

1) Family number: 45102153 (US2010133263A)

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Title: DRAWER TYPE COOKING DEVICE HAVING TURNTABLE MECHANISM

Abstract: Source: US2010133263A [EN] The invention provides a drawer type microwave oven having a turntable functioning as a uniform heating mechanism with a visual effect, while maintaining the ceiling height of a heating chamber and having improved usability. A turntable drive mechanism **40** utilizing a thin deceleration mechanism and a pivot mechanism is disposed in a space **19** formed between a bottom wall **17** of the drawer body **4** and a bottom wall **12** of the heating chamber **3**, and a power transmission mechanism is engaged in a detachable manner in conjunction with the movement of the drawer body **4** together with the door. Thus, a drawer type microwave oven capable of performing uniform heating by pivot rotation while maintaining the ceiling height of the heating chamber is realized.

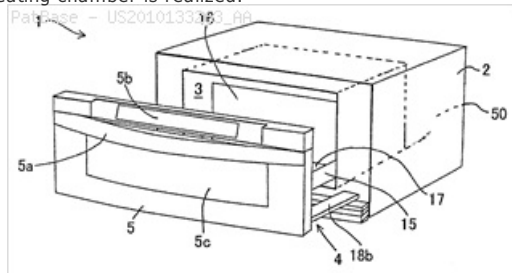
Classifications:

International (IPC 8-9): A47J37/04 F24C1/00 F24C11/00 F24C15/02 F24C15/16 F24C7/02 H05B6/64 H05B6/68 H05B6/80 (Advanced/Invention); F24C1/00 F24C11/00 F24C15/02 F24C15/16 F24C7/02 (Core/Invention)

CPC: H05B6/6411 H05B6/6414 H05B6/642 H05B6/80

European: H05B6/64C1 H05B6/64D H05B6/64E H05B6/80

US: 219/385 219/385S 219/681 219/722 219/754 219/756 99/443.00RP 99/443R



Family:

Publication number	Publication date	Application number	Application date
JP2010127561 A2	20100610	JP20080304020	20081128
JP2010127562 A2	20100610	JP20080304024	20081128
JP2010133634 A2	20100617	JP20080309521	20081204
US2010133263 AA	20100603	US20090625611	20091125
US2012187115 AA	20120726	US20120440326	20120405
US2012192725 AA	20120802	US20120440305	20120405
US8253084 BB	20120828	US20090625611	20091125

Priority:

JP20080304020 20081128	JP20080304024 20081128	JP20080309521 20081204
US20090625611 20091125	US20120440326 20120405	US20120440305 20120405

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Assignee(s): SHARP CORP ; SHARP KABUSHIKI KAISHA

Inventor(s): (std): IWAMOTO MASAYUKI ; TOYODA TAKASHI

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2) Family number: 43773404 (WO11012891A2)

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Title: POWER CONNECTOR SYSTEM

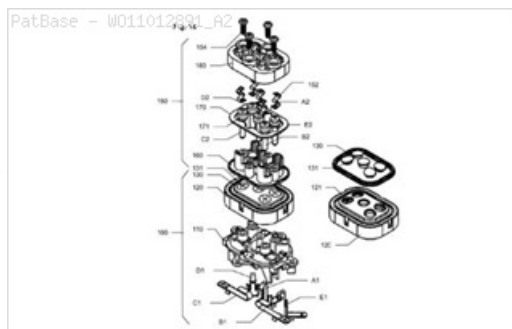
Abstract: A power connector comprises a central terminal and at least three peripheral terminals distributed around the central terminal, the peripheral terminals being substantially equally spaced from the central terminal. This configuration may allow a smaller footprint for such a connector, thus enabling better sealing, lower cost and/or greater flexibility of application, while avoiding safety problems such as tracking.

Classifications:

International (IPC 8-9): A47J19/00 A47J27/00 A47J27/21 A47J27/56 A47J31/00 A47J31/06 A47J31/44 A47J31/46 A47J31/54 A47J31/56 A47J31/58 A47J36/00 A47J36/14 A47J36/24 A47J36/34 A47J36/42 A47J41/00 A47J43/04 A47J43/07 A47J44/02 B65D43/16 B65D47/06 B65D81/18 F16J15/00 F16J15/02 F16J15/06 F16J15/32 F16J15/3204 F16J15/3232 F16K1/14 F24H1/18 F24H9/00 F24H9/18 F24H9/20 G01F23/00 G01F23/26 G01F23/292 G02B7/20 H01H37/04 H01H37/52 H01H37/54 H01R13/00 H01R13/02 H01R13/40 H01R13/405 H01R13/42 H01R13/46 H01R13/502 H01R13/52 H01R13/631 H01R13/635 H01R13/639 H01R13/648 H01R13/70 H01R13/717 H01R24/00 H01R24/38 H01R24/58 H01R33/00 H01R33/72 H01R33/74 H01R33/94 H01R33/96 H01R33/965 H01R4/48 H05B1/00 H05B1/02 H05B3/04 H05B3/08 (Advanced/Invention); A47J27/21 H01R107/00 (Advanced/Non-invention); H01R13/00 (Core/Invention)

CPC: H01R24/38 H01R13