number: 58692803 (DK201570098A)

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Title: PRODUCTION OF AN INSTANT COFFEE PRODUCT IN HIGH YIELD

Abstract: Source: DK201570098A Disclosed herein is a process for production of an instant coffee product in a high yield, comprising the steps of extracting roast and ground coffee beans with water having a temperature of 80 degrees centigrade or less, to produce a first extract and spent coffee grounds, adding water to the spent coffee grounds to produce an aqueous suspension, hydrolysing the aqueous suspension using a hydrolysing enzyme to produce a second extract and spent remains, adding the first extract to the second extract, optionally after concentration and/or drying of the second extract, to obtain a combined extract, and drying the combined extract to obtain an instant coffee product. The high yield is obtained due to the reduction of enzyme inhibiting substances.

Classifications:

International (IPC 8-9): A23F5/26 (Advanced/Invention)

Family:

Publication number	Publication date	Application number	Application date
DK201570098 A1	20150302	DK20150070098	20150224

Priority:

DK20150070098 20150224

Probable Assignee: GEA PROCESS ENGINEERING AS

Assignee(s): (std): GEA PROCESS ENGINEERING AS

Assignee(s): GEA PROCESS ENGINEERING A S

Inventor(s): (std): HARALDSTED HENRIK ; PEDERSEN ANDERS HOLMEN ; SORENSEN JAKOB KRYGER

12) Family number: 59230792 (DK201570234A)

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Title: PRODUCTION OF A COFFEE EXTRACT PRESERVING FLAVOUR COMPONENTS

Abstract: Source: DK201570234A Disclosed herein is a process for preparing a coffee extract, comprising the steps of: providing a mixture of roasted coffee beans and water, milling the mixture of roast 5 coffee beans and water in a pressurised chamber, and separating the milled mixture in a liquid coffee extract and spent coffee grounds. The coffee extract maintains many of the flavour components of the roasted beans.

Classifications:

International (IPC 8-9): A23F5/24 (Advanced/Invention)

Family:

Publication number	Publication date	Application number	Application date
DK201570234 A1	20150427	DK20150070234	20150422

Priority:

DK20150070234 20150422

Probable Assignee: GEA PROCESS ENGINEERING AS

Assignee(s): (std): GEA PROCESS ENGINEERING AS

Assignee(s): GEA PROCESS ENGINEERING A S

Inventor(s): (std): SORENSEN JAKOB KRYGER ; PEDERSEN ANDERS HOLMEN ; HARALDSTED HENRIK

13) Family number: 61387052 (US2017202236A)

© PatBase

Title: PRODUCTION OF AN INSTANT COFFEE PRODUCT IN HIGH YIELD

Abstract: Source: US2017202236A Disclosed herein is a process for production of an instant coffee product in a high yield, comprising the steps of extracting roast and ground coffee beans with water having a temperature of 80 degrees centigrade or less, to produce a first extract and spent coffee grounds, adding water to the spent coffee grounds to produce an aqueous suspension, hydrolysing the aqueous suspension using a hydrolysing enzyme to produce a second extract and spent remains, adding the first extract to the second extract, optionally after concentration and/or drying of the second extract, to obtain a combined extract, and drying the combined extract to obtain an instant coffee product. The high yield is obtained due to the reduction of enzyme inhibiting substances.

Classifications:

International (IPC 8-9): A23F5/24 A23F5/26 A23F5/28 (Advanced/Invention)

CPC: A23F5/267 A23F5/28 A23F5/246

Family:

Publication number	Publication date	Application number	Application date
CA2954452 AA	20170106	CA20142954452	20140708

CN106659179 A	20170510	CN201480080430	20140708
CO20160005962 A2	20170310	CO20160005962	20161228
EP3166417 A1	20170517	EP20140739663	20140708
IN201727003754 A	20170224	IN201727003754	20170201
KR20170027850 A	20170310	KR20177003552	20140708
MX2017000052 A1	20170630	MX20170000052	20140708
US2017202236 AA	20170720	US20140324594	20140708
WO16004949 A1	20160114	WO2014DK50212	20140708

Priority:

WO2014DK50212 20140708

Probable Assignee: GEA PROCESS ENGINEERING AS

Assignee(s): (std): GEA PROCESS ENG A ; GEA PROCESS ENG AS ; GEA PROCESS ENGINEERING AS

Assignee(s): PEDERSEN ANDERS HOLMEN ; SORENSEN JAKOB KRYGER ; HARALDSTED HENRIK ; GEA PROCESS ENGINEERING A ; GEA PROCESS ENGINEERING A S

Inventor(s): (std): ANDERS HOLMEN PEDERSEN ; HARALDSTED HENRIK ; HENRIK HARALDSTED ; JAKOB KRYGER SORENSEN ; PEDERSEN ANDERS HOLMEN ; SORENSEN JAKOB KRYGER

Inventor(s): SOERENSEN JAKOB KRYGER

Agent(s): BORDEN LADNER GERVAIS LLP; JUAN CARLOS CUESTA QUINTERO; AWAPATENT A S; RASMUSSEN TORBEN RAVN ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

14) Family number: 61387051 (US2017202237A)

© PatBase

Title: PRODUCTION OF A COFFEE EXTRACT PRESERVING FLAVOUR COMPONENTS

Abstract: Source: US2017202237A Disclosed herein is a process for preparing a coffee extract, comprising the steps of: providing a mixture of roasted coffee beans and water, milling the mixture of roast coffee beans and water in a pressurised chamber, and separating the milled mixture in a liquid coffee extract and spent coffee grounds. The coffee extract maintains many of the flavour components of the roasted beans.

Classifications:

International (IPC 8-9): A23F5/08 A23F5/10 A23F5/24 A23F5/26 A23F5/48 (Advanced/Invention)

CPC: A23F5/483 A23F5/26 A23F5/08

Family:

Publication number	Publication date	Application number	Application date
CA2954457 AA	20170106	CA20142954457	20140708
CN106535651 A	20170322	CN201480080425	20140708
CO20170000118 A2	20170331	CO20170000118	20170105
EP3166416 A1	20170517	EP20140739662	20140708
KR20170027849 A	20170310	KR20177003550	20140708
MX2017000241 A1	20170825	MX20170000241	20140708
US2017202237 AA	20170720	US20140324639	20140708
WO16004948 A1	20160114	WO2014DK50211	20140708

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WO2014DK50211 20140708

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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

15) Family number: 66084075 (WO17097303A1)

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Title: A PROCESS FOR PRODUCTION OF A CONCENTRATED COFFEE PRODUCT

Abstract: Disclosed is a process for production of a concentrated coffee product, comprising the steps of providing a coffee concentrate obtained from roast and ground coffee beans and adding spent coffee grounds having an average particles size of 0.1- 0 micrometres to the coffee concentrate. The concentrated coffee product finds useful applications for spent coffee grounds, increases the yield of roast and ground coffee beans, makes it possible to design new properties, and/or improves the digestive effect and/or mouth feel.

Classifications:

International (IPC 8-9): A23F5/24 A23F5/26 A23F5/28 A23F5/36 (Advanced/Invention)

CPC: A23F5/24 A23F5/265 A23F3/405 A23F5/28 A23F5/36

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CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID
IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN
MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG
SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW