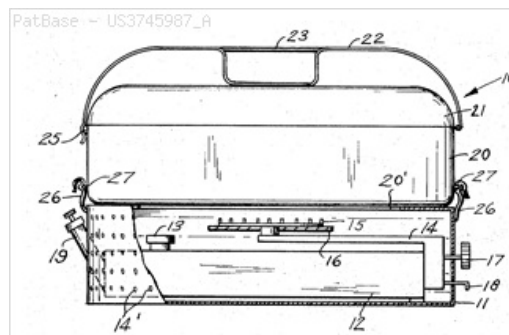


Search history

Search 1: FT=(REMOV~ AND HANDLE~ AND NOTCH~ AND LATCH~ AND EXCHANG~) (Results 4712)
Search 2: FT=(REMOV~ AND HANDLE~ AND NOTCH~ AND LATCH~ AND EXCHANG~ AND KITCHEN AND ACCESSORY) (Results 29)
Search 3: FT=(REMOV~ AND HANDLE~ AND NOTCH~ AND LATCH~ AND KITCHEN AND ACCESSORY) (Results 74)
Search 4: B25G (Results 76)
Search 5: FT=(REMOV~ AND PAN HANDLE~ AND NOTCH~ AND LATCH~ AND KITCHEN AND ACCESSORY) (Results 2)
Search 6: FT=(REMOV*~ AND PAN~ HANDLE~ AND FIXATION~ AND LATCH~ AND KITCHEN AND ACCESSORY) (Results 3)
Search 7: FT=(REMOV*~ AND HANDLE~ AND FIXATION~ AND LATCH~ AND KITCHEN AND ACCESSORY) (Results 46)
Search 8: FT=(REMOV*~ AND HANDLE~ AND FIXATION~ AND FRY~ PAN~ AND KITCHEN AND ACCESSORY) (Results 8)
Search 9: FT=(HANDLER~ AND FIXATION~ AND FRY~ PAN~ AND KITCHEN AND ACCESSORY) (Results 10)
Search 10: FT=(HANDLER~ AND FRY~ PAN~ AND KITCHEN AND ACCESSORY OR UNTENSIL) (Results 63)
Search 11: FT=(REMOV+~ AND HANDLE~ AND NOTCH~ AND LATCH~ AND EXCHANG+~) (Results 0)
Search 12: FT=(REMOV*~ AND HANDLE~ AND NOTCH~ AND LATCH~ AND EXCHANG*~) (Results 4893)
Search 13: FRY PAN (Results 874)
Search 14: FRY PAN AND HANDLE (Results 249)
Search 15: FRY PAN AND HANDLE AND FIXATION ADN REMOV* (Results 0)
Search 16: FRY PAN AND HANDLE AND FIXATION (Results 9)
Search 17: FRY PAN AND HANDLE AND REMOVE (Results 50)
Search 18: FRY PAN AND HANDLE AND NOTCH (Results 15)
Search 19: FRY PAN AND HANDLE AND LATCH (Results 15)
Search 20: FRY PAN AND HANDLE AND EXCHANGE (Results 15)
Search 21: FRY PAN AND HANDLE AND PLATEN (Results 1)
Search 22: 20 AND 17 (Results 6)
Search 23: FRY PAN AND HANDLE AND REMOVE AND FIXATION (Results 4)
Search 24: FRY PAN AND HANDLE AND REMOVE AND NOTCH (Results 5)
Search 25: FRY PAN AND HANDLE AND REMOVE (Results 50)

Title: SELF-CONTAINED GASOLINE **FRY PAN****Abstract:** A portable **frying pan**. A base member with a gasoline fired burner, the base being clipped to the **frying pan** body which is removable.**Classifications:****International (IPC 8-9):** F24C5/20 (Advanced/Invention);

F24C5/00 (Core/Invention)

International (IPC 1-7): F24C5/20**CPC:** F24C5/20**European:** F24C5/20**US:** 126/38**Family:**

Publication number	Publication date	Application number	Application date
CA943420 A1	19740312	CA19710124083	19710930
US3745987 A	19730717	US19710142504	19710512

Priority:

US19710142504 19710512

Probable Assignee:

DRIBNENKI JOE J

Assignee(s): (std):

DRIBNENKI J ; DRIBNENKI JOE J

Assignee(s):

DRIBNENKI J US

Inventor(s): (std):

DRIBNENKI J ; DRIBNENKI JOE J

Inventor(s):

DRIBNENKI J US

Legal status (INPADOC)[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
US3745987 A	19730717	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: COOKWARE HAVING A TREAD PLATE SURFACE

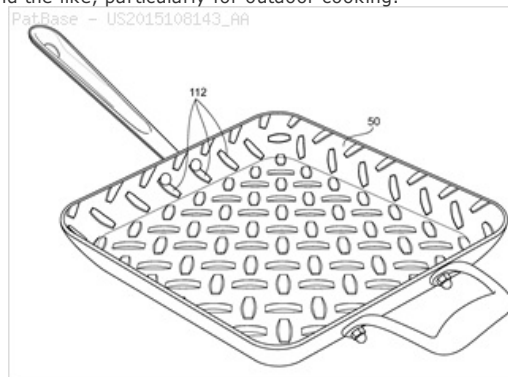
Abstract: Cookware formed from a metal tread plate wherein the metal tread plate is one of carbon steel, aluminum, or stainless steel. The cookware is in the form of a **fry pan**, roaster pan, saucepan and the like, particularly for outdoor cooking.

Classifications:

International (IPC 8-9): A47J36/02 A47J37/10 B21D26/021 B21D51/18 B23K31/02 (Advanced/Invention)

CPC: A47J27/002 A47J36/02 B23K31/02 B21D22/12 B21D26/021 B21D51/22 Y10T29/49986

US: 220/573.2 228/170 29/527.4 72/55



Family:

Publication number	Publication date	Application number	Application date
US2015108143 AA	20150423	US20140520622	20141022

Priority:

US20130893960P 20131022

US20140520622 20141022

Probable Assignee:

ALL CLAD METALCRAFTERS LLC

Assignee(s): (std):

ALL CLAD METALCRAFTERS LLC

Inventor(s): (std):

GROLL WILLIAM A

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
US2015108143 AA	20150423	LSPB	+	published / reissued	
US2015108143 AA	20150916	LSES	NFA1	Non Final Action Mailed	
US2015108143 AA	20170424	LSES	ADV1	Advisory Action Mailed	
US2015108143 AA	20170629	LSES	NFA1	Non Final Action Mailed	
US2015108143 AA	20180319	LSES	NFA1	Non Final Action Mailed	
US2015108143 AA	20190611	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	

Title: COOKING VESSEL WITH OR WITHOUT RETAINABLE COVER AND METHOD OF MAKING THE SAME

Abstract: Cooking vessel that includes a container bottom, a container top comprising a flared section extending to a rim and at least one **handle** coupled to or extending from an outside surface of the flared section.

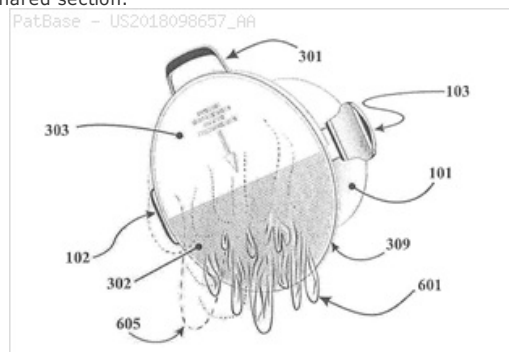
Classifications:

International (IPC 8-9): A47J27/00 A47J36/02 A47J36/08

A47J45/06 (Advanced/Invention)

CPC: A47J27/002 A47J36/08 A47J2027/006 A47J45/061 A47J36/02 A47J37/101

US: 220/573.1



Family:

Publication number	Publication date	Application number	Application date
US2018098657 AA	20180412	US20170730055	20171011

Priority:

US20160407199P 20161012 US20170562819P 20170925 US20170730055 20171011

Probable Assignee:

TAMMERA ROBERT F

Assignee(s): (std):

TAMMERA ROBERT F

Inventor(s): (std):

TAMMERA ROBERT F

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2018098657 AA	20180412	LSPB	+	published / reissued	
US2018098657 AA	20180624	LSES	-NFA2	Non Final Action Counted, Not Yet Mailed	
US2018098657 AA	20180627	LSES	NFA1	Non Final Action Mailed	
US2018098657 AA	20190322	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2018098657 AA	20190621	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2018098657 AA	20190717	LSGT	PAT1	Patented Case	

Title: Deep-fryer pan for industrial fryers

Abstract: A deep-fry pan for industrial deep-fryers. The pan is hermetically closed during operation to minimize contact between oil contained in the pan and ambient air and to minimize pollution of the room in which the fryer is located.

Classifications:

International (IPC 8-9): A47J37/12 G07F9/10 (Advanced/Invention);
A47J37/12 G07F9/10 (Core/Invention)

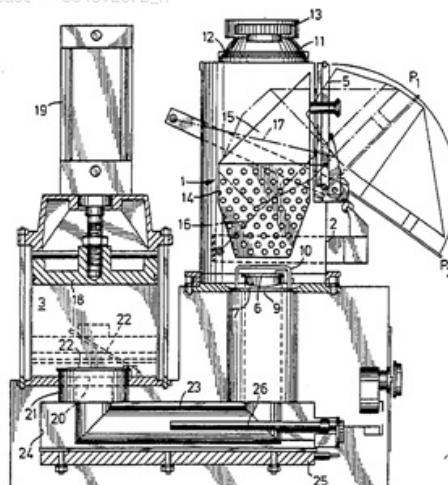
International (IPC 1-7): A47J37/12 G07F9/10

CPC: A47J37/1228 G07F17/0078 G07F17/0085

European: A47J37/12E G07F17/00F4 G07F17/00F4B

US: 426/438 99/330 99/334 99/356 99/357 99/407 99/408

PatBase - US4502372_A



Family:

Publication number	Publication date	Application number	Application date
CA1181961 A1	19850205	CA19820398043	19820310
CA1189710 A1	19850702	CA19820398033	19820310
DE3266108 D1	19851017	DE19823266108	19820311
DE3271916 D1	19860814	DE19823271916	19820311
EP0060204 A1	19820915	EP19820400436	19820311
EP0060204 B1	19860709	EP19820400436	19820311
EP0060779 A1	19820922	EP19820400437	19820311
EP0060779 B1	19850911	EP19820400437	19820311
FR2501491 A1	19820917	FR19810005027	19810313
FR2501491 B1	19851108	FR19810005027	19810313
US4502372 A	19850305	US19840608929	19840511
US4505193 A	19850319	US19840623347	19840622
USRE33712 E	19911008	US19870016194	19870218

Priority:

FR19810005027 19810313
US19820433875 19821013

CA19820398033 19820310

CA19820398043 19820310

Probable Assignee:

ORE IDA VENDEO PRODUCTS INC

Assignee(s): (std):

FRITECO INC ; MARIOTTI RENE

Assignee(s):

ORE IDA VENDEO PRODUCTS INC

Inventor(s): (std):

MARIOTTI RENE ; MARIOTTI RENE G

Agent(s):

GOUDREAU GAGE DUBUC

Designated states:

BE DE GB IT LU NL

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE3266108 D1	19861002	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
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DE3271916 D1	19940310	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
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EP0060204 A1	19830518	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19830307

EP0060204 B1	19860709	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0060204 B1	19870624	LSGT	+26N	NO OPPOSITION FILED	
EP0060204 B1	19910331	LSFE	ITTA	IT: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
EP0060204 B1	19910404	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 19910404 YEAR OF FEE PAYMENT : 10
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EP0060204 B1	19920325	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU PAYMENT DATE : 19920325 YEAR OF FEE PAYMENT : 11
EP0060204 B1	19920327	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 19920327 YEAR OF FEE PAYMENT : 11
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EP0060204 B1	19921111	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP
EP0060204 B1	19930311	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19930311
EP0060204 B1	19930331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE LAPSED DATE : 19930331
EP0060204 B1	19930930	LSLE	-BERE	BE: LAPSED	PARTY TYPE : OWNER REF COUNTRY CODE : EP OWNER : MARIOTTI RENE EFFECTIVE DATE : 19930331
EP0060204 B1	19931001	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL LAPSED DATE : 19931001
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EP0060204 B1	19931201	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE LAPSED DATE : 19931201
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EP0060779 A1	19830518	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19830307
EP0060779 B1	19850911	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0060779 B1	19860827	LSGT	+26N	NO OPPOSITION FILED	
EP0060779 B1	19910331	LSFE	ITTA	IT: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
EP0060779 B1	19910404	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 19910404 YEAR OF FEE PAYMENT : 10

EP0060779 B1	19920311	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB LAPSED DATE : 19920311
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EP0060779 B1	19920327	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 19920327 YEAR OF FEE PAYMENT : 11
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EP0060779 B1	19930311	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 19930311
EP0060779 B1	19930331	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE LAPSED DATE : 19930331
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EP0060779 B1	19931001	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL LAPSED DATE : 19931001
EP0060779 B1	19931116	LSLE	-NLV4	NL: LAPSED OR ANULLED DUE TO NON-PAYMENT OF THE ANNUAL FEE	REF COUNTRY CODE : EP
EP0060779 B1	19931201	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE LAPSED DATE : 19931201
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FR2501491 A1	19850517	LSLI	CL	CONCESSION TO GRANT LICENCES	
FR2501491 B1	19851108	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2501491 B1	19940128	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2501491 B1	20010313	PEXP		Calculated Patent Term Expiry	
US4502372 A	19850305	LSGT	+	granted / extensions (spc, cpc, pte)	
US4502372 A	19880922	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORE-IDA VENDEDD PRODUCTS, INC. OLDPARTY : CHANGE OF NAME; ASSIGNOR:MARIOTTI, RENE; REEL/FRAME:004958/0080 EFFECTIVE DATE : 19870917
US4502372 A	19890305	LSRE	+REIN	REINSTATEMENT AFTER MAINTENANCE FEE PAYMENT	

CONFIRMED					
US4502372 A	19890523	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19890305
US4502372 A	19900320	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4502372 A	19900515	LSGT	PAT1	Patented Case	
US4502372 A	19900515	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US4502372 A	19900619	LSFE	+DP	NOTIFICATION OF ACCEPTANCE OF DELAYED PAYMENT OF MAINTENANCE FEE	
US4505193 A	19850319	LSGT	+	granted / extensions (spc, cpc, pte)	
US4505193 A	19850116	LSGT	PAT1	Patented Case	
US4505193 A	19880922	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ORE-IDA VENDE PRODUCTS, INC. OLDPARTY : CHANGE OF NAME; ASSIGNOR:MARIOTTI, RENE; REEL/FRAME:004958/0080 EFFECTIVE DATE : 19870917
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US4505193 A	19930321	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4505193 A	19930608	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19930321
US4505193 A	20180123	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US4505193 A	20180123	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
USRE33712 E	19910807	LSGT	PAT1	Patented Case	
USRE33712 E	19970302	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
USRE33712 E	20180130	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
USRE33712 E	20180130	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362

Title: Cooking device with proportioning control

Abstract: ABSTRACT OF THE DISCLOSURE

A cooking vessel including a pan with a lower electric heating element supported on its underside and a deep cover with an upper heating element supported within. A removable thermostatic control is supported on the pan with a heat probe in heat sensing relation with the pan. The control is connected to the lower heating element for energization thereof. When the cover is closed, an electrical connection for energizing the upper element is completed. The control serves thermostatically to control the energization of either element or both elements in a repeating, alternating sequence. In one embodiment the proportional on time of the elements is controlled by an adjustable cam, and in other embodiment by an adjustable bimetal actuator.

Classifications:

International (IPC 8-9): A47J27/00 A47J37/06 A47J37/10 A47J43/18

F24C7/04 F24C7/08 H05B1/02 (Advanced/Invention);

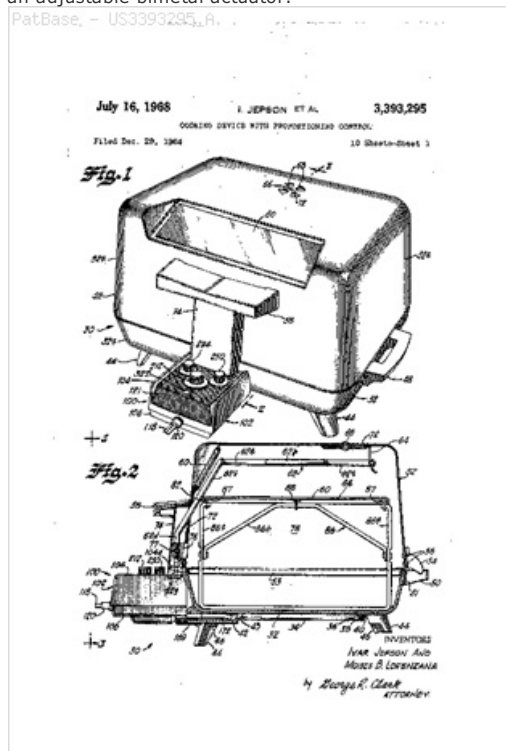
A47J27/00 A47J37/10 F24C7/04 F24C7/08 H05B1/02 (Core/Invention)

International (IPC 1-7): A47J37/06 F24C7/04 F24C7/08 H05B1/02 H05B3/02

CPC: A47J27/004 A47J37/103 F24C7/04 F24C7/08 H05B1/0213 H05B1/0225

European: A47J27/00B A47J37/10A1 F24C7/04 F24C7/08 H05B1/02A4 H05B1/02A8 H05B1/02D H05B1/02T

US: 219/386 219/398 219/483 219/486 219/492 219/524 99/332 99/339 99/340 99/390



Family:

Publication number	Publication date	Application number	Application date
AU5882165 A1	19661117	AU19650058821	19650513
GB1126050 A	19680905	GB19650044633	19651021
US3393295 A	19680716	US19640421795	19641229
US3566075 A	19710223	US19670658125	19671122

Priority:

US19640421795 19641229 US19670658125 19671122

Probable Assignee: SUNBEAM CORP

Assignee(s): (std): SUNBEAM CORP

Inventor(s): (std): LORENZANA MOISES B ; JEPSON IVAR ; IVAR JEPSON

Inventor(s): IVAR JEPSON AND MOISES B LORENZANA ; MOISES B LORENZANA

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU5882165 A1	19661117	LSPB	+	published / reissued	
GB1126050 A	19680905	LSGT	+	granted / extensions (spc, cpc, pte)	
GB1126050 A	19851021	PEXP		Calculated Patent Term Expiry	
US3393295 A	19680716	LSGT	+	granted / extensions (spc, cpc, pte)	
US3566075 A	19710223	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: DETACHABLE SLEEVE

Abstract: This application discloses a novel detachable sleeve comprising an elongated body, an internal cavity adapted to receive a **handle** and a reversible locking mechanism to engage and disengage with the **handle** when received by the internal cavity.

Classifications:

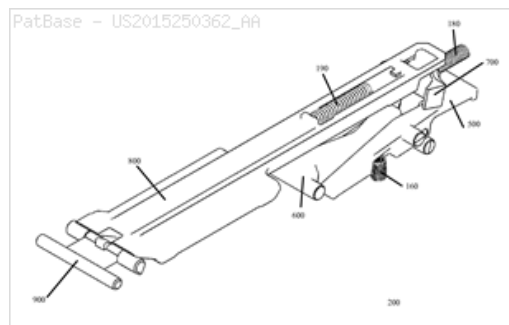
International (IPC 8-9): A47J27/00 A47J45/08

B65D25/28 (Advanced/Invention);

A47J36/00 (Advanced/Non-invention)

CPC: A47J45/085 B65D25/28

US: 220/573.1 220/752 220/753



Family:

Publication number	Publication date	Application number	Application date
US2015250362 AA	20150910	US20140196549	20140304
US9521931 BB	20161220	US20140196549	20140304

Priority:

US20140196549 20140304

Probable Assignee: ALLURE HOME CREATION CO INC

Assignee(s): (std): ALLURE HOME CREATION CO INC

Assignee(s): ALLURE HOME CREATION CO

Inventor(s): (std): HO EDWARD

Agent(s): LOWENSTEIN SANDLER LLP

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2015250362 AA	20150910	LSPB	+	published / reissued	
US2015250362 AA	20161110	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : ALLURE HOME CREATION CO., INC., NEW JERSEY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HO, EDWARD; REEL/FRAME:040280/0102 EFFECTIVE DATE : 20161109
US2015250362 AA	20161130	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US9521931 BB	20161220	LSGT	+	granted / extensions (spc, cpc, pte)	
US9521931 BB	20150701	LSES	NFA1	Non Final Action Mailed	
US9521931 BB	20161130	LSGT	PAT1	Patented Case	
US9521931 BB	20340304	PEXP		Calculated Patent Term Expiry	

Title: KOCHGEFAESS MIT TEMPERATURERFASSUNG

Abstract: Source: DE102007054022B4 [DE] Kochgefaess mit Temperaturerfassung, insbesondere Pflanne, mit einem Gefaesskoerper (2), einem am Gefaesskoerper (2) angeordneten Temperatursensor (31), einem abnehmbar und wieder ansetzbar am Gefaesskoerper (2) befestigten Griff (3), einer am Griff (3) vorgesehenen Anzeigeeinrichtung (32) und einer Leitungsverbindung (33) zwischen dem Temperatursensor (31) und der Anzeigeeinrichtung (32), dadurch gekennzeichnet, dass die Leitungsverbindung (33) eine Trennstelle (34) mit einem ersten, am Gefaesskoerper (2) angeordneten Kontaktelement (35a) und einem zweiten, am Griff (3) angeordneten Kontaktelement (35b) aufweist, an der die Leitungsverbindung (33) beim Abnehmen des Griffes (3) vom Gefaesskoerper (2) selbsttaetig trennbar ist.

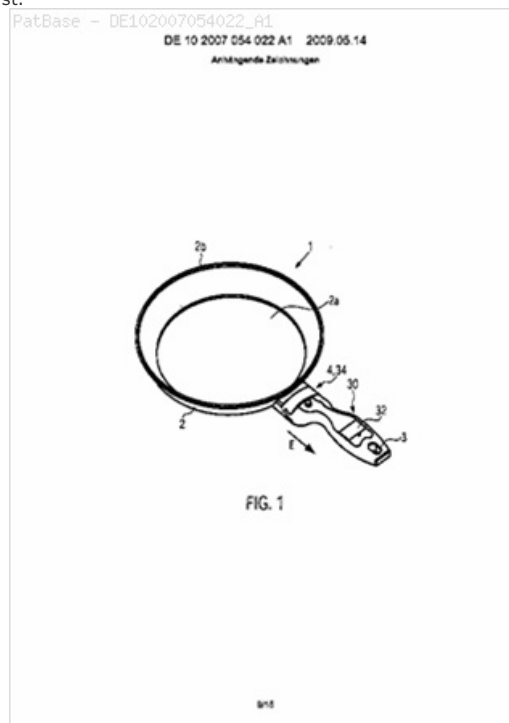
Classifications:

International (IPC 8-9): A47J36/32 A47J37/10 A47J45/07 G01K1/02 (Advanced/Invention);

A47J36/00 A47J37/10 A47J45/00 G01K1/00 (Core/Invention)

CPC: A47J37/108 A47J45/071 G01K7/023 G01K2207/06

European: A47J37/10D A47J45/07A G01K7/02D S01K207/06



Family:

Publication number	Publication date	Application number	Application date
DE102007054022 A1	20090514	DE200710054022	20071113
DE102007054022 B4	20181115	DE200710054022	20071113

Priority:

DE200710054022 20071113

Probable Assignee: WMF WUERTTEMBERG METALLWAREN

Assignee(s): (std): WMF GROUP GMBH ; WMF WUERTTEMBERG METALLWAREN

Assignee(s): WMF WUERTTEMBERGISCHE METALLWARENFABRIK AG

Inventor(s): (std): SCHNOETZINGER FRANK ; KAUPP HEINZ ; THIERER HARALD ; HUBER SIEGFRIED ; ABELE WERNER ; NEUMAYER MARTIN ; BOERNER CORNELIUS ; ALBERT HEINZ ; BUEHLMAIER GUENTER ; KIEFER ALEXANDER ; OSTOWSKI MANFRED

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
DE102007054022 A1	20090514	LSPB	+	published / reissued	
DE102007054022 A1	20140403	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : WMF AG, DE OLDPARTY : FORMER OWNER: WMF WUERTTEMBERGISCHE METALLWARENFABRIK AG, 73312 GEISLINGEN, DE EFFECTIVE DATE : 20140224
DE102007054022 A1	20140403	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : WMF GROUP GMBH, DE OLDPARTY : FORMER OWNER: WMF WUERTTEMBERGISCHE METALLWARENFABRIK AG, 73312 GEISLINGEN, DE EFFECTIVE DATE : 20140224

DE102007054022 A1	20141113	LSES	+R012	REQUEST FOR EXAMINATION VALIDLY FILED	
DE102007054022 A1	20141231	LSES	+R012	REQUEST FOR EXAMINATION VALIDLY FILED	EFFECTIVE DATE : 20141113
DE102007054022 A1	20160405	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : WMF GROUP GMBH, DE OLDPARTY : FORMER OWNER: WMF AG, 73312 GEISLINGEN, DE
DE102007054022 A1	20180807	LSGT	+R018	GRANT DECISION BY EXAMINATION SECTION/EXAMINING DIVISION	
DE102007054022 B4	20181115	LSGT	+	granted / extensions (spc, cpc, pte)	
DE102007054022 B4	20271113	PEXP		Calculated Patent Term Expiry	

Title: Spatter shielding and vapor venting device for **frying pan**

Abstract: An improved spatter shielding and vapor venting device for a **frying pan** comprising a transparent lid to enable visual observation of cooking, a peripheral venting gap to release generated fumes and vapors, a vertical hollow cylindrical wall to rapidly return condensed oil to **frying pan**, a **handle** to hold the device steady, a peripheral horizontal flange and size expansion adapter to facilitate placement on rims of **frying pans** of varying sizes, a vertical cylindrical flange to restrict lateral motion and to shield the contact area between the horizontal flange and **frying pan** rim, a vertical window opening for the introduction, removal, stirring and turning over of food, a hands-free opening and automatic closing window cover means to effectively shield the window opening even while performing said cooking operations, a loop-and-pin hinged system to facilitate stuck-proof withdrawal of inserted instrument through said window opening.

Classifications:

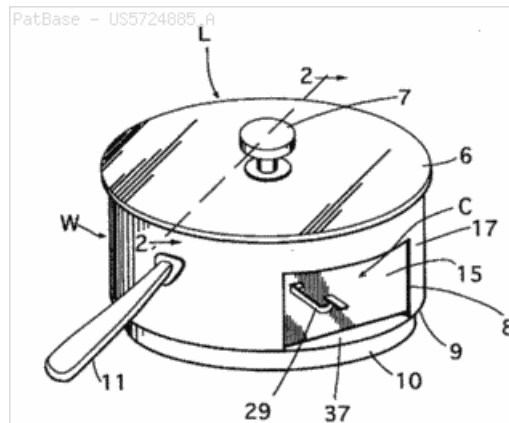
International (IPC 8-9): A47J37/10 (Advanced/Invention);
A47J37/10 (Core/Invention)

International (IPC 1-7): A23L1/00 A47J27/00 A47J37/10 B65D1/40

CPC: A47J37/101

European: A47J37/10A

US: 126/299C 126/381.1 126/383 126/383.1 220/369 220/731 99/341
99/422 99/645 993/410



Family:

Publication number	Publication date	Application number	Application date
US5724885 A	19980310	US19970791761	19970129

Priority:

US19970791761 19970129

Probable Assignee:

UY WILLIAM CHENG

Assignee(s): (std):

UY WILLIAM CHENG

Inventor(s): (std):

UY WILLIAM CHENG

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US5724885 A	19980310	LSGT	+	granted / extensions (spc, cpc, pte)	
US5724885 A	20010907	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5724885 A	20060310	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5724885 A	20060412	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5724885 A	20060412	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5724885 A	20060509	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20060310
US5724885 A	20170129	PEXP		Calculated Patent Term Expiry	

Title: HOLLOW-CAVITY, GAS-FILLED COOKWARE

Abstract: A cooking vessel includes an upper element that defines a cook surface and a lower shell that defines a heat surface for contact with a heat source during heating. The upper element and the lower shell are joined together such that the cook surface and the heat surface are retained in a fixed spatial relationship with each other and a gas-filled cavity is defined between the heat surface of the lower shell and the cook surface of the upper element. An optional temperature sensor may be placed in contact with the gas for cooking temperature readout. Heat is transferred from the heat surface to the cook surface through the gas contained in the gas-filled cavity. Improved heat distribution is accomplished by static and dynamic means of enhancing gas convection. This promotes efficient and even heat distribution at low weight.

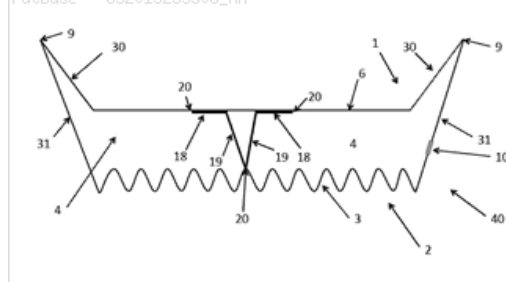
Classifications:

International (IPC 8-9): A21B3/13 A47J27/00 (Advanced/Invention)

CPC: A47J27/002

US: 1/1 99/324

PatBase - US2013255506_AA



Family:

Publication number	Publication date	Application number	Application date
US2013255506 AA	20131003	US20120433054	20120328
US9125512 BB	20150908	US20120433054	20120328

Priority:

US20120433054 20120328

Probable Assignee:

SELWYN GARY S

Assignee(s): (std):

SELWYN GARY S

Inventor(s): (std):

SELWYN GARY S

Agent(s):

GARY C COHN PLLC

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2013255506 AA	20131003	LSPB	+	published / reissued	
US2013255506 AA	20150819	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US9125512 BB	20150908	LSGT	+	granted / extensions (spc, cpc, pte)	
US9125512 BB	20150819	LSGT	PAT1	Patented Case	
US9125512 BB	20190221	LSFE	+MAFP	MAINTENANCE FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US9125512 BB	20340228	PEXP		Calculated Patent Term Expiry (PTA 702 days)	

TRAY

removed

International (IPC 1-7): A47J27/00 A47J27/14 A47J37/00



Publication number	Publication date	Application number	Application date
AU199457504 A1	19940915	AU19940057504	19940302
CA2116150 AA	19940912	CA19942116150	19940222

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD;
GOWLING LAFLEUR HENDERSON LLP

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Patent	Date recorded	Event group	Code	Event	Details
AU199457504 A1	19940915	LSPB	+	published / reissued	
CA2116150 AA	19940912	LSPB	+	published / reissued	
CA2116150 AA	19960824	LSLE	-FZDE	DEAD	

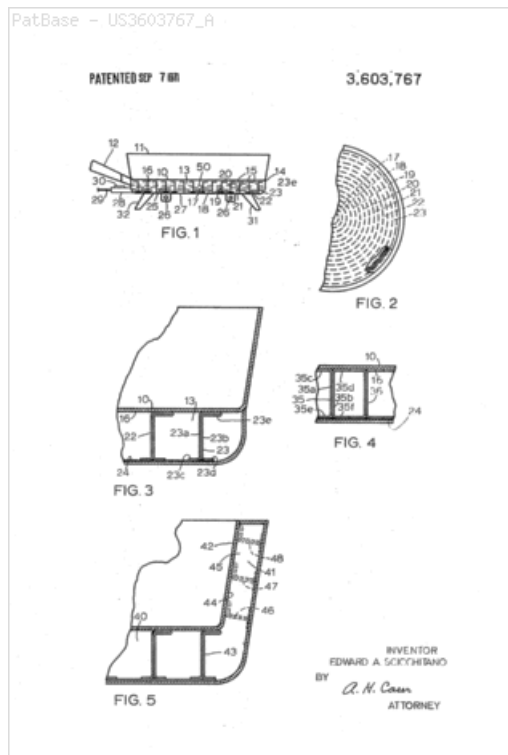
Title: ISOTHERMAL COOKING OR HEATING DEVICE

Abstract: (Claim 1) 1. 1. A cooking utensil comprising a heat-conducting wall for supporting and heating on the upper surface thereof a substance to be cooked, means for retaining cooking fluids on said surface, a sealed reservoir evacuated of all air and noncondensable gases disposed beneath said wall in heat exchange relation therewith, said reservoir being defined by said wall and also by a second wall spaced beneath the first wall, said second wall having a size and shape coextensive with that of the first wall, capillary means in said reservoir in contact with the underside of said first wall and extending toward the second wall, said capillary means comprising a porous structure, a working agent in the reservoir which in liquid form is flowable throughout the entire reservoir and is able to pass through and to saturate the porous capillary means, said agent being heatable to form vapors which condense on said underside of the first wall and which isothermally transfer latent heat of condensation thereto, thereby to maintain said first wall at a substantially uniform elevated temperature, said porous capillary means being permeable to said vapors so that the vapors are flowable throughout the entire reservoir and are condensable on the entire underside of the first wall, said agent at said elevated temperature having a vapor pressure in the vicinity of atmospheric pressure, thereby avoiding pressures which exceed the breaking strength of the utensil, said capillary means acting to drain said condensed vapors from said underside to avoid any buildup thereon of thick liquid films and also acting to facilitate transfer of the condensed vapors toward the bottom of said reservoir, an electrical heat source for heating said agent disposed on said utensil beneath said reservoir and out of contact with said agent, heat control means for said heat source to permit selection of the operating temperature of the utensil, and said utensil being capable of cooking a food in the substantial absence of local overheating or local hot spots and with reduced sticking and splattering in the case of a food

Classifications:**International (IPC 8-9):** A47J27/10 A47J27/17

A47J37/06 (Advanced/Invention);

A47J27/10 A47J27/16 A47J37/06 (Core/Invention)

International (IPC 1-7): F27D11/02**CPC:** A47J27/10 A47J27/17 A47J37/067**European:** A47J27/10 A47J27/17 A47J37/06D**US:** 126/246 165/104.26 219/401 219/430 219/439 219/530 219/540 392/496**Family:**

Publication number	Publication date	Application number	Application date
US3603767 A	19710907	US19690854893	19690903

Priority:

US19690854893 19690903

Probable Assignee:

DYNATHERM CORP

Assignee(s): (std):

DYNATHERM CORP

Assignee(s):

FLEET CAPITAL CORP

Inventor(s): (std):

SCICCHITANO EDWARD A

Inventor(s):

EDWARD A SCICCHITANO

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US3603767 A	19710907	LSGT	+	granted / extensions (spc, cpc, pte)	
US3603767 A	19990908	LSAS	AS	ASSIGNMENT	OWNER NAME : FLEET CAPITAL CORPORATION, AS AGENT, CONNECTICUT DESCRIPTION : SECURITY INTEREST; ASSIGNOR:DYNATHERM CORPORATION, INC.; REEL/FRAME:010206/0801

Title: COOKING UTENSILS

Abstract: The invention concerns a utensil for cooking food. There is a container provided with an opening for insertion and removal of the foodstuffs to be cooked. The container is mounted on a stand and rotatable about a vertical axis. There is provision for tilting the container to a preselected position. A speed control to permit stirring of the ingredients is provided. Any suitable heating source may be used.

Classifications:

International (IPC 8-9): A47J27/00 A47J27/14 A47J36/34 A47J37/04 A47J43/04 A47J44/00 (Advanced/Invention);

A47J27/00 A47J27/14 A47J36/00 A47J37/04 A47J43/04 A47J44/00 (Core/Invention)

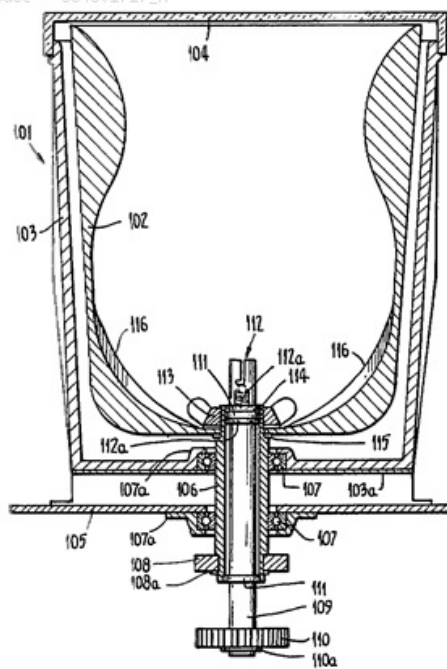
International (IPC 1-7): A47J27/00 A47J27/66 A47J36/00 A47J36/16 A47J36/34 A47J37/00 A47J37/10 A47J44/00 B01F9/02

CPC: A47J27/004 A47J37/047 A47J27/14 A47J43/04

European: A47J27/14 A47J37/04G A47J43/04

US: 366/185 366/220 366/232 99/348

PatBase - US4301717_A

**Family:**

Publication number	Publication date	Application number	Application date
AT391610 B	19901112	AT19790004842	19790711
AT484279 A	19900515	AT19790004842	19790711
AU197947621 A1	19800117	AU19790047621	19780612
AU504891 A1	19791101	AU19790047621D	19790530
AU504891 B1	19791101	AU19790047621	19790530
BR7904480 A	19800325	BR19790004480	19790711
CA1104362 A1	19810707	CA19790331029	19790703
DE2849673 A1	19800131	DE19782849673	19781116
FR2430745 A1	19800208	FR19780031129	19781103
FR2430745 B1	19840706	FR19780031129	19781103
GB2025203 A1	19800123	GB19780035985	19780907
GB2025203 B2	19830216	GB19780035985	19780907
HK41083 A	19831021	HK19830000410	19831013
IT1188810 A	19880128	IT19790068438	19790711
IT7968438 A0	19790711	IT19790068438	19790711
JP1751884 Y	19890427	JP19850133168U	19850902
JP55010978 A2	19800125	JP19780115204	19780921
JP61051124 U1	19860405	JP19850133168U	19850902
JP63008374 Y2	19880314	JP19850133168U	19850902
MY8400240 A	19841231	MY19840000240	19841230
NZ190943 A	19811019	NZ19790190943	19790706
US4301717 A	19811124	US19790055694	19790706

Priority:

AU1978PD05042 19780612 AU1978PD05042 19780712 JP19780115204 19780921
AU19790047621 19790530 CA19790331029 19790703

Probable Assignee: LNEES H

Assignee(s): (std): KNEES H ; KNEES HANS ; LNEES H

Assignee(s): HANS KNEES

Inventor(s): (std): KNESS HANS ; KNEES HANS ; KNEES H ; HANSU NIIZU ; HANS KNEES

Inventor(s): H KNEES ; HANS KNESS

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; MACRAE AND CO

Patent	Date recorded	Event group	Code	Event	Details
AT391610 B	19901112	LSGT	+	granted / extensions (spc, cpc, pte)	
AT391610 B	19950215	LSLE	-ELJ	CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE	
AT391610 B	19990711	PEXP		Calculated Patent Term Expiry	
AT484279 A	19900515	LSPB	+	published / reissued	
AU197947621 A1	19800117	LSPB	+	published / reissued	
AU504891 A1	19791101	LSPB	+	published / reissued	
AU504891 B1	19791101	LSGT	+	granted / extensions (spc, cpc, pte)	
AU504891 B1	19990530	PEXP		Calculated Patent Term Expiry	
BR7904480 A	19800325	LSPB	+	published / reissued	
BR7904480 A	19950418	LSLE	-MK	PATENT EXPIRED	EFFECTIVE DATE : 19940711
DE2849673 A1	19800131	LSPB	+	published / reissued	
DE2849673 A1	19850207	LSES	+8110	REQUEST FOR EXAMINATION PARAGRAPH 44	
DE2849673 A1	19940421	LSRV	-8131	REJECTION	
FR2430745 A1	19800208	LSPB	+	published / reissued	
FR2430745 B1	19840706	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2430745 B1	19940930	LSLE	-ST	NOTIFICATION OF LAPSE	
FR2430745 B1	19981103	PEXP		Calculated Patent Term Expiry	
GB2025203 A1	19800123	LSPB	+	published / reissued	
GB2025203 B2	19830216	LSGT	+	granted / extensions (spc, cpc, pte)	
GB2025203 B2	19950503	LSLE	-PCNP	PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	EFFECTIVE DATE : 19940907
GB2025203 B2	19980907	PEXP		Calculated Patent Term Expiry	
HK41083 A	19831021	LSGT	+	granted / extensions (spc, cpc, pte)	
HK41083 A	20031013	PEXP		Calculated Patent Term Expiry	
IT1188810 A	19880128	LSGT	+	granted / extensions (spc, cpc, pte)	
IT1188810 A	19990711	PEXP		Calculated Patent Term Expiry	
JP1751884 Y	19890427	LSGT	+	granted / extensions (spc, cpc, pte)	
JP55010978 A2	19800125	LSPB	+	published / reissued	
JP61051124 U1	19860405	LSPB	+	published / reissued	
JP63008374 Y2	19880314	LSPB	+	published / reissued	
MY8400240 A	19841231	LSPB	+	published / reissued	
NZ190943 A	19811019	LSPB	+	published / reissued	
US4301717 A	19811124	LSGT	+	granted / extensions (spc, cpc, pte)	
US4301717 A	19811124	LSGT	PAT1	Patented Case	
US4301717 A	19811124	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE

Title: BI-FUNCTIONAL COOKWARE LID

Abstract: A bi-functional lid comprises a food covering section having a concave top wall and a peripheral wall, a knob on the outer surface of the concave top wall and laterally extending **handles** originating from the outer surface of the peripheral wall. The food covering section of a bi-functional lid is made up of multilayer sheets.

Classifications:

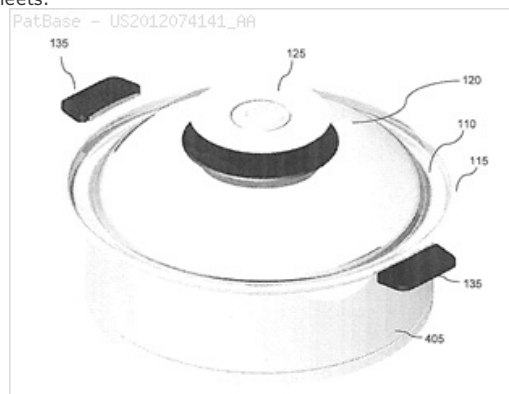
International (IPC 8-9): A47G19/02 A47J36/02

A47J36/06 (Advanced/Invention)

CPC: A47J36/06

European: A47J36/06

US: 220/212.5 220/212.500P 220/573.1 220/573.100S



Family:

Publication number	Publication date	Application number	Application date
CN102415822 A	20120418	CN201110107809	20110426
IN02677MU2010 A	20121116	IN2010MU02677	20100927
KR20120031863 A	20120404	KR20110047917	20110520
US2012074141 AA	20120329	US20110072255	20110325

Priority:

IN2010MU02677 20100927

Probable Assignee: ABBAS CURRIMJEE

Assignee(s): (std): ABBAS CURRIMJEE ; CURRIMJEE ABBAS

Inventor(s): (std): CURRIMJEE ABBAS ; ABBAS CURRIMJEE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CN102415822 A	20120418	LSPB	+	published / reissued	
CN102415822 A	20120418	LSPB	+C06	PUBLICATION	
CN102415822 A	20141203	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
IN02677MU2010 A	20121116	LSPB	+	published / reissued	
KR20120031863 A	20120404	LSPB	+	published / reissued	
KR20120031863 A	20160621	LSDW	-WITN	WITHDRAWAL DUE TO NO REQUEST FOR EXAMINATION	
US2012074141 AA	20120329	LSPB	+	published / reissued	
US2012074141 AA	20130506	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	

Title: ERGONOMIC ANATOMICAL ASSIST SYSTEM FOR **HANDLED** DEVICES

Abstract: An ergonomic anatomical assist system for mounting on a **handled** receptacle device, having a hand grip disposed on a receptacle end of the device, the hand grip disposed on the device transversely to the **handle** and extending off the **handle** so that a user's palm can grasp the grip with palm facing up and opposite the receptacle. The system may further have a forearm support configured to cradle around at least a portion of the user's forearm, the support being disposed on a **handle** portion of the device that is spaced so as to distribute the load of the device over at least two spaced apart anatomical points, one being at the hand and the other along the forearm.

Classifications:

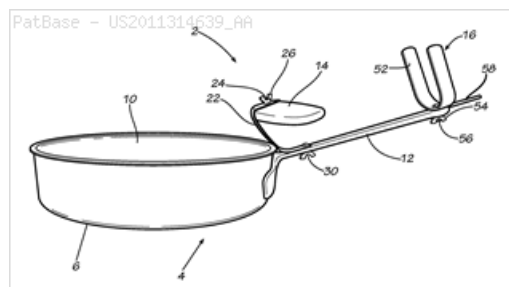
International (IPC 8-9): A47G21/08 A47J45/00 A47J45/06 B23P17/04 B25G1/10 B65G7/12 (Advanced/Invention);

B25G1/00 (Core/Invention)

CPC: Y10T16/466 Y10T16/469 Y10T16/4701 Y10T16/476 Y10T16/48 Y10T29/49826 B25G1/102 A47J45/06

European: A47J45/06 B25G1/10B

US: 16/421 16/421P 16/422 16/424 16/430 16/431 16/431S 29/428 29/428S



Family:

Publication number	Publication date	Application number	Application date
AU2010208027 AA	20100805	AU20100208027	20100201
CA2750949 AA	20100805	CA20102750949	20100201
CA2750949 C	20170321	CA20102750949	20100201
CN102300678 A	20111228	CN201080006360	20100201
EP2391485 A1	20111207	EP20100736539	20100201
US2011314639 AA	20111229	US20100146847	20100201
US8464399 BB	20130618	US20100146847	20100201
WO10088623 A1	20100805	WO2010US22770	20100201

Priority:

US20090149287P 20090202 US20100146847 20100201 WO2010US22770 20100201

Probable Assignee: LETT SOLUTIONS LLC

Assignee(s): (std): HERIGSTAD BYRON JON ; LETT SOLUTIONS LLC

Inventor(s): (std): HERIGSTAD BYRON JON ; JON HERIGSTAD BYRON

Agent(s): GRIFFITH HACK; SMART AND BIGGAR; SCHMIDT STEFFEN; GANZ LAW P C; GANZ LAW PC; GANZ BRADLEY M ET AL

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 VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2010208027 AA	20100805	LSPB	+	published / reissued	
AU2010208027 AA	20140828	LSLE	-MK4	APPLICATION LAPSED SECTION 142(2)(D) - NO CONTINUATION FEE PAID FOR THE APPLICATION	
CA2750949 AA	20100805	LSPB	+	published / reissued	
CA2750949 AA	20150216	LSSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20150202
CA2750949 C	20170321	LSGT	+	granted / extensions (spc, cpc, pte)	
CA2750949 C	20300201	PEXP		Calculated Patent Term Expiry	
CN102300678 A	20111228	LSPB	+	published / reissued	
CN102300678 A	20111228	LSPB	+C06	PUBLICATION	
CN102300678 A	20141008	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
EP2391485 A1	20111207	LSPB	+	published / reissued	
EP2391485 A1	20111207	LSSES	+17P	REQUEST FOR	EFFECTIVE DATE : 20110831

EXAMINATION FILED					
EP2391485 A1	20150211	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20140902
US2011314639 AA	20111229	LSPB	+	published / reissued	
US2011314639 AA	20130515	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : LETT SOLUTIONS, LLC, OREGON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HERIGSTAD, BYRON JON; REEL/FRAME:030425/0294 EFFECTIVE DATE : 20100129
US2011314639 AA	20130529	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US8464399 BB	20130618	LSGT	+	granted / extensions (spc, cpc, pte)	
US8464399 BB	20100209	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : LETT SOLUTIONS, LLC, OREGON OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HERIGSTAD, BYRON JON; REEL/FRAME:023918/0439 EFFECTIVE DATE : 20100129
US8464399 BB	20130529	LSGT	PAT1	Patented Case	
US8464399 BB	20161128	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8464399 BB	20300327	PEXP		Calculated Patent Term Expiry (PTA 54 days)	
WO10088623 A1	20100805	LSPB	+	published / reissued	
WO10088623 A1	20100201	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201080006360.2 COUNTRY OF REF DOCUMENT : CN
WO10088623 A1	20110727	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2750949 COUNTRY OF REF DOCUMENT : CA
WO10088623 A1	20110728	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 13146847 COUNTRY OF REF DOCUMENT : US
WO10088623 A1	20110802	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO10088623 A1	20110831	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010208027 COUNTRY OF REF DOCUMENT : AU
WO10088623 A1	20110831	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2010736539 COUNTRY OF REF DOCUMENT : EP
WO10088623 A1	20110922	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2010208027 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20100201 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :

Title: Apparatus for frying foods

Abstract: A frying device for foods comprises a metallic frying member, cast from an aluminum alloy, with a plurality of oil-filled pores and cavities of specified defined size which act to prevent the food being fried in the device from sticking to the metal frying member. The walls of the frying device are provided with a plurality of openings to enable cooking gases to escape. Less than 50 percent of the surface oil as is used in conventional roasting devices is required in my device. The device and method are particularly adapted for the production of multilayered food products, where a plurality of layers of a product are automatically laid down in timed sequence within the roasting device.

Classifications:

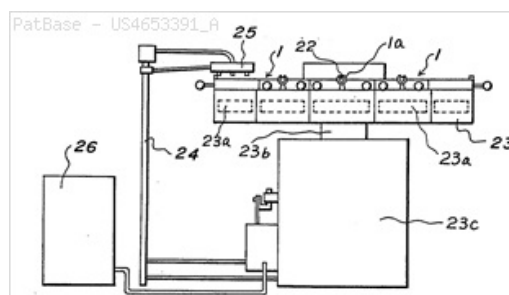
International (IPC 8-9): A47J36/02 A47J37/04 (Advanced/Invention);
A47J36/02 A47J37/04 (Core/Invention)

International (IPC 1-7): A47J36/02 A47J37/00 A47J37/10

CPC: A47J36/02 A47J37/046

European: A47J36/02 A47J37/04F

US: 126/390 126/390.1 426/568 99/349 99/422 99/424



Family:

Publication number	Publication date	Application number	Application date
JP59071720 A2	19840423	JP19820180577	19821016
US4653391 A	19870331	US19860900234	19860825

Priority:

JP19820180577 19821016 US19830542240 19831014

Probable Assignee: TOSHIN TECHNICAL KK

Assignee(s): (std): TOSHIN TECHNICAL CO LTD ; TOSHIN TECHNICAL KK

Assignee(s): TOOSHIN TECHNICAL KK ; TOSHIN TECHNICAL CO

Inventor(s): (std): SHIMIZU YASUHIRO

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
JP59071720 A2	19840423	LSPB	+	published / reissued	
US4653391 A	19870331	LSGT	+	granted / extensions (spc, cpc, pte)	
US4653391 A	19870128	LSGT	PAT1	Patented Case	
US4653391 A	19870128	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE GRANT
US4653391 A	19901001	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4653391 A	19940926	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4653391 A	19990308	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12

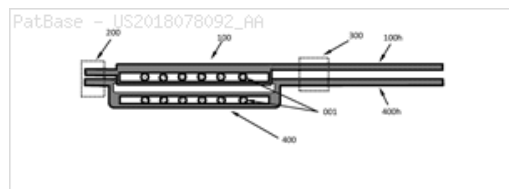
Title: ENERGY EFFICIENT AND TIME SAVING TWO-SIDE HEATING **FRY PAN**

Abstract: This disclosure describes embodiments of several structures of two-side heating **fry pan** that can save energy and shorten cooking time. Moreover, the invented two-side heating **fry pan** has pressing function that enable it to do pressing and model-pressing cook to certain type of foods. The invented two-side heating **fry pan** also has a feature that effectively **removes** the oily vapor generated during the cooking process.

Classifications:

International (IPC 8-9): A47J37/06 A47J37/10 (Advanced/Invention)

CPC: A47J37/105 A47J2037/0617 A47J37/0611 A47J37/108



Family:

Publication number	Publication date	Application number	Application date
US 2018078092 AA	20180322	US20160091109	20160916

Priority:

US20160091109 20160916

Probable Assignee: LIU ZHONGSHAN

Assignee(s): (std): LIU ZHONGSHAN ; LU ZHONGSHAN

Inventor(s): (std): LIU ZHONGSHAN ; LU ZHONGSHAN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2018078092 AA	20180322	LSPB	+	published / reissued	
US2018078092 AA	20180821	LSES	NFA1	Non Final Action Mailed	
US2018078092 AA	20190329	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	

Title: POELE AVEC UN MANCHE A ASSEMBLAGE ET DEMONTAGE RAPIDE

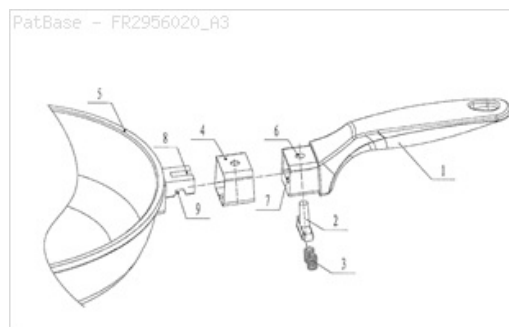
Abstract: The pan has a **handle** (1) including a cavity (7) with an end connected to a pan body (5). A wedging rod (2) is supported on a metallic protection cover (4) by a supporting spring (3). A linkage is provided on a side wall of the pan body at a corresponding position of the **handle** so as to engage with the cavity of the **handle**. A transversal groove (9) used for connection at a horizontal part of the rod and a retractable groove (8) used for receiving a vertical portion of the rod are provided in the linkage.

Classifications:

International (IPC 8-9): A47J45/07 (Advanced/Invention)

CPC: A47J45/071

European: A47J45/07A



Family:

Publication number	Publication date	Application number	Application date
FR2956020 A3	20110812	FR20100050813	20100205
FR2956020 B3	20120203	FR20100050813	20100205

Priority:

FR20100050813 20100205

Probable Assignee:	ZHU JINHONG
Assignee(s): (std):	ZHU JINHONG
Assignee(s):	JINHONG ZHU
Inventor(s): (std):	ZHU JINHONG
Inventor(s):	JINHONG ZHU
Agent(s):	CABINET BLEGER RHEIN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
FR2956020 A3	20110812	LSPB	+	published / reissued	
FR2956020 B3	20120203	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2956020 B3	20150224	LSFE	+PLFP	FEE PAYMENT	YEAR OF FEE PAYMENT : 6
FR2956020 B3	20160205	PEXP		Calculated Patent Term Expiry	

Title: COMPLETE SPECIFICATION SILENCER COOKER

Abstract: A device is useful for cooking the raw-food material, veg. and non-veg. with the help of useless hot exhaust gases of awakened engine of all petrol/diesel/CNG/kerosene oil/bio-diesel engine driven vehicles including diesel/petrol driven pump sets, ships, engine driven boats, earth mover machines, steamers, tractors, portable generators and aeroplane is disclosed. The device is comprises of four parts. Hot flue gas regulator, which is connected by its flange (14) to the out let of the exhaust gases of the engine of the vehicle and other side with flanges (15, 3) to the steam generator. Other side of the steam generator is fasten with flange (4) to the silencer. The steam channel from one side is connected with steam out let of the steam generator/boiler (15-1). Other side to steam inlet of the innovated pressure cooker with the help of insulated flare nut (2, 3). This innovative device is fitted on the leveled floor of the vehicle. By using this new process of steam cooking, the food is prepared swiftly at "ZERO-COST".

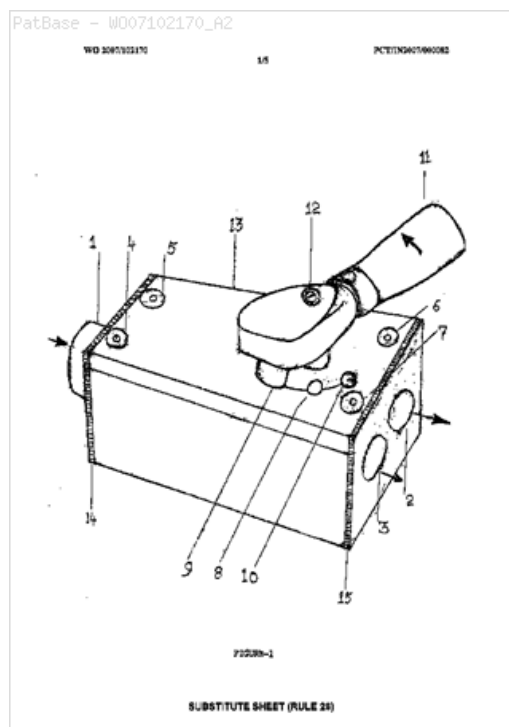
Classifications:

International (IPC 8-9): A23L1/00 B60N3/16 (Advanced/Invention); B60N3/00 (Core/Invention)

International (IPC 1-7): A47J43/28

CPC: A47J27/04 A47J27/0802 A47J27/086 A47J27/62 B60N3/16

European: A47J27/04 A47J27/086 A47J27/08C A47J27/62 B60N3/16



Family:

Publication number	Publication date	Application number	Application date
IN00579DE2006 A	20070119	IN2006DE00579	20060307
IN01917DE2010 A	20160831	IN2010DE01917	20100816
IN234147 B	20090522	IN2006DE00579	20060307
WO07102170 A2	20070913	WO2007IN00082	20070305
WO07102170 A3	20071025	WO2007IN00082	20070305
WO07102170 B1	20071213	WO2007IN00082	20070305

Priority:

IN2006DE00579 20060307

Probable Assignee: AHLUWALIA RAKESH CHANDER

Assignee(s): (std): AHLUWALIA RAKESH CHANDER

Assignee(s): RAKESH CHANDER

Inventor(s): (std): AHLUWALIA RAKESH CHANDER

Inventor(s): RAKESH CHANDER

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 GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MT MW MX MY 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 SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
IN00579DE2006 A	20070119	LSPB	+	published / reissued	
IN01917DE2010 A	20160831	LSPB	+	published / reissued	
IN234147 B	20090522	LSGT	+	granted / extensions (spc, cpc, pte)	

IN234147 B	20260307	PEXP		Calculated Patent Term Expiry	
WO07102170 A2	20070913	LSPB	+	published / reissued	
WO07102170 B1	20080909	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO07102170 B1	20090408	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 07736543 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A2 DESIGNATED STATE(S) :

Title: RECIPE DRIVEN KITCHEN AUTOMATION OF FOOD PREPARATION

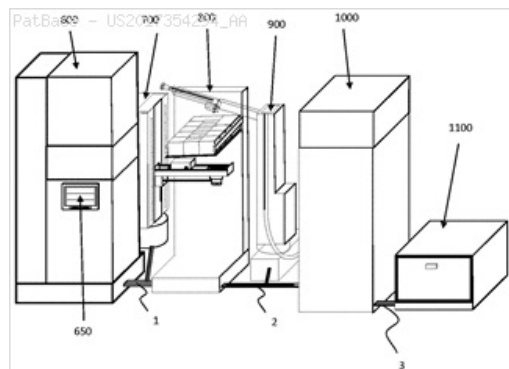
Abstract: A master controller programmed to execute a recipe, stored in computer memory, for a finished food product, prepared from a plurality of raw ingredients; a raw ingredients storage unit controller controlled by the master controller and programmed to control a mechanism for getting the plurality of raw ingredients for the recipe; a cleaning controller controlled by the master controller and programmed by computer software to control one or more cleaning devices configured to clean one or more of the plurality of raw ingredients; a manipulator controller programmed to control one or more devices which physically manipulate one or more of the plurality of raw ingredients by one or more of grinding, mincing, peeling, cutting, and rolling one or more of the plurality of raw ingredients; and a heater controller programmed to control one or more heating devices to heat one or more of the plurality of raw ingredients.

Classifications:

International (IPC 8-9): A47J36/32 A47J37/10 A47J44/00
G05B19/042 (Advanced/Invention)

CPC: A47J36/32 G05B2219/45111 G05B19/042

US: 426/231



Family:

Publication number	Publication date	Application number	Application date
US2017354294 AA	20171214	US20170618826	20170609
US10264916 BB	20190423	US20170618826	20170609

Priority:

US20160349818P 20160614 US20170618826 20170609

Probable Assignee:

SHIVIAIAH VINAY

Assignee(s): (std):

SHIVIAIAH VINAY

Inventor(s): (std):

SHIVIAIAH VINAY

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US10264916 BB	20190423	LSGT	+	granted / extensions (spc, cpc, pte)	
US10264916 BB	20190403	LSGT	PAT1	Patented Case	
US10264916 BB	20370609	PEXP		Calculated Patent Term Expiry	
US2017354294 AA	20171214	LSPB	+	published / reissued	
US2017354294 AA	20180518	LSES	ADV1	Advisory Action Mailed	
US2017354294 AA	20180619	LSES	NFA1	Non Final Action Mailed	
US2017354294 AA	20181210	LSES	+NAM1	Notice of Allowance Mailed -- Application Received in Office of Publications	
US2017354294 AA	20190213	LSFE	+PPR1	Publications -- Issue Fee Payment Received	
US2017354294 AA	20190224	LSFE	+AWA3	Awaiting TC Resp, Issue Fee Payment Verified	
US2017354294 AA	20190301	LSFE	+PPV1	Publications -- Issue Fee Payment Verified	
US2017354294 AA	20190403	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE

Title: EASY CLEAN COOKWARE

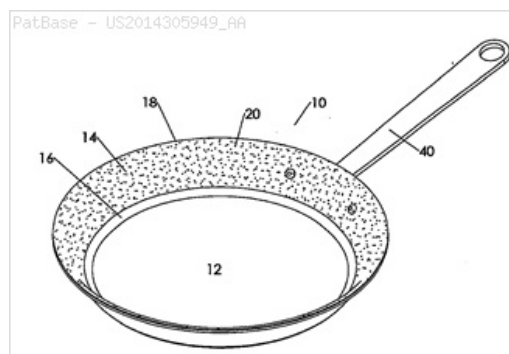
Abstract: Cookware comprising a cooking surface of a bare metal and a sidewall extending upwardly from the cooking surface to a rim, wherein the sidewall is coated with a non-stick material.

Classifications:

International (IPC 8-9): A47J27/00 A47J36/00 A47J36/02 A47J37/10 (Advanced/Invention)

CPC: A47J37/10 A47J36/02 A47J36/025

US: 1/1 220/573.2



Family:

Publication number	Publication date	Application number	Application date
CA2908874 AA	20151005	CA20142908874	20140414
CN105283106 A	20160127	CN201480021145	20140414
DE602014033905 D1	20181108	DE201460033905T	20140414
EP2986190 A1	20160224	EP20140784999	20140414
EP2986190 A4	20161026	EP20140784999	20140414
EP2986190 B1	20181010	EP20140784999	20140414
KR20160009031 A	20160125	KR20157032547	20140414
TR201817701 T4	20181221	TR20180017701T	20140414
US2014305949 AA	20141016	US20140251773	20140414
US9402510 BB	20160802	US20140251773	20140414
WO14172263 A1	20141023	WO2014US33971	20140414

Priority:

US20130811902P 20130415 EP20140784999 20140414 US20140251773 20140414
WO2014US33971 20140414

Probable Assignee: ALL CLAD METALCRAFTERS LLC

Assignee(s): (std): ALL CLAD METALCRAFTERS LLC ; CLAD METALS LLC

Assignee(s): GROLL WILLIAM A ; ALL CLAD METALCRAFTERS LLC CANONSBURG

Inventor(s): (std): GROLL WILLIAM A

Inventor(s): GROLL WILLIAM A MCMURRAY ; A WILLIAM GROLL

Agent(s): GOUDREAU GAGE DUBUC; LAVERY DE BILLY LLP; NOVAGRAAF BREVETS; NOVAGRAAF TECHNOLOGIES; MERVE YILDIRIM; WEBB LAW FIRM; BALDAUF KENT E 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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CA2908874 AA	20151005	LSPB	+	published / reissued	
CA2908874 AA	20181228	LSES	+EEER	EXAMINATION REQUEST	EFFECTIVE DATE : 20181213
CN105283106 A	20160127	LSPB	+	published / reissued	
CN105283106 A	20160127	LSPB	+C06	PUBLICATION	
EP2986190 A1	20160224	LSPB	+	published / reissued	
EP2986190 A1	20160224	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20151110
EP2986190 A4	20161026	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20160923
EP2986190 A4	20180606	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20180511
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(spc, cpc, pte)					
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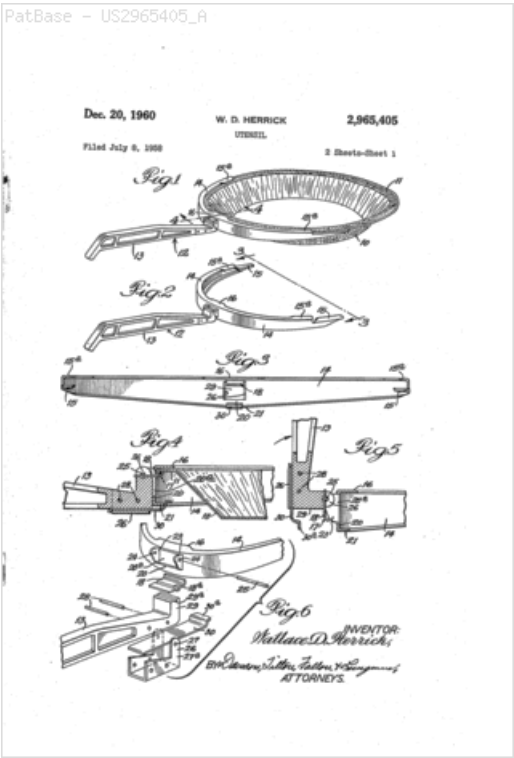
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EP2986190 B1	20190430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : AT NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20181010
EP2986190 B1	20340414	PEXP		Calculated Patent Term Expiry	
KR20160009031 A	20160125	LSPB	+	published / reissued	
TR201817701 T4	20181221	LSGT	+	granted / extensions (spc, cpc, pte)	
TR201817701 T4	20340414	PEXP		Calculated Patent Term Expiry	
US2014305949 AA	20141016	LSPB	+	published / reissued	
US2014305949 AA	20150127	LSAS	AS	ASSIGNMENT	PARTY TYPE : OWNER OWNER : ALL-CLAD METALCRAFTERS LLC, PENNSYLVANIA OLD PARTY : ASSIGNMENT OF ASSIGNOR'S INTEREST; ASSIGNOR : GROLL, WILLIAM A.; REEL/FRACTION : 034816/0873 EFFECTIVE DATE : 20150123
US2014305949 AA	20160713	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US9402510 BB	20160802	LSGT	+	granted / extensions (spc, cpc, pte)	
US9402510 BB	20160713	LSGT	PAT1	Patented Case	
US9402510 BB	20340414	PEXP		Calculated Patent Term Expiry	
WO14172263 A1	20141023	LSPB	+	published / reissued	
WO14172263 A1	20140414	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201480021145.8 COUNTRY OF REF DOCUMENT : CN
WO14172263 A1	20151005	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2908874 COUNTRY OF REF DOCUMENT : CA

WO14172263 A1	20151015	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO14172263 A1	20151110	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2014784999 COUNTRY OF REF DOCUMENT : EP
WO14172263 A1	20151113	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 20157032547 COUNTRY OF REF DOCUMENT : KR KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :

Title: UTENSIL

Abstract: (Claim 1) 1. In a device for supporting a utensil equipped with an outwardly extending flange, a frame adapted to receive said flange while extending about a portion of the perimcter of said utensil, said frame having spaced-apart portions adapted to bear against one side of said Range and a portion intermediate said spaced-Apart portions adapted to bear against the other side of said fl4uge, lqcking means on said #ame aligned wi_4 said iner- mediate portion for cooperation therewith in clamping said flange, and a **handle** on said fratne.

Classifications:
International (IPC 8-9): A47J45/10 (Advanced/Invention);
A47J45/00 (Core/Invention)
International (IPC 1-7): A47J45/10
CPC: A47J45/10
European: A47J45/10
US: 294/27.1 D7/395



Family:

Publication number	Publication date	Application number	Application date
US2965405 A	19601220	US19580747250	19580708

Priority:
US19580747250 19580708

Probable Assignee: COLEMAN CO
Assignee(s): (std): COLEMAN CO
Assignee(s): COLEMAN CO INC ; THE COLEMAN COMPANY INC
Inventor(s): (std): HERRICK WALLACE D

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2965405 A	19601220	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: HOLLOW-CAVITY, GAS-FILLED COOKWARE

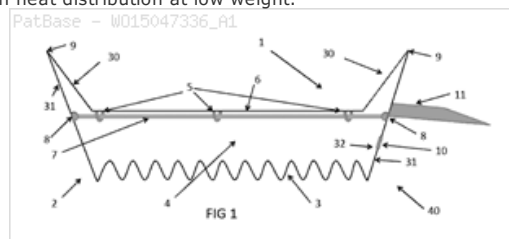
Abstract: A cooking vessel (40) includes an upper element (1) that defines a cook surface (6) and a lower shell (2) that defines a heat surface (3) for contact with a heat source during heating. The upper element and the lower shell are joined together such that the cook surface and the heat surface are retained in a fixed spatial relationship with each other and a gas-filled cavity (4) is defined between the heat surface of the lower shell and the cook surface of the upper element. An optional temperature sensor may be placed in contact with the gas for cooking temperature readout. Heat is transferred from the heat surface to the cook surface through, the gas contained in the gas-filled cavity. Improved heat distribution is accomplished by static (21) and dynamic (13) means of enhancing gas convection. This promotes efficient and even heat distribution at low weight.

Classifications:

International (IPC 8-9): A47J27/00 A47J36/00

A47J36/02 (Advanced/Invention)

CPC: A47J27/002 A47J27/022 A47J36/00 A47J36/02



Family:

Publication number	Publication date	Application number	Application date
WO15047336 A1	20150402	WO2013US62419	20130927

Priority:

WO2013US62419 20130927

Probable Assignee: SELWYN GARY S

Assignee(s): (std): SELWYN GARY S

Inventor(s): (std): SELWYN GARY S

Agent(s): GARY C COHN PLLC

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 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

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
WO15047336 A1	20150402	LSPB	+	published / reissued	
WO15047336 A1	20160329	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO15047336 A1	20170405	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 13779967 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) :

Title: Portable stove

Abstract: The present invention is directed to a portable stove. The portable stove comprises a body member which contains burners. The portable stove includes shelves which lock into place onto the body member during use and storage. A griddle having a heat dispersement plate is removably mounted to the body member above the burner. Legs are hingedly and slidingly attached to the body member. The legs may be folded to either a standing position or a carrying position. Accordingly, the shelves, griddle and legs may be secured to the stove during storage.

Classifications:

International (IPC 8-9): A47J37/06 A47J37/07

F24C1/16 (Advanced/Invention);

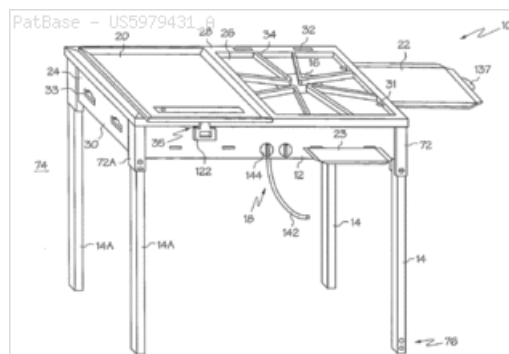
A47J37/06 A47J37/07 F24C1/00 (Core/Invention)

International (IPC 1-7): A47J37/00 F24C3/00

CPC: A47J37/0682 A47J37/0786 F24C1/16

European: A47J37/06D3 A47J37/07L F24C1/16

US: 126/304A 126/39R 126/40 126/41R 126/50 248/222.52 248/224.8 248/250



Family:

Publication number	Publication date	Application number	Application date
US5979431 A	19991109	US19960653868	19960528

Priority:

US19960653868 19960528

Probable Assignee: SANDSTONE HOLDING LLC

Assignee(s): (std): HAMILTON KENNETH R ; STONE LAWRENCE MATTHEW

Assignee(s): HAMILTON KENNETH R PO BOX ; NDSTONE HOLDING LLC SA ; SANDSTONE HOLDING LLC

Inventor(s): (std): HAMILTON KENNETH R ; STONE LAWRENCE MATTHEW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US5979431 A	19991109	LSGT	+	granted / extensions (spc, cpc, pte)	
US5979431 A	19961104	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HAMILTON, KENNETH R., UTAH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:STONE, LAWRENCE MATTHEW; REEL/FRAME:008254/0400 EFFECTIVE DATE : 19960525
US5979431 A	20021127	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SANDSTONE HOLDING, LLC, COLORADO OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:HAMILTON, KENNETH R.; STONE, LAWRENCE MATTHEW; REEL/FRAME:013532/0081 EFFECTIVE DATE : 20010516
US5979431 A	20031110	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5979431 A	20031210	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5979431 A	20031210	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5979431 A	20040106	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20031109
US5979431 A	20160528	PEXP		Calculated Patent Term Expiry	

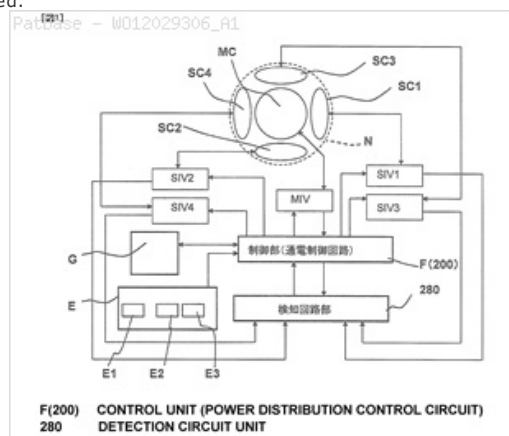
Title: INDUCTION COOKING APPLIANCE

Abstract: An induction cooking appliance includes: an annular main heating coil (MC); flat-shaped first and second subsidiary heating coils (SC1, SC2) close to both sides of the main heating coil (MC); inverter circuits (MIV, SIV1, SIV2) which drive all the heating coils; a power distribution control circuit (200) which controls the inverter circuits; and an operation unit (E). A selection switch (350) and selection units (E1, E2) are provided on the operation unit (E). With the selection switch (350), a control can be selected for performing multiple iterations of an operation wherein the second subsidiary heating coil (SC2) is driven while the driving of the first subsidiary heating coil (SC1) is at rest, and an operation wherein the driving of the second subsidiary heating coil (SC2) is then stopped and the first subsidiary coil (SC1) is driven. With the selection units (E1, E2), the directions of current flowing through the heating coils are controlled, and a cooking menu which places importance on heating speed or a cooking menu which places importance on the uniformity of heating can be selected.

Classifications:

International (IPC 8-9): H05B6/06 H05B6/12 H05B6/36 H05B6/44 (Advanced/Invention)

CPC: H05B6/1272 H05B6/062 Y02B40/126 H05B6/065 H05B2213/05 H05B6/1254



Family:

Publication number	Publication date	Application number	Application date
■ CN103202098 A	20130710	CN201180052424	20110831
■ CN103202098 B	20160203	CN201180052424	20110831
■ DE602011040951 D1	20171005	DE201160040951T	20110831
■ EP2613608 A1	20130710	EP20110821327	20110831
■ EP2613608 A4	20160406	EP20110821327	20110831
■ EP2613608 B1	20170823	EP20110821327	20110831
■ ES2640965 T3	20171107	ES20110821327T	20110831
■ JP2012029306 A1	20131028	JP20120531694T	20110831
■ JP5538546 B1	20140702	JP20120531694T	20110831
■ WO12029306 A1	20120308	WO2011JP04866	20110831

Priority:

JP20100197693 20100903 EP20110821327 20110831 WO2011JP04866 20110831
JP20120531694 20110831

Probable Assignee: MITSUBISHI ELECTRIC CORP

Assignee(s): (std): HIRASHIKI ISAMU ; ITO MASANOBU ; KAMEOKA KAZUHIRO ; KAWATA YUKIO ; MITSUBISHI ELECTRIC CORP ; MITSUBISHI ELECTRIC HOME APPL ; MITSUBISHI ELECTRIC HOME APPLIANCE CO LTD ; YAMAUCHI TOKIKO ; TANAKA KAZUFUMI

Assignee(s): MITSUBISHI ELECTRIC HOME APPLIANCE CO LTD FUKAYA SHI ; MITSUBISHI ELECTRIC HOME APPLIANCE CO

Inventor(s): (std): HIRASHIKI ISAMU ; ITO MASANOBU ; KAMEOKA KAZUHIRO ; KAWATA YUKIO ; TANAKA KAZUFUMI ; YAMAUCHI TOKIKO

Agent(s): GLEITER HERMANN; PFENNING MEINIG AND PARTNER MBB; KOBAYASHI HISAO; AJIMA KIYOSHI; TAKANASHI NORIO; KOBAYASHI HISAO ET AL

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 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

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Patent	Date recorded	Event group	Code	Event	Details
CN103202098 A	20130710	LSPB	+	published / reissued	
CN103202098 A	20130710	LSPB	+C06	PUBLICATION	
CN103202098 B	20160203	LSGT	+	granted / extensions (spc, cpc, pte)	
CN103202098 B	20160203	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	

CN103202098 B	20310831	PEXP		Calculated Patent Term Expiry	
EP2613608 A1	20130710	LSPB	+	published / reissued	
EP2613608 A1	20130710	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20130327
EP2613608 A4	20160406	LSES	+RA4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED (CORRECTED)	EFFECTIVE DATE : 20160307
EP2613608 A4	20170412	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20170314
EP2613608 B1	20170823	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2613608 B1	20170823	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2613608 B1	20170831	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2613608 B1	20170915	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 922576 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170915
EP2613608 B1	20170920	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2613608 B1	20171005	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602011040951 COUNTRY OF REF DOCUMENT : DE
EP2613608 B1	20171031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170905 YEAR OF FEE PAYMENT : 7
EP2613608 B1	20171107	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2640965 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20171107
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EP2613608 B1	20180110	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : LT REF LEGAL EVENT CODE : MG4D
EP2613608 B1	20180115	LSRV	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : MK05 REF DOCUMENT NUMBER : 922576 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20170823
EP2613608 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170823
EP2613608 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171123
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EP2613608 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170823
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EP2613608 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20171124
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EP2613608 B1	20180430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA	COUNTRY OF REF DOCUMENT : CH NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE

				POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	FEES LAPSED DATE : 20170831
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EP2613608 B1	20180430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170823
EP2613608 B1	20180430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170831
EP2613608 B1	20180430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DK NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170823
EP2613608 B1	20180524	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R097 REF DOCUMENT NUMBER : 602011040951 COUNTRY OF REF DOCUMENT : DE
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EPO]					
EP2613608 B1	20180713	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20180608
EP2613608 B1	20180725	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20171123
EP2613608 B1	20180731	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : IE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170831
EP2613608 B1	20180801	LSGT	+26N	NO OPPOSITION FILED	EFFECTIVE DATE : 20180524
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EP2613608 B1	20180831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20170823
EP2613608 B1	20180831	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171023
EP2613608 B1	20180928	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MT NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20170831
EP2613608 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20180821 YEAR OF FEE PAYMENT : 8
EP2613608 B1	20181031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20180904 YEAR OF FEE PAYMENT : 8
EP2613608 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20171123
EP2613608 B1	20181130	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20180810 YEAR OF FEE PAYMENT : 8
EP2613608 B1	20190628	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HU NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT; INVALID AB INITIO LAPSED DATE : 20110831
EP2613608 B1	20310831	PEXP		Calculated Patent Term Expiry	
ES2640965 T3	20171107	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2640965 T3	20310831	PEXP		Calculated Patent Term Expiry	

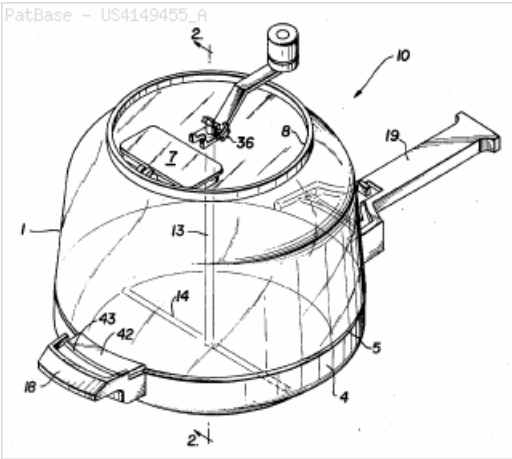
JP2012029306 A1	20131028	LSPB	+	published / reissued	
JP2012029306 A1	20140108	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140107
JP2012029306 A1	20140311	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140310
JP2012029306 A1	20140328	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2012029306 A1	20140402	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20140401
JP2012029306 A1	20140509	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5538546 COUNTRY OF REF DOCUMENT : JP
JP2012029306 A1	20140512	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20140428
JP5538546 B1	20140702	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5538546 B1	20140403	LSGT	+A01	特許査定書 (Decision of patent grant)	
JP5538546 B1	20140502	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5538546 B1	20140509	LSGT	+R150	特許証 (Patent certificate)	
JP5538546 B1	20170413	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5538546 B1	20170418	LSFE	+R250	年金領収書, 年金領収書 (分納) (Pension receipt, annuity receipt (scheduled))	
JP5538546 B1	20180412	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5538546 B1	20180417	LSFE	+R250	年金領収書, 年金領収書 (分納) (Pension receipt, annuity receipt (scheduled))	
JP5538546 B1	20190411	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5538546 B1	20190416	LSFE	+R250	年金領収書, 年金領収書 (分納) (Pension receipt, annuity receipt (scheduled))	
JP5538546 B1	20310831	PEXP		Calculated Patent Term Expiry	
WO12029306 A1	20120308	LSPB	+	published / reissued	
WO12029306 A1	20130131	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2012531694 COUNTRY OF REF DOCUMENT : JP
WO12029306 A1	20130304	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO12029306 A1	20130327	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2011821327 COUNTRY OF REF DOCUMENT : EP

Title: ELECTRIC POP CORN POPPER

Abstract: Disclosed herein is an apparatus for cooking which enjoys the duality of not only accommodating conventional cooking, but also provides a specific apparatus for the efficient cooking and preparation of various kinds of conventional and exotic pop corn recipes. When used in conventional cooking, the apparatus without the translucent lid according to the present invention corresponds to conventional cookware, but for the cooking of pop corn, the apparatus provides a translucent cover portion, insulating means between this cover and the lower pan portion, and an air gap disposed therebetween. The stirring attachment is suitably formed to not only stir the pop corn while it is being cooked, but also features a removable **handle** in which a forked extremity of a portion of the stirring attachment serves to provide a nesting area to **remove** the hot stirrer from the lid. A lid locking device serves to stabilize the lid's disposition on the lower pan element and ventilation is provided along the inner face between the **handles** and the area that supports the lid.

Classifications:

International (IPC 8-9): A23L1/18 A47J37/00 (Advanced/Invention);
A23L1/18 A47J37/00 (Core/Invention)
International (IPC 1-7): A23L1/18
CPC: A47J37/00 A23L7/187
European: A23L1/18C6B A47J37/00
US: 366/247 99/323.5 99/348 D7/325



Family:

Publication number	Publication date	Application number	Application date
US4149455 A	19790417	US19780887680	19780317

Priority:

US19780887680 19780317

Probable Assignee:	ROSS MICHAEL M
Assignee(s): (std):	ROSS MICHAEL M
Inventor(s): (std):	ROSS MICHAEL M

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
US4149455 A	19790417	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: FOOD RACK

Abstract: A food rack including a frame having a plurality of food supporting members mounted rotatably within the frame. At least one end of the food supporting members are detachable from the frame to allow the food supporting members to be passed through the food items. When food items are supported on the food supporting members and the frame is placed over a cooking surface, each of the food items contacts the cooking surface and movement of the frame parallel to the cooking surface causes rotation of the food supporting members.

Classifications:

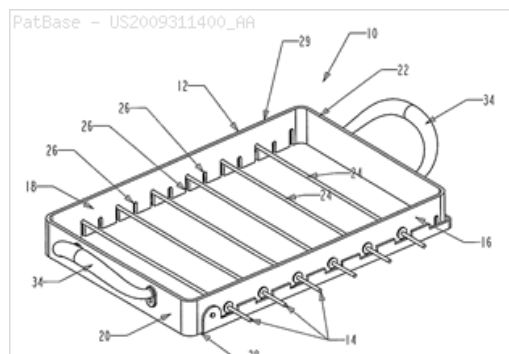
International (IPC 8-9): A23L1/01 A23L5/10 A47J A47J36/24 A47J37/00 A47J37/04 (Advanced/Invention);

A23L1/01 A47J36/24 A47J37/00 A47J37/04 (Core/Invention)

CPC: A47J37/041 A47J37/0694 A47J37/049

European: A47J37/04P

US: 426/523 426/523P 99/419 99/419S 99/448 99/448S

**Family:**

Publication number	Publication date	Application number	Application date
AU2007281013 AA	20080207	AU20070281013	20070731
AU2007281013 BB	20111117	AU20070281013	20070731
CA2659455 AA	20090130	CA20072659455	20070731
CN101522082 A	20090902	CN200780036812	20070731
EP2051612 A1	20090429	EP20070784700	20070731
HK1131320 A1	20100122	HK20090110006	20091028
US2009311400 AA	20091217	US20070375938	20070731
WO08014539 A1	20080207	WO2007AU01055	20070731

Priority:

AU20060904138 20060801 AU20060904138P 20060801 WO2007AU01055 20070731
 AU20070281013 20070731

Probable Assignee: NEIL ALLEN

Assignee(s): (std): ALLEN NEIL ; ALLEN NEIL ANDREW ; ANDREW ALLEN NEIL ; NEIL ALLEN

Inventor(s): (std): ALLEN NEIL ANDREW ; ANDREW ALLEN NEIL

Inventor(s): NEIL ANDREW ALLEN

Agent(s): JANET STEAD AND ASSOCIATES PATENT AND TRADE MARKS ATTORNEYS; WRAYS; SMART AND BIGGAR; HIGGS JONATHAN ET AL; MARKS AND CLERK; NIXON AND VANDERHUYE PC; HOLLIDAY NEAL JOSEPH

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI 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 PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU2007281013 AA	20080207	LSPB	+	published / reissued	
AU2007281013 AA	20120315	LSGT	+FGA	LETTERS PATENT SEALED OR GRANTED (STANDARD PATENT)	
AU2007281013 AA	20170223	LSLE	-MK14	PATENT CEASED SECTION 143(A) (ANNUAL FEES NOT PAID) OR EXPIRED	
AU2007281013 BB	20111117	LSGT	+	granted / extensions (spc, cpc, pte)	
AU2007281013 BB	20270731	PEXP		Calculated Patent Term Expiry	
CA2659455 AA	20090130	LSPB	+	published / reissued	
CA2659455 AA	20130925	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20130731
CN101522082 A	20090902	LSPB	+	published / reissued	
CN101522082 A	20090902	LSPB	+C06	PUBLICATION	
CN101522082 A	20120620	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	

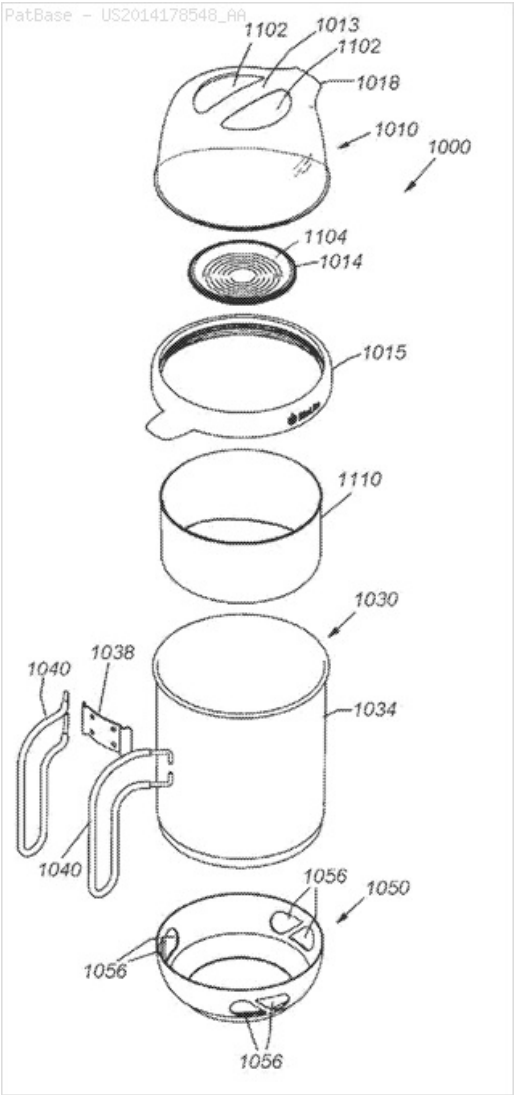
EP2051612 A1	20090429	LSPB	+	published / reissued	
EP2051612 A1	20090429	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20090302
EP2051612 A1	20130918	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20130201
EP2051612 A1	20160226	LSWD	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : HK REF LEGAL EVENT CODE : WD REF DOCUMENT NUMBER : 1131320 COUNTRY OF REF DOCUMENT : HK
HK1131320 A1	20100122	LSPB	+	published / reissued	
US2009311400 AA	20091217	LSPB	+	published / reissued	
US2009311400 AA	20120427	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
WO08014539 A1	20080207	LSPB	+	published / reissued	
WO08014539 A1	20070731	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 200780036812.X COUNTRY OF REF DOCUMENT : CN
WO08014539 A1	20090130	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2659455 COUNTRY OF REF DOCUMENT : CA
WO08014539 A1	20090131	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 12375938 COUNTRY OF REF DOCUMENT : US
WO08014539 A1	20090203	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO08014539 A1	20090226	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007281013 COUNTRY OF REF DOCUMENT : AU
WO08014539 A1	20090227	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 575236 COUNTRY OF REF DOCUMENT : NZ
WO08014539 A1	20090301	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : RU
WO08014539 A1	20090302	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007784700 COUNTRY OF REF DOCUMENT : EP
WO08014539 A1	20090326	LSNP	ENP	ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 2007281013 COUNTRY OF REF DOCUMENT : AU DATE OF REF DOCUMENT : 20070731 KIND CODE OF REF DOCUMENT : A DESIGNATED STATE(S) :

Title: EFFICIENCY POT AND KETTLE FOR USE WITH COOKING STOVES

Abstract: This invention provides a pot assembly for use with a stove. The system includes a lid, a pot body and an adapter assembly. The lid has a cap for accessing the contents while in use, a pour spout for dispensing the contents and a plurality of slits for use as a strainer. The pot body has folding handles that can form a triangular structure for control. The adapter assembly has an upper flame flange and a lower flame flange and baffles to directionally vector the stove's combustion gasses away from the assembly. The adapter assembly has a centering ring to engage the top of the stove and maintain stability during use. The pot assembly can be used as a storage container for the stove.

Classifications:

International (IPC 8-9): A23L1/01 A23L5/10 A47J27/21 A47J33/00 A47J36/36 (Advanced/Invention)
CPC: A47J33/00 A47J36/36 A47J27/21166 A23L5/13
US: 220/573.1 426/478 426/509



Family:

Publication number	Publication date	Application number	Application date
US2014178548 AA	20140626	US20130080750	20131114
WO14078572 A1	20140522	WO2013US70155	20131114

Priority:

US20120726221P 20121114 US20130080750 20131114

Probable Assignee: BIOLITE LLC

Assignee(s): (std): BIOLITE LLC ; BURNS CLAY ; CEDAR JONATHAN N ; DRUMMOND ALEXANDER H ; LEREA NISAN H ; LJUNGGREN ANTON OLOF

Inventor(s): (std): LJUNGGREN ANTON OLOF ; BURNS CLAY ; DRUMMOND ALEXANDER H ; CEDAR JONATHAN N ; LEREA NISAN H

Agent(s): LOGINOV WILLIAM A

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 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

Legal status (INPADOC)

Patent	Date recorded	Event group	Code	Event	Details
US2014178548 AA	20140626	LSPB	+	published / reissued	
US2014178548 AA	20161027	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
WO14078572 A1	20140522	LSPB	+	published / reissued	
WO14078572 A1	20150515	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO14078572 A1	20151209	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF DOCUMENT NUMBER : 13854397 COUNTRY OF REF DOCUMENT : EP KIND CODE OF REF DOCUMENT : A1 DESIGNATED STATE(S) :

Title: ROTATABLE AUTOMATIC BROILERGRIDDLE

Abstract: (Claim 1) 1. A cooking apparatus comprising a housing having walls defining a cooking chamber, means defining a peripherally extending opening in the wall of said chamber, a rotatable griddle rotatably mounted in said chamber having an annular cooking surface supported in a horizontal plane below and adjacent said opening, a ventilation system for said apparatus comprising a duct means defining a ventilation passageway, said duct means extending into said chamber, means in said passageway for creating an entering current of air through said peripheral opening and for withdrawing air and vapors from said cooking chamber, a series of baffles arranged in said chamber centrally of said annular cooking surface for directing the flow of air and vapors through said chamber, at least one of said baffles extending into said duct means and defining therewith a tortuous exit passageway for said air and vapors progressively diminishing area.

Classifications:

International (IPC 8-9): A47J37/04 (Advanced/Invention);

A47J37/04 (Core/Invention)

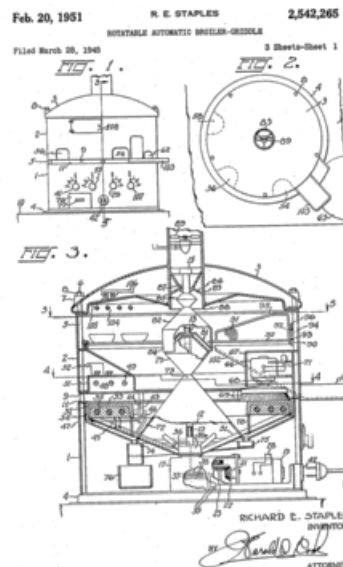
International (IPC 1-7): A47J37/04

CPC: A47J37/046

European: A47J37/04F

US: 126/299R 126/41A 15/256.5 312/236 312/305 99/327 99/339 99/386 99/400 99/423 99/425

PatBase - US2542265_A



Family:

Publication number	Publication date	Application number	Application date
US2542265 A	19510220	US19450585280	19450328

Priority:

US19450585280 19450328

Probable Assignee:

STAPLES RICHARD E

Assignee(s): (std):

STAPLES RICHARD E

Inventor(s): (std):

STAPLES RICHARD E

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2542265 A	19510220	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: Combination turner/strainer kitchen utensil

Abstract: A dual-purpose spatula-skimmer kitchen utensil provides a rigid, planar surface having a thin leading edge for being pushed beneath a food product (e.g., cooking within a shallow **frying pan** or the like). A depression or concavity in the planar surface has perforations or holes therethrough which permit liquid to flow but trap small food particles. In a further embodiment, the depression is ramped and has substantially flat upper and lower surfaces. The utensil may be used for skimming and/or straining cooking liquids (e.g., to filter food particles suspended in oil used in frying), and also for flipping or turning food products.

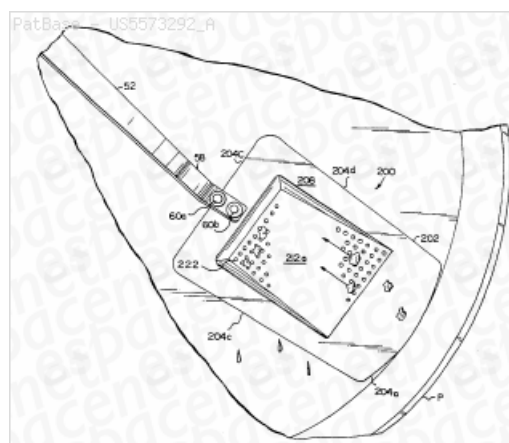
Classifications:

International (IPC 1-7): A47J43/28

CPC: A47J43/283 A47J43/284 A47J43/288

European: A47J43/28D A47J43/28E A47J43/28G

US: 294/7 30/325



Family:

Publication number	Publication date	Application number	Application date
US5573292 A	19961112	US19940366424	19941229

Priority:

US19910717809 19910619 US19920929528 19920814 US19940366424 19941229

Probable Assignee:

CITINO SALVATORE

Assignee(s):

CITINO SALVATORE

Inventor(s): (std):

CITINO SALVATORE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US5573292 A	19961112	LSGT	+	granted / extensions (spc, cpc, pte)	
US5573292 A	19961101	LSGT	PAT1	Patented Case	
US5573292 A	20001112	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5573292 A	20010116	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20001112
US5573292 A	20180125	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5573292 A	20180125	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5573292 A	20141229	PEXP		Calculated Patent Term Expiry	

Title: COOKING APPARATUS FOR FOOD ON SKEWERS OR THE LIKE

Abstract: A cooking apparatus 11 comprising a cabinet 15 having side walls 17, a top wall 19 and a bottom wall 21. A cylinder 25 is positioned within the interior of the cabinet 15. A heat source 35 is provided within the interior of the cylinder 25. A support sleeve 41 is located centrally within the cylinder 25 and is mounted on a base 43 attached to the bottom wall 29 of the cylinder. A drive shaft 51 extends axially through the support sleeve 41 and is rotatably supported therein. The bottom end of the drive shaft 41 extends beyond the bottom wall 29 and is coupled to the drive means 55. The drive means 55 comprises an electric motor 57 drivingly coupled to the drive shaft 51 through a drive transmission assembly 59 including the gear box, drive shaft and gears. With this arrangement, drive from the electric motor 57 is transferred through the drive transmission assembly to the drive shaft so as to cause rotation of the drive shaft within the support sleeve 41. A support assembly 61 is adapted to be supported on the support sleeve 41 and drivingly connected to the drive shaft 51. The support assembly 61 comprises a rotary part 63 and a stationary part 65. The rotary part 63 comprises a support structure 67 for supporting satay sticks for circulation with the cooking chamber 36. During the cooking stage, the satay sticks circulate within the cooking chamber, both about the first axis 117 defined by the drive shaft 51 and a second axis 115 which corresponds to the longitudinal extent of the satay sticks. This causes the satay sticks to continually turn in relation to the surrounding heat source during the process without the need for any effort on the part of the operator.

Classifications:

International (IPC 8-9): A47J37/04 (Advanced/Invention);
A47J37/04 (Core/Invention)

International (IPC 1-7): A47J37/04

Family:

Publication number	Publication date	Application number	Application date
 AU199880755 A1	19990225	AU19980080755	19980817
 AU2002313835 AA	20030327	AU20020313835	20021205
 AU859497 A0	19970911	AU1997P008594	19970815

Priority:

AU1997P008594 19970815 AU19980080755 19980817

Probable Assignee: PEARL MARGARET VOS

Assignee(s): (std): PEARL MARGARET VOS ; VOS P M ; VOS PETER MARTIN

Assignee(s): VOS PEARL MARGARET ; PETER MARTIN VOS

Inventor(s): VOS PEARL MARGARET ; VOS PETER MARTIN

Agent(s): WRAYS; WRAYS PTY LTD

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU199880755 A1	19990225	LSPB	+	published / reissued	
AU199880755 A1	20030116	LSLE	-MK5	APPLICATION LAPSED SECTION 142(2)(E) - PATENT REQUEST AND COMPL. SPECIFICATION NOT ACCEPTED	
AU2002313835 AA	20030327	LSPB	+	published / reissued	

Title: PERFORMANCE TEST METHODS FOR COOKWARE

Abstract: Test methods are provided for evaluating the performance of cookware. One example test evaluates the durability of the cookware's grate-contacting surface, and includes a heat-abrasion phase on a cooking device's grate, a food-baking phase using a cooking-surface staining food item and/or a common food-cooking substance, and/or a solution-soaking phase using a caustic solution. Another example test evaluates the release performance of the cookware's cooking surface, and includes a release phase using a food item that tends to stick to cooking surfaces, a food-baking phase using salt and grease, a tiger paw phase, and/or an automatic dishwasher phase. And another example test evaluates the searing performance of the cookware's cooking surface, and includes searing a piece of meat on the cooking surface and evaluating the color/darkness of the meat piece itself and/or a fond made from the cooked-on meat residue against standardized colors/darknesses.

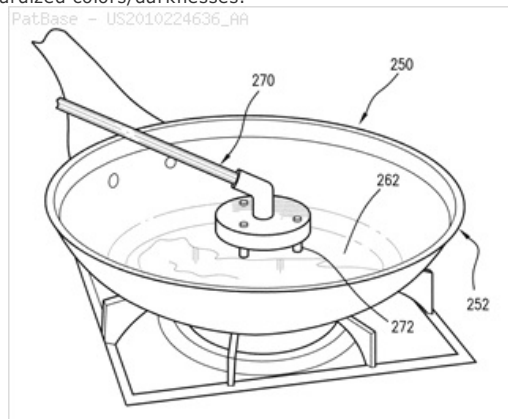
Classifications:

International (IPC 8-9): A47J27/00 A47J37/10 G01N17/00 G01N19/04 G01N31/00 (Advanced/Invention); A47J27/00 A47J29/00 A47J36/00 A47J36/02 G01N33/12 (Advanced/Non-invention)

CPC: A47J36/02 G01N17/00

European: A47J36/02 G01N17/00

US: 220/573.1 436/164 436/2

**Family:**

Publication number	Publication date	Application number	Application date
CA2695345 AA	20100904	CA20102695345	20100304
CN101825556 A	20100908	CN201010171722	20100304
JP2010269128 A2	20101202	JP20100047223	20100304
US2010224636 AA	20100909	US20100660740	20100303

Priority:

US20090157421P 20090304 US20100660740 20100303

Probable Assignee: CALPHALON CORP

Assignee(s): (std): CALPHALON CORP ; ETHERIDGE ELISHA ; LOGUIDICE PAUL ; STILES LYLE

Inventor(s): (std): STILES LYLE ; ETHERIDGE ELISHA ; LOGUIDICE PAUL ; ELISHA ETHERIDGE ; PAUL LOGUIDICE ; LYLE STILES

Agent(s): GARDNER GROFF GREENWALD AND VILLANUEVA PC

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
CA2695345 AA	20100904	LSPB	+	published / reissued	
CA2695345 AA	20140429	LSLE	-FZDE	DEAD	EFFECTIVE DATE : 20140304
CN101825556 A	20100908	LSPB	+	published / reissued	
CN101825556 A	20100908	LSPB	+C06	PUBLICATION	
CN101825556 A	20121114	LSDW	-C02	DEEMED WITHDRAWAL OF PATENT APPLICATION AFTER PUBLICATION (PATENT LAW 2001)	
JP2010269128 A2	20101202	LSPB	+	published / reissued	
JP2010269128 A2	20130507	LSWD	-A300	WITHDRAWAL OF APPLICATION BECAUSE OF NO REQUEST FOR EXAMINATION	TEXT : JAPANESE INTERMEDIATE CODE: A300 EFFECTIVE DATE : 20130507
US2010224636 AA	20100909	LSPB	+	published / reissued	

US2010224636 AA	20100330	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CALPHALON CORPORATION, GEORGIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:ETHERIDGE, ELISHA; LOGUIDICE, PAUL; STILES, LYLE; SIGNING DATES FROM 20100323 TO 20100325; REEL/FRA:024161/0332
US2010224636 AA	20130408	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	

Title: **FRY PAN** COOKING SHIELD AND METHOD

Abstract: Arcuate shield segments (12, 14, 16) form a collar (10) around the perimeter of a **frying pan** (18) cooking surface while suspended within the pan side walls for containing splattering grease within the **fry pan**. Tabs (28) extending from lower edge portions of the shield segments permit attachment to pans having various size openings. Multiple shield segments are removably attached to each other and aligned to surround the pan cooking surface. The segments are removably attached such that a **handle removes** all segments simultaneously or a single segment when access through the shield wall is desired. Each segment is dimensioned for convenience in cleaning and storage of the multiple segments.

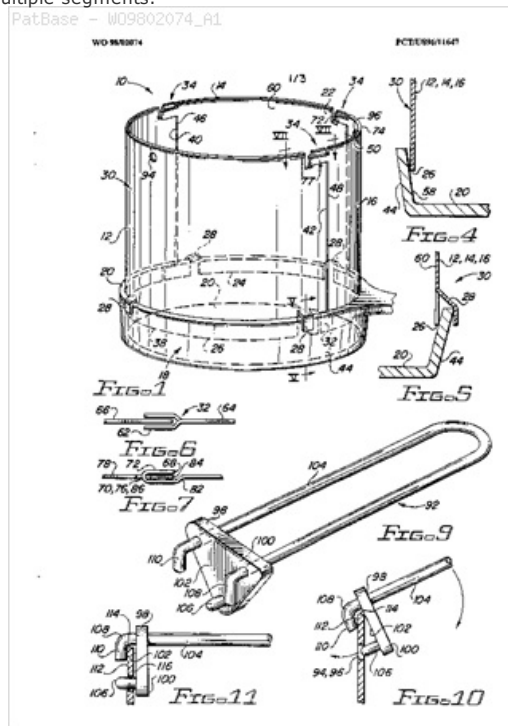
Classifications:

International (IPC 8-9): A47J37/10 (Advanced/Invention);
A47J37/10 (Core/Invention)

International (IPC 1-7): A47J37/10

CPC: A47J37/10 A47J37/108

European: A47J37/10 A47J37/10D



Family:

Publication number	Publication date	Application number	Application date
AU199665449 A1	19980209	AU19960065449	19960712
WO9802074 A1	19980122	WO1996US11647	19960712

Priority:

WO1996US11647 19960712

Probable Assignee: JOSEPH WILLIAM G

Assignee(s): (std): JOSEPH WILLIAM G ; WILLIAM G JOSEPH

Inventor(s): (std): JOSEPH WILLIAM G

Inventor(s): WILLIAM G JOSEPH

Designated states: AL AM AT AU AZ BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IL IS IT JP KE KG KP KR KZ LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG UZ VN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU199665449 A1	19980209	LSPB	+	published / reissued	
WO9802074 A1	19980122	LSPB	+	published / reissued	
WO9802074 A1	19990312	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : CA
WO9802074 A1	19990512	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
WO9802074 A1	19990604	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF DOCUMENT NUMBER : 1998505943 COUNTRY OF REF DOCUMENT : JP

WO9802074 A1	20000823	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
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Title: METHOD FOR COOKING A LIPID-CONTAINING FOOD PRODUCT BY USING AN ANTIOXIDANT AND A NON-OXIDIZING GAS ATMOSPHERE

Abstract: A food-grade antioxidant and a non-oxidizing gas atmosphere environment are provided in combination in a cooking container and a food is cooked in the presence of the antioxidant and the non-oxidizing gas atmosphere for preventing or reducing oxidation of lipids and vitamins in the food. As a result, rancidity from cooking lipid-containing food, and the resultant off-odors and flavors associated therewith, as well as color changes and loss of nutritional quality of the food, can be reduced or avoided.

Classifications:

International (IPC 8-9): A23B9/20 A23L1/01 A23L3/16 A23L3/3409 A23L3/3454 A23L3/349 A23L3/3544 A23L5/10 (Advanced/Invention); A23B9/00 A23L1/01 A23L3/16 A23L3/34 A23L3/3454 A23L3/3463 (Core/Invention)

International (IPC 1-7): A23B9/20

CPC: A23L5/11 A23L5/17 A23L5/19 A23L3/3544 A23L3/165 A23L3/3409 A23L3/3454 A23L3/349

European: A23L1/01B A23L1/01H A23L1/01K A23L3/16D A23L3/3409 A23L3/3454 A23L3/349 A23L3/3544

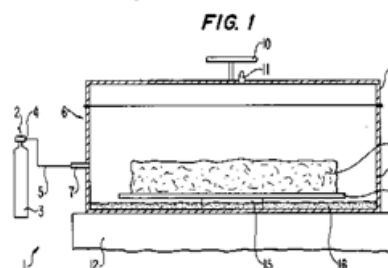
US: 426/312 426/412 426/442 426/523 426/542 426/654

PatBase - US5395634_A

U.S. Patent

Mar. 7, 1995

5,395,634



Family:

Publication number	Publication date	Application number	Application date
AU199519675 A1	19960911	AU19950019675	19950222
EP0839000 A1	19980506	EP19950912573	19950222
EP0839000 A4	19980527	EP19950912573	19950222
US5395634 A	19950307	US19910718751	19910621
WO9625856 A1	19960829	WO1995US02136	19950222

Priority:

US19910718751 19910621 WO1995US02136 19950222

Probable Assignee: BENJAMIN R HUMPHREYS

Assignee(s): (std): BENJAMIN R HUMPHREYS ; HUMPHREYS BENJAMIN R

Inventor(s): (std): HUMPHREYS BENJAMIN R

Inventor(s): BENJAMIN R HUMPHREYS

Designated states: AT AU BE BR CA CH DE DK ES FR GB GR IE IT JP LI LU MC MX NL PT SE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU199519675 A1	19960911	LSPB	+	published / reissued	
EP0839000 A1	19980506	LSPB	+	published / reissued	
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EP0839000 A4	19980527	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 19980415
EP0839000 A4	20010620	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 20010508

EP0839000 A4	20020529	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20011118
US5395634 A	19950307	LSGT	+	granted / extensions (spc, cpc, pte)	
US5395634 A	19950223	LSGT	PAT1	Patented Case	
US5395634 A	19950223	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5395634 A	19990308	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5395634 A	20020906	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5395634 A	20070223	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 12
US5395634 A	20120307	PEXP		Calculated Patent Term Expiry	
WO9625856 A1	19960829	LSPB	+	published / reissued	
WO9625856 A1	19971128	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 1995912573 COUNTRY OF REF DOCUMENT : EP
WO9625856 A1	19980506	LSPB	+WWP	WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1995912573 COUNTRY OF REF DOCUMENT : EP
WO9625856 A1	20011118	LSWD	-WWW	WIPO INFORMATION: WITHDRAWN IN NATIONAL OFFICE	REF DOCUMENT NUMBER : 1995912573 COUNTRY OF REF DOCUMENT : EP

Title: INDUCTION COOKING APPLIANCE

Abstract: Disclosed is an induction cooking appliance which provides cooperative heating by a main heating coil and sub-heating coils disposed adjacent the main heating coil and having centers spaced apart from that of the main heating coil, wherein said induction cooking appliance is capable of indicating the cooperative heating area and each independent heating area by use of light. Specifically disclosed is an induction cooking appliance provided with: a main heating coil (MC) and sub-heating coils (SC) adjacent to the main heating coil (MC) and having centers spaced apart from that of the main heating coil (MC), said main heating coil (MC) and said sub-heating coils (SC) being disposed below a top plate of light transmitting material; local luminescent units for indicating the heating area of each sub-heating coil (SC) when the sub-heating coil (SC) and the main heating coil (MC) are in cooperative heating operation; a wide area luminescent unit for indicating the entire combined heating area of the main heating coil (MC) and the sub-heating coils; and a mounting determination unit for an object to be heated, which detects whether the same object to be heated is mounted on both the main heating coil and a sub-heating coil; wherein when the same object is being heated by the main heating coil (MC) and a sub-heating coil (SC) together, that sub-heating coil is indicated by light emitted from a local luminescent unit.

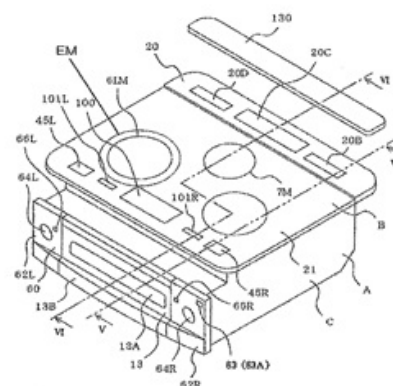
Classifications:

International (IPC 8-9): H05B6/02 H05B6/06 H05B6/12 H05B6/36 H05B6/44 (Advanced/Invention)

CPC: H05B6/065 H05B6/1272 Y02B40/126 H05B6/1218 Y02B40/123 H05B6/02 H05B6/36 H05B6/1245 H05B6/44

European: H05B6/12A1 Y02B40/12B

PatBase - WO11114603_A1
【図1】



Family:

Publication number	Publication date	Application number	Application date
■ CN102884863 A	20130116	CN201180014631	20110113
■ CN102884863 B	20160706	CN201180014631	20110113
■ CN105578635 A	20160511	CN201610024937	20110113
■ CN105578635 B	20190611	CN201610024937	20110113
■ CN105636259 A	20160601	CN201610027364	20110113
■ CN105636259 B	20181211	CN201610027364	20110113
■ DE602011041640 D1	20171026	DE201160041640T	20110113
■ EP2549830 A1	20130123	EP20110755796	20110113
■ EP2549830 A4	20160120	EP20110755796	20110113
■ EP2600692 A1	20130605	EP20130153590	20110113
■ EP2600692 B1	20170913	EP20130153590	20110113
■ ES2643846 T3	20171124	ES20130153590T	20110113
■ JP2011114603 A1	20130627	JP20120505461T	20110113
■ JP5611321 B1	20141022	JP20120505461T	20110113
■ WO11114603 A1	20110922	WO2011JP00114	20110113

Priority:

JP20100064163 20100319 CN201180014631 20110113 EP20110755796 20110113
WO2011JP00114 20110113 JP20120505461 20110113 EP20130153590 20110113

Probable Assignee: MITSUBISHI ELECTRIC HOME APPL

Assignee(s): (std): KAWATA YUKIO ; MASUDA ICHIRO ; MITSUBISHI ELECTRIC CORP ; MITSUBISHI ELECTRIC HOME APPL ; MITSUBISHI ELECTRIC HOME APPLIANCE CO LTD ; TANAKA MICHIO

Assignee(s): MITSUBISHI ELECTRIC HOME APPLIANCE CO LTD FUKAYA SHI ; MITSUBISHI ELECTRIC HOME APPLIANCE CO

Inventor(s): (std): TANAKA MICHIO ; KAWATA YUKIO ; MASUDA ICHIRO

Agent(s): PFENNING MEINIG AND PARTNER GBR; PFENNING MEINIG AND PARTNER MBB; ELZABURU SLP ELZABURU SLP; KOBAYASHI HISAO; AJIMA KIYOSHI; TAKANASHI NORIO; KOBAYASHI HISAO ET AL

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 VC VN ZA ZM ZW

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Patent **Date recorded** **Event group** **Code** **Event** **Details**

CN102884863 A	20130116	LSPB	+	published / reissued	
CN102884863 A	20130116	LSPB	+C06	PUBLICATION	
CN102884863 B	20160706	LSGT	+	granted / extensions (spc, cpc, pte)	
CN102884863 B	20160706	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN102884863 B	20310113	PEXP		Calculated Patent Term Expiry	
CN105578635 A	20160511	LSPB	+	published / reissued	
CN105578635 A	20160511	LSPB	+C06	PUBLICATION	
CN105578635 A	20160511	LSPB	PB01	公开 (The publication of application)	TEXT : 公开 (DISCLOSURE)
CN105578635 B	20190611	LSGT	+	granted / extensions (spc, cpc, pte)	
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CN105578635 B	20310113	PEXP		Calculated Patent Term Expiry	
CN105636259 A	20160601	LSPB	+	published / reissued	
CN105636259 A	20160601	LSPB	+C06	PUBLICATION	
CN105636259 B	20181211	LSGT	+	granted / extensions (spc, cpc, pte)	
CN105636259 B	20181211	LSGT	+GR01	PATENT GRANT	
CN105636259 B	20310113	PEXP		Calculated Patent Term Expiry	
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EP2549830 A1	20130123	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20120919
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EP2549830 A4	20190717	LSES	+17Q	FIRST EXAMINATION REPORT DESPACHED	EFFECTIVE DATE : 20190617
EP2600692 A1	20130605	LSPB	+	published / reissued	
EP2600692 A1	20131030	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20130919
EP2600692 A1	20170111	LSES	+17Q	FIRST EXAMINATION REPORT DESPACHED	EFFECTIVE DATE : 20161208
EP2600692 A1	20170426	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20170327
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EP2600692 B1	20170915	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2600692 B1	20171004	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
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EP2600692 B1	20171026	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602011041640 COUNTRY OF REF DOCUMENT : DE
EP2600692 B1	20171124	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2643846 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT :

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EP2600692 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20170913
EP2600692 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20171213
EP2600692 B1	20180131	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : HR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20170913
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EP2600692 B1	20180228	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GR NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20171214
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EP2600692 B1	20180330	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA	COUNTRY OF REF DOCUMENT : NL NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT

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EP2600692 B1	20180430	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : RO NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20170913
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EP2600692 B1	20180926	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 20180113
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EP2600692 B1	20181031	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
EP2600692 B1	20181102	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST EFFECTIVE DATE : 20180928
EP2600692 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : LI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180131
EP2600692 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SI NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20170913
EP2600692 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE NOTIFICATIONOFLAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180131
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EP2600692 B1	20181130	LSLE	-PG25	LAPSED IN A	COUNTRY OF REF DOCUMENT : CH

				CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20180131
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EP2600692 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20190102 YEAR OF FEE PAYMENT : 9
EP2600692 B1	20190430	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : ES PAYMENT DATE : 20190204 YEAR OF FEE PAYMENT : 9
EP2600692 B1	20190531	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : SE PAYMENT DATE : 20190110 YEAR OF FEE PAYMENT : 9
EP2600692 B1	20190628	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : MC NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20170913
EP2600692 B1	20310113	PEXP		Calculated Patent Term Expiry	
ES2643846 T3	20171124	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2643846 T3	20310113	PEXP		Calculated Patent Term Expiry	
JP2011114603 A1	20130627	LSPB	+	published / reissued	
JP2011114603 A1	20130918	LSSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20130917
JP2011114603 A1	20140416	LSRV	-A02	DECISION OF REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20140415
JP2011114603 A1	20140617	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20140616
JP2011114603 A1	20140626	LSAL	A911	TRANSFER OF RECONSIDERATION BY EXAMINER BEFORE APPEAL (ZENCHI)	TEXT : JAPANESE INTERMEDIATE CODE: A911 EFFECTIVE DATE : 20140625
JP2011114603 A1	20140820	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2011114603 A1	20140827	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20140826
JP2011114603 A1	20140911	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20140902
JP2011114603 A1	20140912	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5611321 COUNTRY OF REF DOCUMENT : JP
JP5611321 B1	20141022	LSGT	+	granted / extensions (spc, cpc, pte)	
JP5611321 B1	20140828	LSGT	+A01	特許査定書 (Decision of patent grant)	

JP5611321 B1	20140909	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5611321 B1	20140912	LSGT	+R150	特許証 (Patent certificate)	
JP5611321 B1	20170810	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5611321 B1	20170822	LSFE	+R250	年金領收書, 年金領收書 (分納) (Pension receipt, annuity receipt (scheduled))	
JP5611321 B1	20180816	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5611321 B1	20180821	LSFE	+R250	年金領收書, 年金領收書 (分納) (Pension receipt, annuity receipt (scheduled))	
JP5611321 B1	20310113	PEXP		Calculated Patent Term Expiry	
WO11114603 A1	20110922	LSPB	+	published / reissued	
WO11114603 A1	20110113	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201180014631.3 COUNTRY OF REF DOCUMENT : CN
WO11114603 A1	20120918	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2012505461 COUNTRY OF REF DOCUMENT : JP
WO11114603 A1	20120919	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO11114603 A1	20120919	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2011755796 COUNTRY OF REF DOCUMENT : EP

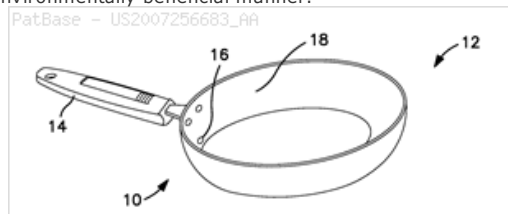
Title: COOKING SYSTEM AND METHOD FOR SEPARATING AND STORING FATTY LIQUIDS

Abstract: A cooking system for separating and storing fatty liquids away from edible food either during or after cooking. The system includes a cooking apparatus having a body portion for cooking food. A fatty liquid reservoir mounted on the cooking apparatus is in fluid communication with the body portion. A pressure reducing device is in fluid communication with the reservoir and generates a pressure differential of sufficient magnitude to deliver a fatty liquid from the body portion to the reservoir. The system allows a user to cook food while removing excess liquid fat, grease or the like in order to scavenge away the unwanted fatty liquid from the cooking environment to a storage area where the liquid is safely quarantined. Once quarantined, the hot fatty liquid can be allowed to cool so that it can be eventually discarded in an environmentally beneficial manner.

Classifications:**International (IPC 8-9):** A47J37/00 A47J37/12

F24D1/00 (Advanced/Invention);

A47J37/00 F24D1/00 (Core/Invention)

CPC: A47J37/108 A47J37/1285 A47J45/071**European:** A47J37/10D A47J37/12M2 A47J45/07A**US:** 126/369**Family:**

Publication number	Publication date	Application number	Application date
EP2027419 A2	20090225	EP20070798468	20070613
EP2027419 A4	20101215	EP20070798468	20070613
US2007256683 AA	20071108	US20070761558	20070612
WO07146969 A2	20071221	WO2007US71057	20070613
WO07146969 A3	20081106	WO2007US71057	20070613

Priority:

US20060814643P 20060615 US20070761558 20070612 WO2007US71057 20070613

Probable Assignee: ZIMMERMAN HARRY I**Assignee(s):** (std): ZIMMERMAN HARRY I ; ZIMMERMAN ISRAEL H ; ZIMMERMAN ISRAEL HARRY**Inventor(s):** (std): ZIMMERMAN HARRY I ; ZIMMERMAN ISRAEL HARRY ; ZIMMERMAN ISRAEL H**Inventor(s):** ZIMMERMAN ISRAEL**Agent(s):** HARTLEY ANDREW PHILIP ET AL; WALTER W DUFT LAW OFFICES OF WALTER W DUFT

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI 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 PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
EP2027419 A2	20090225	LSPB	+	published / reissued	
EP2027419 A2	20090225	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20081027
EP2027419 A4	20101215	LSES	+A4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED	EFFECTIVE DATE : 20101111
EP2027419 A4	20111228	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 20110611
US2007256683 AA	20071108	LSPB	+	published / reissued	
US2007256683 AA	20110711	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
WO07146969 A2	20071221	LSPB	+	published / reissued	
WO07146969 A2	20081027	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2007798468 COUNTRY OF REF DOCUMENT : EP
WO07146969 A3	20081216	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO07146969 A3	20090115	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : RU

Title: ANTIMICROBIAL THERMOMETER

Abstract: The present invention relates to a cooking thermometer which can measure a temperature in contact with foodstuffs directly or around foodstuffs during the cooking process. Particularly, the present invention relates to a cooking thermometer which inhibits the proliferation of bacteria on the surface of the thermometer and is coated with an antibacterial compound such as titanium dioxide. The antibacterial thermometer of the present invention coated with titanium dioxide comprises a temperature measurement part which calculates and indicates the temperature of food during the cooking process; and a titanium dioxide coating layer which is covered onto the surface of said temperature measurement part with the antibacterial activity

Classifications:

International (IPC 8-9): G01K1/08 G01K13/00 (Advanced/Invention);
G01K13/00 (Advanced/Non-invention);

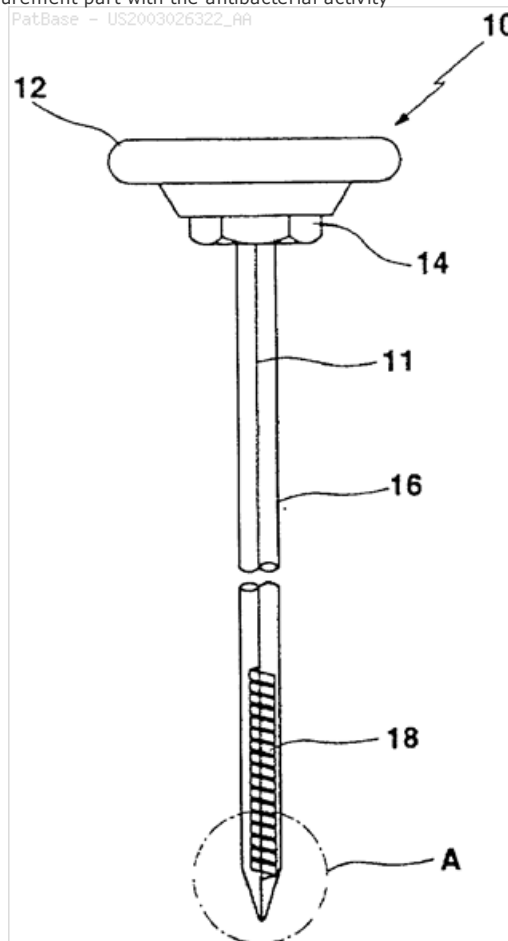
G01K13/00 (Core/Invention)

International (IPC 1-7): G01K1/00 G01K11/00 G01K13/00 G01K5/02
G01K7/00

CPC: G01K1/08

European: G01K1/08

US: 374/100 374/100P 374/100S 374/155 374/155P 374/159 374/159S
374/163 374/163S 374/201 374/201S 374/207 374/207S 374/208
374/208P 374/208S 374/54 374/54S 374/55 374/55P 374/E1.011
374/E10.11S



Family:

Publication number	Publication date	Application number	Application date
KR100415387 B1	20040116	KR20010045105	20010726
KR200250438 Y1	20011122	KR20010022716U	20010726
KR200250439 Y1	20011122	KR20010022717U	20010726
KR200260573 Y1	20020110	KR20010022718U	20010726
KR200260574 Y1	20020110	KR20010022719U	20010726
KR20030010232 A	20030205	KR20010045105	20010726
US2003026322 AA	20030206	US20020112306	20020401
US2003152129 AA	20030814	US20030386708	20030313
US2003152131 AA	20030814	US20030386657	20030313
US2003169803 AA	20030911	US20030386658	20030313

Priority:

KR20010045105 20010726 US20020112306 20020401 US20030386657 20030313
US20030386658 20030313 US20030386708 20030313

Probable Assignee: YUIL MEASURES CO LTD

Assignee(s): (std): LEE YONG WON ; YUIL MEASURES CO LTD

Assignee(s): TERMS WON ; YUIL MEASURES CO

Inventor(s): (std): LEE YONG WON ; LEE YONGWON

Legal status (INPADOC)

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Patent **Date recorded** **Event group** **Code** **Event** **Details**

KR100415387 B1	20040116	LSGT	+	granted / extensions (spc, cpc, pte)	
KR100415387 B1	20091228	LSFE	FPAY	ANNUAL FEE PAYMENT	PAYMENT DATE : 20091228 YEAR OF FEE PAYMENT : 7
KR100415387 B1	20110106	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	
KR100415387 B1	20210726	PEXP		Calculated Patent Term Expiry	
KR200250438 Y1	20011122	LSGT	+	granted / extensions (spc, cpc, pte)	
KR200250438 Y1	20110726	PEXP		Calculated Patent Term Expiry	
KR200250439 Y1	20011122	LSGT	+	granted / extensions (spc, cpc, pte)	
KR200250439 Y1	20110726	PEXP		Calculated Patent Term Expiry	
KR200260573 Y1	20020110	LSGT	+	granted / extensions (spc, cpc, pte)	
KR200260573 Y1	20110726	PEXP		Calculated Patent Term Expiry	
KR200260574 Y1	20020110	LSGT	+	granted / extensions (spc, cpc, pte)	
KR200260574 Y1	20110726	PEXP		Calculated Patent Term Expiry	
KR20030010232 A	20030205	LSPB	+	published / reissued	
KR20030010232 A	20010726	LSES	A201	REQUEST FOR EXAMINATION	
KR20030010232 A	20030404	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR20030010232 A	20031122	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR20030010232 A	20040105	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
US2003026322 AA	20030206	LSPB	+	published / reissued	
US2003026322 AA	20020401	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : YUIL MEASURES CO., LTD., KOREA, REPUBLIC OF OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:LEE, YONGWON; REEL/FRAME:012752/0856 EFFECTIVE DATE : 20020304
US2003026322 AA	20041018	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2003152129 AA	20030814	LSPB	+	published / reissued	
US2003152129 AA	20040108	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2003152131 AA	20030814	LSPB	+	published / reissued	
US2003152131 AA	20040108	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	
US2003169803 AA	20030911	LSPB	+	published / reissued	
US2003169803 AA	20040223	LSWD	-ABD3	Abandoned -- Failure to Respond to an Office Action	

Title: ZERO CROSSING SYNCHRONOUS SWITCHING CIRCUITS FOR POWER SEMICONDUCTORS SUPPLYING NON-UNITY POWER FACTOR LOADS

Abstract: 1,193,091. Triac control circuits. GENERAL ELECTRIC CO. 5 Oct., 1967 [6 Oct., 1966], No. 45597/67. Addition to 1,147,422. Heading H3T. [Also in Divisions G3 and H2] A semi-conductor controllable rectifier is controlled to supply complete half cycles of current to a non-unity power factor load by sensing the voltage across the rectifier to detect the rise consequent upon approach to the zero current (blocking) condition, the sensing signal produced by such detection being used to permit firing of the rectifier at the start of the next current half cycle, providing such firing is compatible with the requirements of a controlled variable or a pre-set regulated condition. In Fig. 2 the A.C. supply to an inductive load 12, 21 is controlled by a triac 11 whose voltage is sensed by a bridge 31-35 which derives a signal from transistor 35 when the triac starts to block, this condition producing a voltage rise due to the phase difference between the voltage and current waveforms Fig. 1 (not shown). The signal from transistor 35 causes turn-on of transistors 26, 27 and application of a firing signal to the triac from the D.C. supply 22, 23, 24. Should a switch 41 be closed however, the signal from transistor 35 is shunted by a transistor 37 made conductive by the switch closure and the triac is not fired for this and any subsequent half cycles corresponding to this switch condition. Instead of the overriding circuit 39, 41 shown, the control signal for transistor 37 may be derived from temperature, optical or pressure sensors. In a modification, Fig. 3 (not shown), a parallel RC circuit (40, 42) is connected between the triac and the sensing network to improve firing, the sensing network comprises two alternately-turned-on transistors (43, 44) and two diodes (45, 46), and a series RC circuit (47, 48) is connected between the network and the triac gate to cause a firing pulse of predetermined time to be generated, since the inclusion of the series circuit causes transistors 26, 27 and the appropriate transistor of the sensing network to act as a one-shot multivibrator. This modification is used to control an electric motor (12) providing temperature control for a refrigerator or air conditioning installation, the arrangement being such that transistor 37 is controlled by a differential transistor amplifier (53, 54) which includes thermistor (58) responsive to the controlled temperature and which operates as a two-state trigger circuit providing a hysteresis effect in the control operation. During start up of the circuit there is a possibility that conduction of transistors 26, 27 will prevent adequate charging of capacitor 24. Various solutions are proposed to prevent this occurrence and in one arrangement, Fig. 4 (not shown), an R.C. circuit (63, 64) is added to the modification of Fig. 3 to maintain the transistor 26 non-conducting until capacitor 24 is fully charged. In this arrangement the motor is of the capacitor start type and the series R.C. circuit (47, 48) is adjusted accordingly. Also the transistor 27 is omitted. The embodiment shown in Fig. 5 is similar in certain respects to Figs. 2, 3 and 4 but uses transistors 71, 72, interconnected in positive feedback, and a capacitor 76 to form a relaxation oscillator which turns on the transistor 26 when blocking of the triac renders transistors 35, 75 conductive, recharging of capacitor 76 also being effected by conduction of the transistor 26. The time constant of the oscillator comprising members 71, 72, 76 is such as to allow charging of capacitor 24 upon starting-up of the circuit. Overriding control of the circuit is provided by the differential amplifier comprising transistors 53A, 53B, 53C, 54 of which the former are connected to temperature-sensing networks including thermistors 83A, 83B, 83C and reference resistors 58A, 58B, 58C. Other types of signal sensors such as photo-cells or strain gauges may be used. In the described embodiment the thermistors 83A, 83B, 83C are thermally coupled with the windings of the motor 12 and prevent conduction of the triac should the windings become overheated, each thermistor controlling a respective one of the transistors 53A, 53B, 53C to exert an individual overriding control. Such control may be in addition to that exercised by a further thermistor sensing air temperature, when the motor is used for temperature control of a refrigerator or air conditioning plant.

Classifications:

International (IPC 8-9): G05D23/24 G05F1/45 H01H33/59 H02M1/08 H02M5/257 H02M7/155 H03K17/13 H03K17/72 (Advanced/Invention); G05D23/20 G05F1/10 H01H33/59 H02M1/08 H02M5/02 H02M7/12 H03K17/13 H03K17/72 (Core/Invention)

International (IPC 1-7): G05B11/14 G05B11/16 G05D23/24 G05F1/44 H01H9/30 H01L23/56 H02M1/08 H02P13/30 H03K17/02 H03K17/68 H03K17/72 H05B1/02

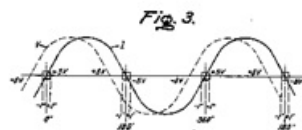
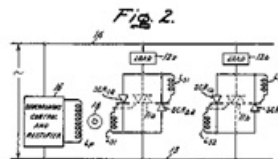
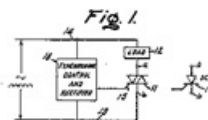
CPC: G05D23/1909 G05D23/1913 G05D23/24 H03K17/72 G05F1/452 H01H33/593 H02M1/083 H02M5/2573 H02M7/155 H03K17/136

European: G05D23/24C2 G05D23/24C2C G05D23/24C6C G05F1/45A H01H33/59B H02M1/08C H02M5/257C H02M7/155 H03K17/13C H03K17/72

US: 219/501 307/252 307/650 307/651 327/141 327/452 327/476 327/482 327/494 327/587 327/588 328/3 361/2

PatBase - US3486042_A

Dec. 23, 1968 D. L. WATROBIN 3,486,042
ZERO CROSSING SYNCHRONOUS SWITCHING CIRCUITS FOR POWER SEMICONDUCTORS SUPPLYING NON-UNITY POWER FACTOR LOADS
Filed Oct. 8, 1966 Sheet 1 of 1



Inventor:
Daniel L. Watrobin
By: [Signature]
His Attorney

Family:

Publication number	Publication date	Application number	Application date
CH457580 A	19680615	CH19660007136	19660517
CH474920 A	19690630	CH19670013894	19671005
DE1523332 A1	19690626	DE19661523332	19660517
DE1523332 B2	19730510	DE19661523332	19660517
DE1523332 C3	19731122	DE19661523332	19660517
DE1613686 A1	19710506	DE19671613686	19671003
FR1480488 A	19670512	FR19660061111	19660511
FR93219 E	19690228	FR19670123280	19671004

GB1147422 A	19690402	GB19660022165	19660518
GB1193091 A	19700528	GB19670045597	19671005
JP44009936 B4	19690509	JP19660030973	19660517
NL6606857 A	19661121	NL19660006857	19660518
NL6713636 A	19680408	NL19670013636	19671006
SE320745 B	19700216	SE19660006802	19660517
SE336175 B	19710628	SE19670013653	19671005
US3381226 A	19680430	US19650456670	19650518
US3486042 A	19691223		19661006

Priority:

US19650456670 19650518 US19660584702 19661006

Probable Assignee: GEN ELECTRIC

Assignee(s): (std): GEN ELECTRIC

Assignee(s): GENERAL ELECTRIC CO ; GENERAL ELECTRIC CO SCHENECTADY N Y V ST A ; GENERAL ELECTRIC COMPANY ; GEC

Inventor(s): (std): CLIFFORD MORGAN JONES ; DAVIS HARNDEN JUN JOHN ; DONALD LELAND WATROUS ; HARNDEN J ; HARNDEN JR JOHN D ; LELAND WATROUS DONALD ; MORGAN JONES CLIFFORD ; WATROUS D ; WATROUS DONALD L ; WATROUS DONALD LELAND ; JONES CLIFFORD M ; HARNDEN JOHN D JR ; JONES CLIFFORD MORGAN ; HARNDEN JUN JOHN DAVIS ; JOHN DAVIS JR HARNDEN ; JONES C

Inventor(s): JONES CLIFFORD MORGAN SCOTIA ; JR JOHN D HARNDEN ; HARNDEN JUN ; HARNDEN JUN JOHN DAVIS SCHENECTADY ; DAVIS JR HARNDEN JOHN ; DONALD L WATROUS ; DAVIS HARNDEN JUN

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CH457580 A	19680615	LSGT	+	granted / extensions (spc, cpc, pte)	
CH457580 A	19860517	PEXP		Calculated Patent Term Expiry	
CH474920 A	19690630	LSGT	+	granted / extensions (spc, cpc, pte)	
CH474920 A	19751231	LSLE	-PLZ	PATENT OF ADDITION CEASED	
CH474920 A	19871005	PEXP		Calculated Patent Term Expiry	
DE1523332 A1	19690626	LSPB	+	published / reissued	
DE1523332 B2	19730510	LSPB	+	published / reissued	
DE1523332 C3	19731122	LSGT	+	granted / extensions (spc, cpc, pte)	
DE1523332 C3	19731122	LSGT	+C3	GRANT AFTER TWO PUBLICATION STEPS (3RD PUBLICATION)	
DE1613686 A1	19710506	LSPB	+	published / reissued	
FR1480488 A	19670512	LSGT	+	granted / extensions (spc, cpc, pte)	
FR1480488 A	19860511	PEXP		Calculated Patent Term Expiry	
GB1147422 A	19690402	LSGT	+	granted / extensions (spc, cpc, pte)	
GB1147422 A	19860518	PEXP		Calculated Patent Term Expiry	
GB1193091 A	19700528	LSGT	+	granted / extensions (spc, cpc, pte)	
GB1193091 A	19701007	LSGT	+PS	PATENT SEALED	
GB1193091 A	19751217	LSLE	-PLNP	PATENT LAPSED THROUGH NONPAYMENT OF RENEWAL FEES	
GB1193091 A	19871005	PEXP		Calculated Patent Term Expiry	
JP44009936 B4	19690509	LSPB	+	published / reissued	
NL6606857 A	19661121	LSPB	+	published / reissued	
NL6713636 A	19680408	LSPB	+	published / reissued	
SE320745 B	19700216	LSPB	+	published / reissued	
SE336175 B	19710628	LSPB	+	published / reissued	
US3381226 A	19680430	LSGT	+	granted / extensions (spc, cpc, pte)	
US3486042 A	19691223	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: NON-STICK METALLIC COOKING VESSEL

Abstract: A household appliance comprises a metallic body having a non-stick surface which has a multitude of interstices filled with a non-stick material so that the surface is composed externally of minute areas defined by peaks of the surface, and of areas of non-stick material, interconnecting said minute areas. The appliance may be for example a **frying pan**, waffle iron, oven or domestic (laundry) iron. The interstices may be produced by sand or shot blasting; this may be followed by the application of a porous metal or glass layer; the roughened surface is then cleaned and coated and/or impregnated with the non-stick material which may be a fluorocarbon polymer or telomer, or a silicone resin, for example by vacuum impregnation, followed by buffing to ensure that the peaks of the metallic surface are exposed. Alternatively, the porous-layer-forming material (e.g. powdered aluminium) and the non-stick material may be mixed and flame- or arc-sprayed simultaneously on to the surface, followed by a further impregnation. ALSO: A household appliance comprises a metallic body having a non-stick surface which has a multitude of interstices filled with a non-stick material so that the surface is composed externally of minute areas defined by peaks of the surface, and of areas of non-stick material interconnecting said minute areas. The appliance may be for example a **frying pan**, waffle iron, oven or domestic (laundry) iron. The interstices may be produced by sand or shot blasting; this may be followed by the application of a porous metal or glass layer; the roughened surface is then cleaned and coated and/or impregnated with the non-stick material which may be a fluorocarbon polymer or telomer, or a silicone resin, for example by vacuum impregnation, followed by buffing to ensure that the peaks of the metallic surface are exposed. Alternatively, the porous-layer-forming material (e.g. powdered aluminium) and the non-stick material may be mixed and flame- or arc-sprayed simultaneously on to the surface, followed by a further impregnation. ALSO: A household appliance comprises a metallic body having a non-stick surface which has a multitude of interstices filled with a non-stick material so that the surface is composed externally of minute areas defined by peaks of the surface, and of areas of non-stick material interconnecting said minute areas. The appliance may be for example a domestic (laundry) iron. The non-stick material may be a fluorocarbon polymer or telomer, or a silicone resin.

Classifications:

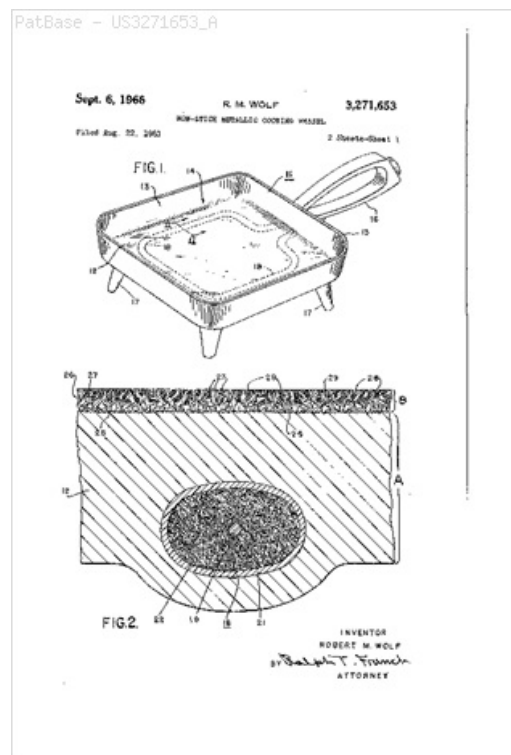
International (IPC 8-9): A47J36/02 A47J37/10 B05D5/08 C23C4/08 C23C4/18 D06F75/38 (Advanced/Invention); A47J36/02 A47J37/10 B05D5/08 C23C4/08 C23C4/18 D06F75/00 (Core/Invention)

International (IPC 1-7): A47G A47J37/10 B05D7/26 B29C27/00 B29C27/30

CPC: A47J36/02 A47J37/10 B05D5/086 C23C4/08 C23C4/18 D06F75/38

European: A47J36/02 A47J37/10 B05D5/08C3 C23C4/08 C23C4/18
D06F75/38

US: 219/438 220/573.2



Family:

Publication number	Publication date	Application number	Application date
BE621641 A	00000000		00000000
DE1454212 A1	19690612	DE19621454212	19620806
FR1331796 A	19630705	FR19620907285	19620820
GB956740 A	19640429	GB19620026287	19620709
IT943003 A	19730402	IT19620015091	19620726
US3271653 A	19660906	US196101133103	19610822

Priority:

US19610133103 19610822 FR19620907285 19620820

Probable Assignee: WESTINGHOUSE ELECTRIC CORP

Assignee(s): (std): WESTERN ELECTRIC CO : WESTINGHOUSE ELECTRIC CORP

Assignee(s): WEC

Inventor(s): (std): M WOLF ROBERT ; WOLF ROBERT M

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
BE621641 A	00000000	LSPB	+	published / reissued	
BE621641 A	19200101	PEXP		Calculated Patent Term Expiry	
DE1454212 A1	19690612	LSPB	+	published / reissued	
DE1454212 A1	19780706	LSLE	-EHJ	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
FR1331796 A	19630705	LSGT	+	granted / extensions (spc, cpc, pte)	
FR1331796 A	19820820	PEXP		Calculated Patent Term Expiry	
GB956740 A	19640429	LSGT	+	granted / extensions (spc, cpc, pte)	
GB956740 A	19820709	PEXP		Calculated Patent Term Expiry	
IT943003 A	19730402	LSGT	+	granted / extensions (spc, cpc, pte)	
IT943003 A	19820726	PEXP		Calculated Patent Term Expiry	
US3271653 A	19660906	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: Spatter shielding and vapor venting device for **frying pan**

Abstract: A spatter shielding and vapor venting device for a **frying pan** comprising a transparent lid to enable visual observation of cooking, a peripheral venting gap to release generated fumes and vapors, a vertical hollow cylindrical wall to rapidly return condensed oil to **frying pan**, a **handle** to hold the device steady, a horizontal flange to facilitate placement on rims of **frying pans** of varying sizes, a vertical cylindrical flange to restrict lateral motion and to shield the contact area between the horizontal flange and **frying pan** rim, a vertical window opening for the introduction, removal, stirring and turning over of food, a hands-free opening and automatic closing window cover means to effectively shield the window opening even while performing said cooking operations.

Classifications:

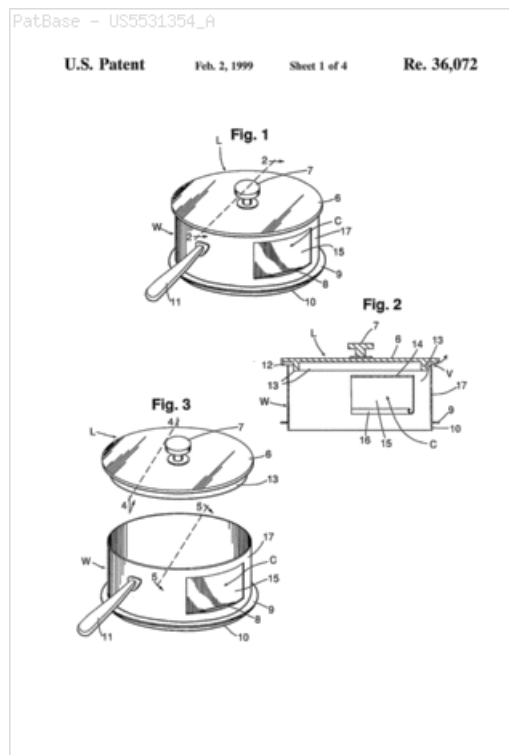
International (IPC 8-9): A47J37/10 (Advanced/Invention)

International (IPC 1-7): B65D1/00 B65D1/40

CPC: A47J37/101 A47J37/108

European: A47J37/10A A47J37/10D

US: 126/299C 220/366.1 220/369 220/370 220/731 366/347 99/645



Family:

Publication number	Publication date	Application number	Application date
US5531354 A	19960702	US19950515488	19950815
USRE36072 E	19990202	US19960742036	19961101

Priority:

US19950515488 19950815 US19960742036 19961101

Probable Assignee: UY WILLIAM C

Assignee(s): (std): UY WILLIAM C

Assignee(s): UY WILLIAM CHENG

Inventor(s): (std): UY WILLIAM CHENG ; UY WILLIAM C

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US5531354 A	19960702	LSGT	+	granted / extensions (spc, cpc, pte)	
US5531354 A	19960618	LSGT	PAT1	Patented Case	
US5531354 A	19960618	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US5531354 A	20150815	PEXP		Calculated Patent Term Expiry	
USRE36072 E	20000515	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
USRE36072 E	20080702	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
USRE36072 E	20080728	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	

Title: MULTI-PURPOSE HEAT TRANSFER AND STORAGE DEVICE

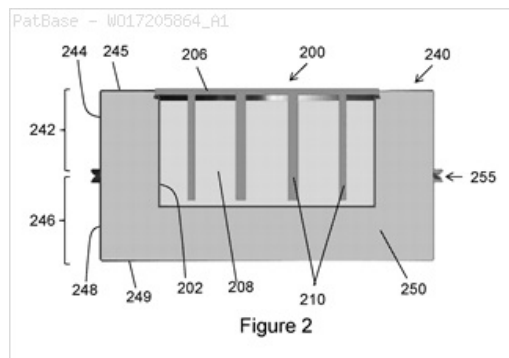
Abstract: Devices, systems, and methods relating to providing a portable, rechargeable vessel for collecting, storing, and recovering thermal energy are provided. In one aspect, vessel includes a structure defining a well and an open-top portion at the top of the well; a phase- change material, wherein the phase-change material is disposed in the well, the phase-change material being configured to change phase at temperature in the range of 110-700 degrees C; one or more thermally-conductive fins interleaved in the phase-change material; and a thermally- conductive heat transfer plate disposed at and substantially covering the open-top portion of the structure, in direct thermal contact with the one or more fins, thereby allowing the transfer plate to directly exchange thermal energy with the phase change material.

Classifications:

International (IPC 8-9): B65D81/34 B65D81/36

B65D81/38 (Advanced/Invention)

CPC: F28F3/02 F28F21/084 F28D20/02 F24S20/30 F24S60/00 F24S70/20 Y02B40/18 Y02E10/40 Y02E60/145



Family:

Publication number	Publication date	Application number	Application date
IN201817049160 A	20190315	IN201817049160	20181226
WO17205864 A1	20171130	WO2017US34885	20170528
WO17205864 A9	20190131	WO2017US34885	20170528

Priority:

US20160392317P 20160527 WO2017US34885 20170528

Probable Assignee: SUN BUCKETS INC

Assignee(s): (std): ALONSO MATTHEW PAUL ; BRADLEY JOE ; LITCHFIELD J BRUCE ; SUN BUCKETS INC

Inventor(s): (std): ALONSO MATTHEW PAUL ; BRADLEY JOE ; LITCHFIELD J BRUCE

Agent(s): SUGGS JAMES V

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 DJ 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 KH KM KN KP KR KW 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

Legal status (INPADOC)

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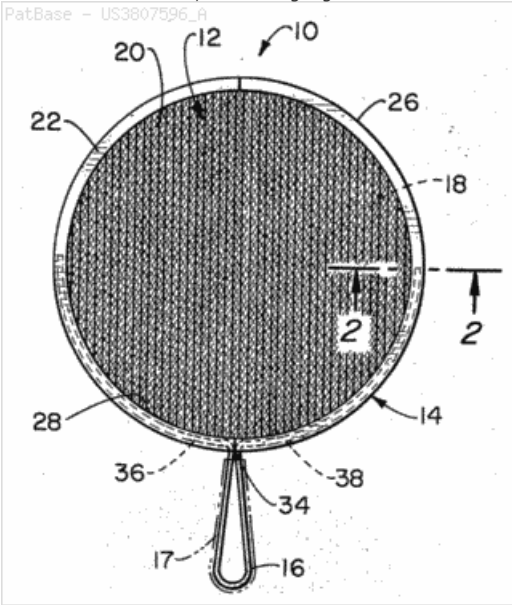
Patent	Date recorded	Event group	Code	Event	Details
IN201817049160 A	20190315	LSPB	+	published / reissued	
WO17205864 A1	20171130	LSPB	+	published / reissued	
WO17205864 A1	20181128	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE

Title: **FRY PAN** UTENSIL

Abstract: The utensil is to be located over the top of a heating vessel such as a **frying pan** to prevent splatter from the heating vessel wherein a dual aluminum screen assembly is employed which is connected through a circular rim, the circular rim having an upper substantially planar surface with a lower rounded surface, the rim having an internal cavity, the free ends of a wire stock **handle** cooperating within said cavity and being securely connected to said rim. 4 Claims, 3 Drawing Figures

Classifications:

International (IPC 8-9): A47J37/10 (Advanced/Invention);
A47J37/10 (Core/Invention)
International (IPC 1-7): A47J36/06 A47J37/10 B65D51/16
CPC: A47J37/101
European: A47J37/10A
US: 220/369 D7/359



Family:

Publication number	Publication date	Application number	Application date
US3807596 A	19740430	US19720255197	19720519

Priority:

US19720255197 19720519

Probable Assignee: ALUMINUM FILTER CO
Assignee(s): (std): ALUMINUM FILTER CO
Assignee(s): ALUMINUM FILTER CO US
Inventor(s): (std): BAKER R
Inventor(s): BAKER R US

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US3807596 A	19740430	LSGT	+	granted / extensions (spc, cpc, pte)	

Title: APPARATUS FOR REMOVING AN ADHERED FRAGILE FOOD PRODUCT FROM A SUPPORT SURFACE

Abstract: An apparatus for use in releasing a fragile food product which has become stuck to a support surface as a result of a prior processing operation, and for transferring the released food product from the support surface in an orderly fashion so that the food product can be further processed and the support surface returned for reuse. In a preferred embodiment, a releasing roller having flexible rubber projections thereon rotates below a tray which supports strips of an extruded meat product stuck to the tray, with the projections extending upwardly through apertures in the tray to gently contact the underside of the meat strip. A back-up roller above the tray and offset horizontally from the releasing roller restrains the trays and strips from moving upwardly, thereby cooperating with the releasing roller to free the adhered food product. The tray is then inverted onto a strip conveyor belt, the strip conveyor belt having a depressed central portion and raised side portions so that the ends of the tray are supported on the raised side portions with the released food product either falling onto the strip conveyor belt or being suspended just above the strip conveyor belt. A peeling plate is positioned at a height intermediate between the depressed and raised portions of the strip conveyor belt, and with a tapered leading edge pointing against the motion of the strip conveyor belt, to separate the trays, which are lifted upwardly over the peeling plate, from the strips of food product, which remain on the strip conveyor belt.

Classifications:

International (IPC 8-9): A21C9/08 A22C17/00 (Advanced/Invention);
A21C9/00 A22C17/00 (Core/Invention)

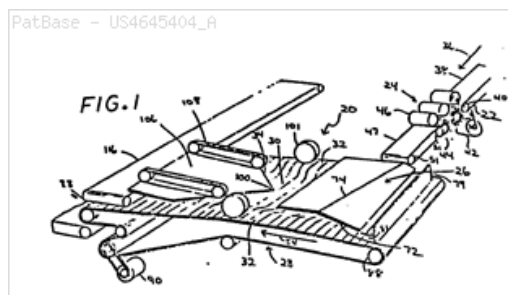
International (IPC 1-7): A21C9/08 A22C17/00 A47J27/62

CPC: Y10T83/2194 A22C17/0033 A21C9/08

European: A21C9/08 A22C17/00B8

US: 198/598 198/599 198/635 414/403 414/416.05 414/416.1 414/417
414/418 83/155.1 99/355 99/644

PatBase - US4645404_A



Family:

Publication number	Publication date	Application number	Application date
DE3569870 D1	19890608	DE19853569870	19850917
EP0178472 A1	19860423	EP19850111737	19850917
EP0178472 B1	19890503	EP19850111737	19850917
US4645404 A	19870224	US19840651488	19840917

Priority:

US19840651488 19840917

Probable Assignee: DEL MONTE CORP

Assignee(s): (std): STAR KIST FOODS

Assignee(s): STAR KIST FOODS INC ; STAR KIST FOODS INC A CA CORP ; DEL MONTE CORP ; DLM FOODS LLC ; SK TWO LLC

Inventor(s): (std): JURAVIC DAVOR

Designated states: BE DE FR GB IT

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE3569870 D1	19900531	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION	
DE3569870 D1	19960912	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE	
EP0178472 A1	19860423	LSPB	+	published / reissued	
EP0178472 A1	19861217	LSSE	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19861022
EP0178472 A1	19880330	LSSE	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19880208
EP0178472 B1	19890503	LSGT	+	granted / extensions (spc, cpc, pte)	
EP0178472 B1	19900425	LSGT	+26N	NO OPPOSITION FILED	
EP0178472 B1	19910930	LSFE	ITTA	IT: LAST PAID ANNUAL FEE	REF COUNTRY CODE : EP
EP0178472 B1	19940701	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 19940701 YEAR OF FEE PAYMENT : 10
EP0178472 B1	19940725	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE PAYMENT DATE : 19940725 YEAR OF FEE PAYMENT : 10

EP0178472 B1	19940726	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 19940726 YEAR OF FEE PAYMENT : 10
EP0178472 B1	19941031	LSFE	+PGFP	ANNUAL FEE PAID TO NATIONAL OFFICE [ANNOUNCED FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 19941031 YEAR OF FEE PAYMENT : 10
EP0178472 B1	19950917	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : GB LAPSED DATE : 19950917
EP0178472 B1	19950930	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : BE LAPSED DATE : 19950930
EP0178472 B1	19960331	LSLE	-BERE	BE: LAPSED	PARTYTYPE : OWNER REF COUNTRY CODE : EP OWNER : STAR-KIST FOODS INC. EFFECTIVE DATE : 19950930
EP0178472 B1	19960515	LSLE	-GBPC	GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	REF COUNTRY CODE : EP EFFECTIVE DATE : 19950917
EP0178472 B1	19960531	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : FR LAPSED DATE : 19960531
EP0178472 B1	19960601	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : DE LAPSED DATE : 19960601
EP0178472 B1	19960830	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : ST
US4645404 A	19870224	LSGT	+	granted / extensions (spc, cpc, pte)	
US4645404 A	19840917	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : STAR KIST FOODS, INC., 582 TUNA ST., TERMINAL ISLA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:JURAVIC, DAVOR; REEL/FRAME:004316/0004 EFFECTIVE DATE : 19840914
US4645404 A	19840917	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : STAR KIST FOODS, INC., A CA CORP., CALIFORNIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:JURAVIC, DAVOR; REEL/FRAME:004316/0004 EFFECTIVE DATE : 19840914
US4645404 A	19861218	LSGT	PAT1	Patented Case	
US4645404 A	19900823	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4645404 A	19940804	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US4645404 A	19990221	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US4645404 A	19990504	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19990224
US4645404 A	20041214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : SK TWO L.L.C., PENNSYLVANIA OLDPARTY : MERGER; ASSIGNOR:STAR-KIST FOODS, INC.; REEL/FRAME:015460/0267 EFFECTIVE DATE : 20021202

US4645404 A	20041214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DLM FOODS L.L.C., PENNSYLVANIA OLDPARTY : MERGER; ASSIGNOR:SK TWO, L.L.C.; REEL/FRAME:015460/0296 EFFECTIVE DATE : 20021217
US4645404 A	20041214	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : DEL MONTE CORPORATION, CALIFORNIA OLDPARTY : MERGER; ASSIGNOR:DLM FOODS L.L.C.; REEL/FRAME:015460/0307 EFFECTIVE DATE : 20021220
US4645404 A	20180123	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US4645404 A	20180123	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362

Title: METHOD AND APPARATUS FOR ODOR CONTROL USING PANELS OF ACTIVATED CARBON CLOTH

Abstract: A method of containing and reducing unwanted odors and fumes and removing those fumes from the immediate surroundings of the apparatus.

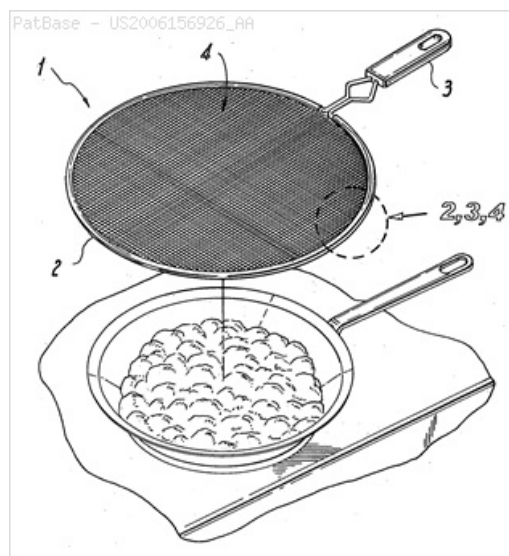
Classifications:

International (IPC 8-9): B01D53/02 (Advanced/Invention);
B01D53/02 (Core/Invention)

CPC: A61L9/014 B01D53/0407 B01D2253/102 B01D2253/25
B01D2257/90 B01D2259/4541 B01J20/20 B01J20/28033

European: A61L9/014 B01D53/04C B01J20/20 B01J20/28D24
L01D253/102 L01D253/25 L01D257/90 L01D259/45P

US: 126/383.1 96/108 96/108P 96/134



Family:

Publication number	Publication date	Application number	Application date
US2006156926 AA	20060720	US20050287721	20051128
US8192537 BB	20120605	US20050287721	20051128

Priority:

US20050645465P 20050120 US20050287721 20051128

Probable Assignee: ALEMAO THADDEUS

Assignee(s): (std): ALEMAO THADDEUS

Inventor(s): (std): ALEMAO THADDEUS

Agent(s): ALFRED M WALKER; LEE GROSSKTENZ; ALFRED M; JOHN F

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US2006156926 AA	20060720	LSPB	+	published / reissued	
US2006156926 AA	20120516	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US8192537 BB	20120605	LSGT	+	granted / extensions (spc, cpc, pte)	
US8192537 BB	20120516	LSGT	PAT1	Patented Case	
US8192537 BB	20151113	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8192537 BB	20251128	PEXP		Calculated Patent Term Expiry	

Abstract: Source: DE9206889U1 [DE] (Claim 1) 1. Bratpfanne mit Wrasenabzug bei aufgelegtem Deckel, so- wie mit Fettabtropfkante, Fettspritzerschutz, abnehm- baren Stiel und Kurzzeitwecker, dadurch gekennzeichnet, dass der den Pfannenboden urge- bende nach aufwaerts fuehrende Pfannenrand an seinem obe- ren Ende eine nach aussen weisende Deckelaufgeflaeche hat (1) Fig. 1, 2, 3 u. 4, die durch einen aufwaertsfueh- renden Rand (6) Fig. 1, 2, 3 u. 4 begrenzt und von min- destens zwei auf dieser Ebene sich gegenueberliegende Wuelste (2) Fig. 1, 2, 3 u. 4 zur Deckelaufage in zweiter Ebene unterbrochen wird, wobei die auf der unteren Ebene befindlichen Grundflaechen der Wuelste, mit ihrer Breite (3) Fig. 1, 2, 3 uo 4 nur einen Teil der Breite der un- teren Ebene (1) Fig.1, 2, 3 u. 4 einnehmen, so dass vor den Wuelsten ein schmaler Streifen der unteren Ebene (1) Fig. 1, 2 3 u. 4 zur Deckelaufage verbleibt.

Machine translation: (Claim 1) 1 Griddle with extractor hood with its lid, as well as with Fettabtropfkante, fat splash protection, decreasing-able arm and short-term timer, characterized in that the bottom of the pan urge-Bender to-ascending edge of the socket at its upper end an outwardly oriented Deckelaufgeflaeche (1) 1, 2, 3 and 4, the leaders by a aufwaertsfueh-edge (6) 1, 2, 3 and 4 and is limited by at least two on this level, opposing ridges (2) shows stops 1, 2, 3 and 4 to the ceiling mat in the second level, where the container on the lower flat base of the ridges, with its width (3) 1, 2, 3, 4 uo only part of the width of the un- Teren level (1) Fig.1, 2, 3 and 4 are taking, so that the beads from a narrow strip of the lower level (1) 1, 2, 3 and 4 is left to the ceiling pad.

Classifications:

International (IPC 8-9): A47J36/38 A47J37/10

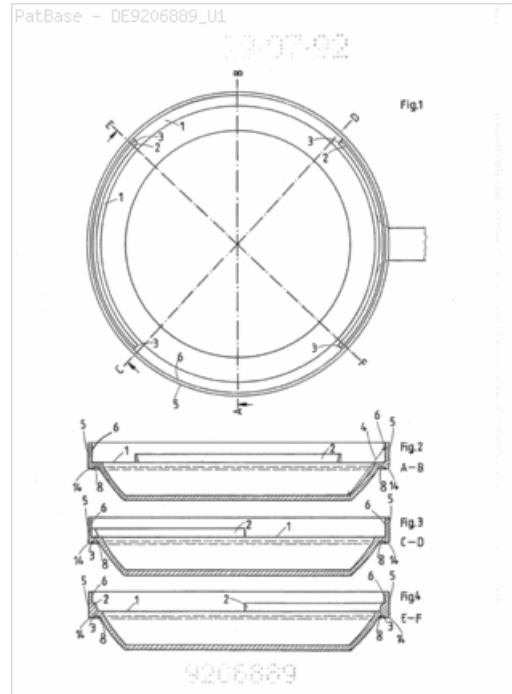
A47J45/06 (Advanced/Invention);

A47J36/00 A47J37/10 A47J45/00 (Core/Invention)

International (IPC 1-7): A47J36/38 A47J37/10

CPC: A47J36/38 A47J37/103 A47J45/063

European: A47J36/38 A47J37/10A1 A47J45/06C



Family:

Publication number	Publication date	Application number	Application date
DE9206889 U1	19921008	DE19920006889U	19920521

Priority:

DE19920006889U 19920521

Probable Assignee: KRAEMER MAX 5600 WUPPERTAL DE

Assignee(s): KRAEMER MAX 5600 WUPPERTAL DE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE9206889 U1	19921008	LSGT	+	granted / extensions (spc, cpc, pte)	
DE9206889 U1	20020521	PEXP		Calculated Patent Term Expiry	

Title: FLEXIBLE SEPARABLE, NON-STICK LINERS FOR HEATED COOKING SURFACES

Abstract: A flexible non-stick liner of thin plastic sheet material such as tetrafluoroethylene polymers is arranged to rest in readily removable covering relation on a heated cooking surface, keeping the cooking surface substantially clean. The liner can be easily **removed** and replaced, stays substantially clean, can be wiped clean if desired. It is especially suitable for omelet pans, facilitating the rolling and sealing of cooked omelets. The liner is also suitable for flat surface grills, cooking plates, **fry pans**, deep-fat cooking vessels, stew pots, baking pans and tins, sauce pans, skillets, roasting pans, pressure cookers, and the like.

Classifications:

International (IPC 8-9): A47J36/02 (Advanced/Invention);

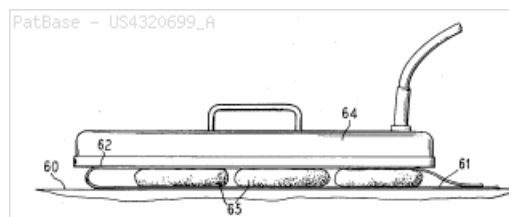
A47J36/02 (Core/Invention)

International (IPC 1-7): A47J37/10

CPC: A47J36/022 Y10T428/24628

European: A47J36/02B

US: 126/390.1 220/573.1 220/573.2 426/113 426/295 426/296 426/412 426/523 426/614 428/174 99/349 99/376 99/422 99/425



Family:

Publication number	Publication date	Application number	Application date
US4320699 A	19820323	US19780899702	19780424

Priority:

US19780899702 19780424

Probable Assignee:

SOLAR KIST CORP

Assignee(s): (std):

SOLAR KIST CORP

Inventor(s): (std):

BINKS CHESTER J

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
US4320699 A	19820323	LSGT	+	granted / extensions (spc, cpc, pte)	
US4320699 A	19820630	LSGT	PAT1	Patented Case	
US4320699 A	19820630	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE

Title: COOKING UTENSIL

Abstract: The invention concerns a utensil for cooking food. There is a container provided with an opening for insertion and removal of the foodstuffs to be cooked. The container is mounted on a stand and may be used at an angle of about 90 degrees or about 45 degrees. A speed control to permit stirring of the ingredients is provided. Any suitable heating source may be used.

Classifications:

International (IPC 8-9): A47J27/00 A47J27/14 A47J36/36 A47J37/04 A47J41/00 (Advanced/Invention);

A47J27/00 A47J27/14 A47J36/00 A47J37/04 (Core/Invention)

International (IPC 1-7): A47J27/00 A47J27/08 A47J27/12 A47J27/14 A47J36/34 A47J36/36 A47J37/00 A47J37/04 A47J37/10 A47J37/12 A47J39/00 A47J41/00 F27D11/00

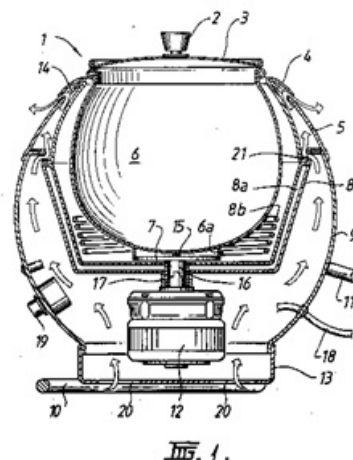
CPC: A47J27/004 A47J27/14 A47J36/36

European: A47J27/00B A47J27/14 A47J36/36

US: 219/433 219/436 219/438 99/410 99/421R D7/354

PatBase - US5107096_R

U.S. Patent Apr. 21, 1992 Sheet 1 of 4 5,107,096



Family:

Publication number	Publication date	Application number	Application date
AU199062180 A1	19910328	AU19900062180	19900905
AU628639 B2	19920917	AU19900062180	19900905
BRPI9004813 A	19910910	BR1990PI04813	19900920
CA2025602 AA	19910321	CA19902025602	19900918
CN1018711 B	19921021	CN19901008566	19900919
CN1050980 A	19910501	CN19901008566	19900919
EP0419144 A2	19910327	EP19900310070	19900914
EP0419144 A3	19910612	EP19900310070	19900914
FI904601 A0	19900919	FI19900004601	19900919
IL95744 A0	19910630	IL19900095744	19900919
IL95744 A1	19930315	IL19900095744	19900919
JP3139316 A2	19910613	JP19900249901	19900919
KR19910005815 A	19910427	KR19900014925	19900920
KR920008545 B1	19921001	KR19900014925	19900920
NO904090 A	19910321	NO19900004090	19900919
NO904090 A0	19900919	NO19900004090	19900919
NO904090 L	19910321	NO19900004090	19900919
NZ235255 A	19920728	NZ19900235255	19900911
PT95347 A	19920630	PT19900095347	19900918
US5107096 A	19920421	US19900582666	19900913
ZA9007496 A	19910925	ZA19900007496	19900919

Priority:

AU1989PJ06462 19890920 AU19900062180 19900905 CA19902025602 19900918

Probable Assignee: KNEES IND PTY LTD

Assignee(s): (std): KNEES IND PTY LTD ; NIIZU IND PTY LTD

Assignee(s): KNEES INDUSTRIES PTY LTD ; KNEES HANS ; KNEES IND

Inventor(s): (std): HANS KNEES ; HANSU NIIZU ; KNEES HANS

Agent(s): PIZZEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; BLAKE CASSELS AND GRAYDON LLP; GE EHRLICH 1995 LTD

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

Patent	Date recorded	Event group	Code	Event	Details
AU199062180 A1	19910328	LSPB	+	published / reissued	
AU628639 B2	19920917	LSGT	+	granted / extensions (spc, cpc, pte)	
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CA2025602 AA	19920131	LSES	+EEER	EXAMINATION REQUEST	
CA2025602 AA	19950318	LSLE	-FZDE	DEAD	
CN1018711 B	19921021	LSPB	+	published / reissued	
CN1018711 B	19930721	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN1018711 B	19951108	LSLE	-C19	LAPSE OF PATENT RIGHT DUE TO NON-PAYMENT OF THE ANNUAL FEE	
CN1050980 A	19910501	LSPB	+	published / reissued	
CN1050980 A	19910501	LSPB	+C06	PUBLICATION	
EP0419144 A2	19910327	LSPB	+	published / reissued	
EP0419144 A2	19910327	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19901008
EP0419144 A3	19910710	LSRE	RHK1	MAIN CLASSIFICATION (CORRECTION)	CLASSIFICATIONSCHEME : IPC CLASSIFICATIONSYMBOL : A47J 37/04
EP0419144 A3	19930707	LSES	+17Q	FIRST EXAMINATION REPORT DESPATCHED	EFFECTIVE DATE : 19930526
EP0419144 A3	19940629	LSDW	-18D	APPLICATION DEEMED TO BE WITHDRAWN	EFFECTIVE DATE : 19940108
FI904601 A0	19940513	LSLE	-FD	APPLICATION LAPSED	
FI904601 A0	20040831	LSLE	-FD	APPLICATION LAPSED	PARTYTYPE : OWNER OWNER : KNEES INDUSTRIES PTY LTD
IL95744 A0	19970713	LSWD	-RH	PATENT VOID	
IL95744 A1	19930315	LSPB	+	published / reissued	
JP3139316 A2	19910613	LSPB	+	published / reissued	
KR19910005815 A	19910427	LSPB	+	published / reissued	
KR920008545 B1	19921001	LSGT	+	granted / extensions (spc, cpc, pte)	
KR920008545 B1	19900920	LSES	A201	REQUEST FOR EXAMINATION	
KR920008545 B1	19920615	LSES	-E902	NOTIFICATION OF REASON FOR REFUSAL	
KR920008545 B1	19920902	LSPB	G160	DECISION TO PUBLISH PATENT APPLICATION	
KR920008545 B1	19921221	LSGT	+E701	DECISION TO GRANT OR REGISTRATION OF PATENT RIGHT	
KR920008545 B1	19930305	LSGT	+GRNT	WRITTEN DECISION TO GRANT	
KR920008545 B1	19951002	LSLE	-LAPS	LAPSE DUE TO UNPAID ANNUAL FEE	
KR920008545 B1	20100920	PEXP		Calculated Patent Term Expiry	
NO904090 A	19910321	LSPB	+	published / reissued	
NZ235255 A	19920728	LSPB	+	published / reissued	
PT95347 A	19920630	LSPB	+	published / reissued	

PT95347 A	19920630	LSPB	+BB1A	LAYING OPEN OF PATENT APPLICATION	EFFECTIVE DATE : 19920224
PT95347 A	19971128	LSRV	-FC3A	REFUSAL	EFFECTIVE DATE : 19970730
US5107096 A	19920421	LSGT	+	granted / extensions (spc, cpc, pte)	
US5107096 A	19900913	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KNEES INDUSTRIES PTY LTD., AUSTRALIA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:KNEES, HANS; REEL/FRAME:005448/0801 EFFECTIVE DATE : 19900905
US5107096 A	19920409	LSGT	PAT1	Patented Case	
US5107096 A	19960421	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5107096 A	19960702	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19960424
US5107096 A	20180127	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5107096 A	20180127	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5107096 A	20100913	PEXP		Calculated Patent Term Expiry	
ZA9007496 A	19910925	LSGT	+	granted / extensions (spc, cpc, pte)	
ZA9007496 A	20100918	PEXP		Calculated Patent Term Expiry	

Title: INDUCTION HEATING COOKER

Abstract: Disclosed is an induction heating cooker wherein, when a user sets a predetermined heat power value using an top surface operation portion (61), and a power control distribution circuit (200) determines that the same pan is placed on a main heating coil (MC) and at least one of subsidiary heating coils (SC1 to SC4), on the basis of the information from a heated object placement determination unit (280), in order to obtain the heat power value set by the user, the distribution of the outputs between a main inverter circuit and subsidiary inverter circuits is controlled into a predetermined distribution, so that the heating coils are operated in cooperation with one another, and the predetermined heat power information is displayed.

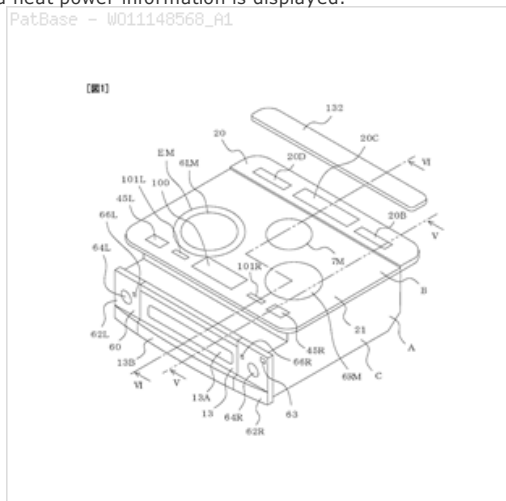
Classifications:

International (IPC 8-9): H05B6/06 H05B6/12 (Advanced/Invention)

CPC: Y02B40/123 H05B6/1218 H05B6/062 H05B6/1272 H05B2213/07
Y02B40/126 H05B6/065 H05B2213/05

European: H05B6/12A1 H05B6/12A4C T05B213/07

PatBase - WO11148568_H1



Family:

Publication number	Publication date	Application number	Application date
CN102934516 A	20130213	CN201180026364	20110425
CN102934516 B	20160120	CN201180026364	20110425
DE602011048619 D1	20180621	DE201160048619T	20110425
EP2579680 A1	20130410	EP20110786272	20110425
EP2579680 A4	20170531	EP20110786272	20110425
EP2579680 B1	20180523	EP20110786272	20110425
ES2678499 T3	20180813	ES20110786272T	20110425
JP2011148568 A1	20130725	JP20120517107T	20110425
JP5642168 B1	20141217	JP20120517107T	20110425
WO11148568 A1	20111201	WO2011JP02426	20110425

Priority:

JP20100122206 20100528 EP20110786272 20110425 WO2011JP02426 20110425
JP20120517107 20110425

Probable Assignee: MITSUBISHI ELECTRIC HOME APPL

Assignee(s): (std): BUNYA JUN ; GOTO HARUYO ; KAWADA YUKIO ; KINOSHITA HIROKAZU ; MITSUBISHI ELECTRIC HOME APPLIANCE CO LTD ; MITSUBISHI ELECTRIC CORP ; SATO SUGURU ; MITSUBISHI ELECTRIC HOME APPL

Assignee(s): MITSUBISHI ELECTRIC HOME APPLIANCE CO LTD FUKAYA SHI ; MITSUBISHI ELECTRIC HOME APPLIANCE CO

Inventor(s): (std): SATO SUGURU ; KINOSHITA HIROKAZU ; KAWADA YUKIO ; GOTO HARUYO ; BUNYA JUN

Agent(s): PFENNING MEINIG AND PARTNER GBR; PFENNING MEINIG AND PARTNER MBB; ELZABURU SLP ELZABURU SLP; KOBAYASHI HISAO; AJIMA KIYOSHI; TAKANASHI NORIO; KOBAYASHI HISAO ET AL

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 VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CN102934516 A	20130213	LSPB	+	published / reissued	
CN102934516 A	20130213	LSPB	+C06	PUBLICATION	
CN102934516 B	20160120	LSGT	+	granted / extensions (spc, cpc, pte)	
CN102934516 B	20160120	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN102934516 B	20310425	PEXP		Calculated Patent Term	

Expiry					
EP2579680 A1	20130410	LSPB	+	published / reissued	
EP2579680 A1	20130410	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20121128
EP2579680 A4	20170531	LSES	+RA4	SUPPLEMENTARY SEARCH REPORT DRAWN UP AND DESPATCHED (CORRECTED)	EFFECTIVE DATE : 20170502
EP2579680 A4	20180221	LSGT	+INTG	INTENTION TO GRANT ANNOUNCED	EFFECTIVE DATE : 20180123
EP2579680 B1	20180523	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2579680 B1	20180523	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D
EP2579680 B1	20180531	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2579680 B1	20180613	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : FG4D
EP2579680 B1	20180615	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 1002589 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20180615
EP2579680 B1	20180621	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER : 602011048619 COUNTRY OF REF DOCUMENT : DE
EP2579680 B1	20180813	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : FG2A REF DOCUMENT NUMBER : 2678499 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T3 DESIGNATED STATE(S) : EFFECTIVE DATE : 20180813
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EP2579680 B1	20181130	LSLE	-PG25	LAPSED IN A CONTRACTING STATE [ANNOUNCED VIA POSTGRANT INFORMATION FROM NATIONAL OFFICE TO EPO]	COUNTRY OF REF DOCUMENT : NL NOTIFICATION OF LAPSE : LAPSE BECAUSE OF FAILURE TO SUBMIT A TRANSLATION OF THE DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME- LIMIT LAPSED DATE : 20180523
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ES2678499 T3	20310425	PEXP		Calculated Patent Term Expiry	
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JP2011148568 A1	20140402	LSES	-A131	NOTIFICATION OF REASONS FOR REFUSAL	TEXT : JAPANESE INTERMEDIATE CODE: A131 EFFECTIVE DATE : 20140401
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				ANNUAL FEES (DURING GRANT PROCEDURE)	CODE: A61 EFFECTIVE DATE : 20141028
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JP5642168 B1	20141104	LSFE	R100	特許料納付書 (Patent fee payment form)	
JP5642168 B1	20141107	LSGT	+R150	特許証 (Patent certificate)	
JP5642168 B1	20171019	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5642168 B1	20171024	LSFE	+R250	年金領収書, 年金領収書 (分納) (Pension receipt, annuity receipt (scheduled))	
JP5642168 B1	20181011	LSFE	R20	特許料納付書 (Patent fee payment form)	
JP5642168 B1	20181016	LSFE	+R250	年金領収書, 年金領収書 (分納) (Pension receipt, annuity receipt (scheduled))	
JP5642168 B1	20310425	PEXP		Calculated Patent Term Expiry	
WO11148568 A1	20111201	LSPB	+	published / reissued	
WO11148568 A1	20110425	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201180026364.1 COUNTRY OF REF DOCUMENT : CN
WO11148568 A1	20121127	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2012517107 COUNTRY OF REF DOCUMENT : JP
WO11148568 A1	20121128	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO11148568 A1	20121128	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 2011786272 COUNTRY OF REF DOCUMENT : EP

Title: SIMULATED UNCOOKED EGG WITH SHAPED EGG-YOLK AND METHOD OF MAKING

Abstract: A simulated egg, preferably cholesterol-free, capable of having the yolk and liquid egg-white together but in separate phases, so that upon cooking, the simulated egg looks and behaves like a natural egg.

Classifications:

International (IPC 8-9): A23L1/32 A23L15/00 (Advanced/Invention);
A23L1/32 (Core/Invention)

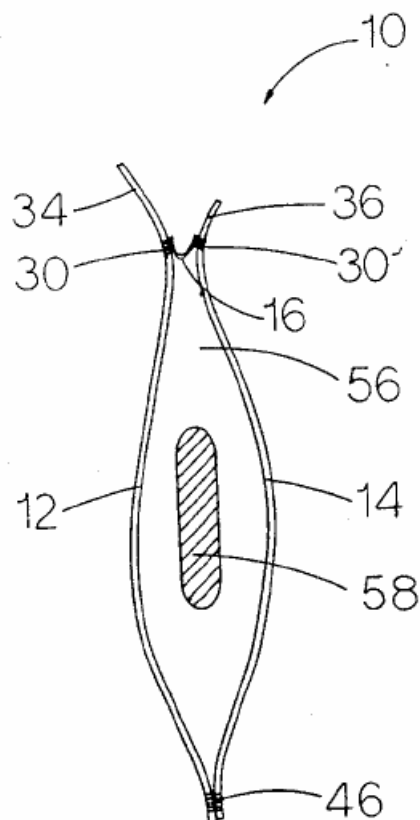
International (IPC 1-7): A23L1/04 A23L1/05 A23L1/0522 A23L1/0532
A23L1/32

CPC: A23L15/35

European: A23L1/32H

US: 426/100 426/104 426/106 426/250 426/273 426/274 426/279
426/512 426/516 426/517 426/518 426/519 426/520 426/573 426/575
426/576 426/577 426/578 426/580 426/614 426/89 99/485 99/516
99/534

PatBase - US5073399_A



Family:

Publication number	Publication date	Application number	Application date
US5073399 A	19911217	US19900551160	19900711
US5149561 A	19920922	US19910757641	19910911
US5151293 A	19920929	US19910750116	19910826
US5227189 A	19930713	US19920930105	19920814
US5340601 A	19940823	US19930104709	19930811
US5401525 A	19950328	US19930075106	19930611
US5520947 A	19960528	US19940363739	19941223
US5753293 A	19980519	US19950521239	19950830

Priority:

US19900551160 19900711	US19910750116 19910826	US19910757641 19910911
US19920930105 19920814	US19930075106 19930611	US19930104709 19930811
US19940363739 19941223	US19950521239 19950830	

Probable Assignee: MICHAEL FOODS INC

Assignee(s): (std): VASSILIOU EUSTATHIOS

Assignee(s): MICHAEL FOODS INC ; MICHAEL FOODS OF DELAWARE INC ; PAPETTI S HYGRADE EGG PRODUCTS INC ;
PAPETTI'S HYGRADE EGG PRODUCTS INC ; PAPETTI'S HYGRADE EGG PRODUCTS INC ; THL FOOD
PRODUCTS CO ; THL FOOD PRODUCTS HOLDINGS CO ; MINNESOTA PRODUCTS INC ; NORTHERN STAR CO
; PAPETTI ELECTROHEATING CORP ; WFC INC ; WISCO FARMS COOPERATIVE ; BANK OF AMERICA NA ;
BANK OF AMERICA NA AGENT AS ; CASA TRUCKING INC ; CRYSTAL FARMS REFRIGERATED DISTRIBUTION
CO ; FARM FRESH FOODS INC ; KMS DAIRY INC ; MG WALDBAUM CO

Inventor(s): (std): VASSILIOU EUSTATHIOS

Legal status (INPADOC)

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Patent Date recorded Event group Code Event Details

US5073399 A 19911217 LSGT + granted /

				extensions (spc, cpc, pte)	
US5073399 A	19950109	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5073399 A	19970527	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MICHAEL FOODS, INC., MINNESOTA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PAPETTI'S HYGRADE EGG PRODUCTS, INC.; REEL/FRAME:008535/0169 EFFECTIVE DATE : 19970226
US5073399 A	19990318	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5073399 A	20010423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS AGENT, CALIFORNIA OLDPARTY : NOTICE OF GRANT OF SECURITY INTEREST; ASSIGNOR:MICHAEL FOODS OF DELAWARE, INC.; REEL/FRAME:011742/0097 EFFECTIVE DATE : 20010410
US5073399 A	20010801	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MICHAEL FOODS OF DELAWARE, INC., MINNESOTA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MICHAEL FOODS, INC.; REEL/FRAME:012043/0431 EFFECTIVE DATE : 20010613
US5073399 A	20031217	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5073399 A	20040108	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MICHAEL FOODS OF DELAWARE, INC., MINNESOTA OLDPARTY : RELEASE OF SECURITY INTEREST; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:014852/0850 EFFECTIVE DATE : 20031117
US5073399 A	20040115	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5073399 A	20040115	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5073399 A	20040120	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., NORTH CAROLINA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:THL FOOD PRODUCTS CO.; THL FOOD PRODUCTS HOLDINGS CO.; MICHAEL FOODS OF DELAWARE, INC.; AND OTHERS; REEL/FRAME:014892/0753 EFFECTIVE DATE : 20031120
US5073399 A	20040210	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20031217
US5073399 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THL FOOD PRODUCTS CO., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5073399 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THL FOOD PRODUCTS HOLDINGS CO., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
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US5073399 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CASA TRUCKING, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5073399 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CRYSTAL FARMS REFRIGERATED DISTRIBUTION COMPANY, M OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5073399 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KMS DAIRY, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5073399 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MINNESOTA PRODUCTS, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5073399 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NORTHERN STAR CO., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5073399 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PAPETTI'S HYGRADE EGG PRODUCTS, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5073399 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : M.G. WALDBAUM COMPANY, MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5073399 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FARM FRESH FOODS, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5073399 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PAPETTI ELECTROHEATING CORPORATION, MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5073399 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WFC, INC., WISCONSIN OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5073399 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WISCO FARMS COOPERATIVE, WISCONSIN OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5073399 A	20100711	PEXP		Calculated Patent Term Expiry	

US5149561 A	19920922	LSGT	+	granted / extensions (spc, cpc, pte)	
US5149561 A	19920911	LSGT	PAT1	Patented Case	
US5149561 A	19930928	LSRE	CC	CERTIFICATE OF CORRECTION	
US5149561 A	19951030	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5149561 A	19970527	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MICHAEL FOODS, INC., MINNESOTA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PAPETTI'S HYGRADE EGG PRODUCTS, INC.; REEL/FRAME:008535/0169 EFFECTIVE DATE : 19970226
US5149561 A	20000924	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5149561 A	20001128	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20000922
US5149561 A	20180127	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5149561 A	20180127	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5149561 A	20110911	PEXP		Calculated Patent Term Expiry	
US5151293 A	19920929	LSGT	+	granted / extensions (spc, cpc, pte)	
US5151293 A	19920724	LSGT	PAT1	Patented Case	
US5151293 A	19951013	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5151293 A	19970527	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MICHAEL FOODS, INC., MINNESOTA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PAPETTI'S HYGRADE EGG PRODUCTS, INC.; REEL/FRAME:008535/0169 EFFECTIVE DATE : 19970226
US5151293 A	20001001	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5151293 A	20001205	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20000929
US5151293 A	20180127	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5151293 A	20180127	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5151293 A	20110826	PEXP		Calculated Patent Term Expiry (a terminal disclaimer has been filed)	
US5227189 A	19930713	LSGT	+	granted / extensions (spc, cpc, pte)	
US5227189 A	19930630	LSGT	PAT1	Patented Case	
US5227189 A	19940614	LSRE	CC	CERTIFICATE OF CORRECTION	
US5227189 A	19961115	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5227189 A	19970527	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MICHAEL FOODS, INC.,

US5227189 A	20010423	LSAS	AS	ASSIGNMENT	MINNESOTA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PAPETTI'S HYGRADE EGG PRODUCTS, INC.; REEL/FRAME:008535/0169 EFFECTIVE DATE : 19970226
US5227189 A	20010715	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS AGENT, CALIFORNIA OLDPARTY : NOTICE OF GRANT OF SECURITY INTEREST; ASSIGNOR:MICHAEL FOODS OF DELAWARE, INC.; REEL/FRAME:011742/0097 EFFECTIVE DATE : 20010410
US5227189 A	20010801	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MICHAEL FOODS OF DELAWARE, INC., MINNESOTA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MICHAEL FOODS, INC.; REEL/FRAME:012043/0431 EFFECTIVE DATE : 20010613
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US5227189 A	20120814	PEXP		Calculated Patent Term Expiry	
US5340601 A	19940823	LSGT	+	granted / extensions (spc, cpc, pte)	
US5340601 A	19971230	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5340601 A	20020823	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5340601 A	20020925	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
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US5340601 A	20021022	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20020823
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US5340601 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THL FOOD PRODUCTS CO., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629

US5340601 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THL FOOD PRODUCTS HOLDINGS CO., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5340601 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MICHAEL FOODS OF DELAWARE, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5340601 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CASA TRUCKING, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5340601 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CRYSTAL FARMS REFRIGERATED DISTRIBUTION COMPANY, M OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5340601 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KMS DAIRY, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5340601 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MINNESOTA PRODUCTS, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5340601 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NORTHERN STAR CO., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5340601 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PAPETTI'S HYGRADE EGG PRODUCTS, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
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US5340601 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WFC, INC., WISCONSIN

					OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
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US5340601 A	20130811	PEXP		Calculated Patent Term Expiry	
US5401525 A	19950328	LSGT	+	granted / extensions (spc, cpc, pte)	
US5401525 A	19970401	LSRE	CC	CERTIFICATE OF CORRECTION	
US5401525 A	19970527	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MICHAEL FOODS, INC., MINNESOTA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PAPETTI'S HYGRADE EGG PRODUCTS, INC.; REEL/FRAME:008535/0169 EFFECTIVE DATE : 19970226
US5401525 A	19980901	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5401525 A	20010423	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS AGENT, CALIFORNIA OLDPARTY : NOTICE OF GRANT OF SECURITY INTEREST; ASSIGNOR:MICHAEL FOODS OF DELAWARE, INC.; REEL/FRAME:011742/0097 EFFECTIVE DATE : 20010410
US5401525 A	20010801	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MICHAEL FOODS OF DELAWARE, INC., MINNESOTA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:MICHAEL FOODS, INC.; REEL/FRAME:012043/0431 EFFECTIVE DATE : 20010613
US5401525 A	20021227	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5401525 A	20040108	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MICHAEL FOODS OF DELAWARE, INC., MINNESOTA OLDPARTY : RELEASE OF SECURITY INTEREST; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:014852/0850 EFFECTIVE DATE : 20031117
US5401525 A	20040120	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., NORTH CAROLINA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:THL FOOD PRODUCTS CO.; THL FOOD PRODUCTS HOLDINGS CO.; MICHAEL FOODS OF DELAWARE, INC.; AND OTHERS; REEL/FRAME:014892/0753 EFFECTIVE DATE : 20031120
US5401525 A	20070328	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5401525 A	20070425	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5401525 A	20070425	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5401525 A	20070522	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20070328
US5401525 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THL FOOD PRODUCTS CO., MINNESOTA

					OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
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US5401525 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CASA TRUCKING, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5401525 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CRYSTAL FARMS REFRIGERATED DISTRIBUTION COMPANY, M OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5401525 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KMS DAIRY, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
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US5401525 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NORTHERN STAR CO., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5401525 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PAPETTI'S HYGRADE EGG PRODUCTS, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5401525 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : M.G. WALDBAUM COMPANY, MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5401525 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FARM FRESH FOODS, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5401525 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PAPETTI ELECTROHEATING CORPORATION, MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168

US5401525 A	20100715	LSAS	AS	ASSIGNMENT	EFFECTIVE DATE : 20100629 PARTYTYPE : OWNER OWNER : WFC, INC., WISCONSIN OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5401525 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WISCO FARMS COOPERATIVE, WISCONSIN OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5401525 A	20130611	PEXP		Calculated Patent Term Expiry	
US5520947 A	19960528	LSGT	+	granted / extensions (spc, cpc, pte)	
US5520947 A	19960517	LSGT	PAT1	Patented Case	
US5520947 A	19970527	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MICHAEL FOODS, INC., MINNESOTA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PAPETTI'S HYGRADE EGG PRODUCTS, INC.; REEL/FRAME:008535/0169 EFFECTIVE DATE : 19970226
US5520947 A	20000528	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5520947 A	20000926	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20000528
US5520947 A	20180125	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5520947 A	20180125	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5520947 A	20141223	PEXP		Calculated Patent Term Expiry	
US5753293 A	19980519	LSGT	+	granted / extensions (spc, cpc, pte)	
US5753293 A	19970527	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MICHAEL FOODS, INC., MINNESOTA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:PAPETTI'S HYGRADE EGG PRODUCTS, INC.; REEL/FRAME:008535/0169 EFFECTIVE DATE : 19970226
US5753293 A	20010419	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS AGENT, CALIFORNIA OLDPARTY : NOTICE OF GRANT OF SECURITY INTEREST; ASSIGNOR:PAPETTI'S HYGRADE EGG PRODUCTS, INC.; REEL/FRAME:011742/0766 EFFECTIVE DATE : 20010410
US5753293 A	20010425	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., AS AGENT, CALIFORNIA OLDPARTY : NOTICE OF GRANT OF SECURITY INTEREST; ASSIGNOR:MICHAEL FOODS, INC.; REEL/FRAME:011783/0686 EFFECTIVE DATE : 20010410
US5753293 A	20011009	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5753293 A	20040108	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PAPETTI'S HYGRADE EGG PRODUCTS, INC., MINNESOTA OLDPARTY : RELEASE OF SECURITY INTEREST; ASSIGNOR:BANK OF AMERICA,

					N.A.; REEL/FRAME:014852/0699 EFFECTIVE DATE : 20031117
US5753293 A	20040108	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MICHAEL FOODS, INC., MINNESOTA OLDPARTY : RELEASE OF SECURITY INTEREST; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:014852/0854 EFFECTIVE DATE : 20031117
US5753293 A	20040120	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : BANK OF AMERICA, N.A., NORTH CAROLINA OLDPARTY : SECURITY AGREEMENT; ASSIGNORS:THL FOOD PRODUCTS CO.; THL FOOD PRODUCTS HOLDINGS CO.; MICHAEL FOODS OF DELAWARE, INC.; AND OTHERS; REEL/FRAME:014892/0753 EFFECTIVE DATE : 20031120
US5753293 A	20060519	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5753293 A	20060621	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5753293 A	20060621	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5753293 A	20060718	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20060519
US5753293 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THL FOOD PRODUCTS CO., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5753293 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : THL FOOD PRODUCTS HOLDINGS CO., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5753293 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MICHAEL FOODS OF DELAWARE, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5753293 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CASA TRUCKING, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5753293 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CRYSTAL FARMS REFRIGERATED DISTRIBUTION COMPANY, M OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5753293 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : KMS DAIRY, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5753293 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : MINNESOTA PRODUCTS, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168

					EFFECTIVE DATE : 20100629
US5753293 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : NORTHERN STAR CO., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5753293 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PAPETTI'S HYGRADE EGG PRODUCTS, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5753293 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : M.G. WALDBAUM COMPANY, MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5753293 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : FARM FRESH FOODS, INC., MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5753293 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PAPETTI ELECTROHEATING CORPORATION, MINNESOTA OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5753293 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WFC, INC., WISCONSIN OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5753293 A	20100715	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : WISCO FARMS COOPERATIVE, WISCONSIN OLDPARTY : RELEASE BY SECURED PARTY; ASSIGNOR:BANK OF AMERICA, N.A.; REEL/FRAME:024686/0168 EFFECTIVE DATE : 20100629
US5753293 A	20150830	PEXP		Calculated Patent Term Expiry	

Title: APPARATUS AND METHOD FOR CLEANING AND MAINTAINING DEEP FAT FRYERS AND SIMILAR DEVICES

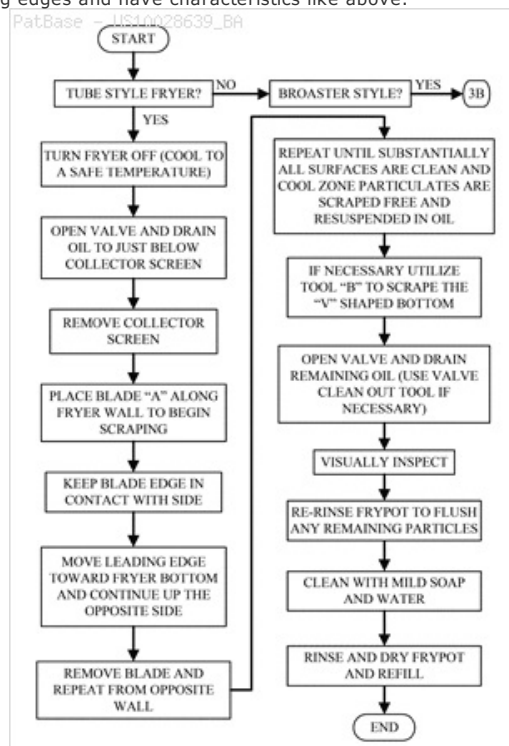
Abstract: A method and tool(s) for maintaining a liquid fryer or broaster having a frypot for holding frying liquid including a V-shaped or conical bottom. The method can include: Providing a tool having a generally normally flat blade extending longitudinally from a **handle** end to a distal end, the blade comprising a material having sufficient stiffness to impart scraping force to the distal end over a range of temperatures including 150 degrees Fahrenheit, but sufficient flexibility to slide past steps and angles, including acute angles, while scraping the frypot. Scraping an internal wall of the frypot, beginning above and then down to and past the V-shaped or conical bottom. Draining the remaining frying liquid. Cleaning the interior of the frypot/vat. Refilling the frying liquid. The tool(s) can be elongated with different widths and leading edges and have characteristics like above.

Classifications:

International (IPC 8-9): A47J37/12 A47L17/06 B08B7/00 B08B9/00 B08B9/04 (Advanced/Invention);

B08B1/00 B08B9/08 (Advanced/Non-invention)

CPC: B08B1/005 B08B9/0808 A47L25/00 A47J37/1271



Family:

Publication number	Publication date	Application number	Application date
US10028639 BA	20180724	US20150616092	20150206

Priority:

US20140937096P 20140207 US20150616092 20150206

Probable Assignee: B O B ENTPR OF WATERLOO INC

Assignee(s): (std): B O B ENTPR OF WATERLOO INC

Assignee(s): BOB ENTERPRISES OF WATERLOO INC

Inventor(s): (std): BREITBACH JOE

Agent(s): MCKEE VOORHEES AND SEASE PLC

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
US10028639 BA	20180724	LSGT	+	granted / extensions (spc, cpc, pte)	
US10028639 BA	20180704	LSGT	PAT1	Patented Case	
US10028639 BA	20180704	LSGT	STCF	INFORMATION ON STATUS: PATENT GRANT	TEXT : PATENTED CASE
US10028639 BA	20190108	LSRE	CC	CERTIFICATE OF CORRECTION	
US10028639 BA	20361001	PEXP		Calculated Patent Term Expiry (PTA 603 days)	

Title: **FRY PAN** COOKING SHIELD AND METHOD

Abstract: Arcuate shield segments form a collar around the perimeter of a **frying pan** cooking surface while suspended within the pan side walls for containing splattering grease within the **fray pan**. Tabs extending from lower edge portions of the shield segments permit attachment to pans having various size openings. Multiple shield segments are removably attached to each other and aligned to surround the pan cooking surface. The segments are removably attached such that a **handle removes** all segments simultaneously or a single segment when access through the shield wall is desired. Each segment is dimensioned for convenience in cleaning and storage of the multiple segments.

Classifications:

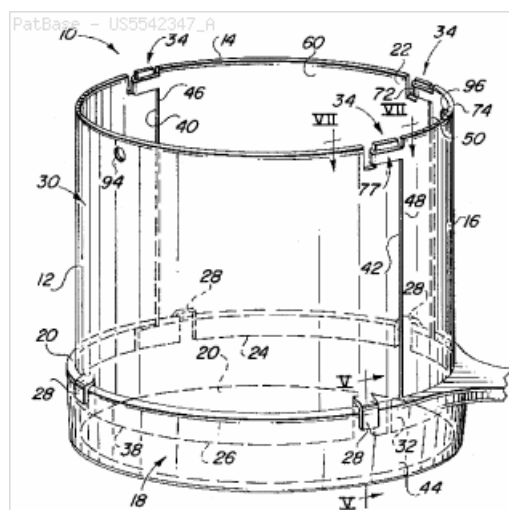
International (IPC 8-9): A47J36/36 A47J37/10 (Advanced/Invention);
A47J36/00 A47J37/10 (Core/Invention)

International (IPC 1-7): A23L1/00 A47J37/10

CPC: A47J36/36 A47J37/101 Y10S220/912

European: A47J36/36 A47J37/10A

US: 126/299C 126/373 126/383.1 220/4.03 220/403 220/731 220/912
99/422 99/645 99A/220



Family:

Publication number	Publication date	Application number	Application date
US5542347 A	19960806	US19950407873	19950320

Priority:

US19950407873 19950320

Probable Assignee:

JOSEPH WILLIAM G

Assignee(s): (std):

JOSEPH WILLIAM G

Inventor(s): (std):

JOSEPH WILLIAM G

Legal status (INPADOC)

[View legal status timeline](#)

Patent	Date recorded	Event group	Code	Event	Details
US5542347 A	19960806	LSGT	+	granted / extensions (spc, cpc, pte)	
US5542347 A	20000201	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US5542347 A	20040121	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8
US5542347 A	20080806	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US5542347 A	20080901	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US5542347 A	20080901	LSLE	-STCH	INFORMATION ON STATUS: PATENT DISCONTINUATION	TEXT : PATENT EXPIRED DUE TO NONPAYMENT OF MAINTENANCE FEES UNDER 37 CFR 1.362
US5542347 A	20080923	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20080806
US5542347 A	20150320	PEXP		Calculated Patent Term Expiry	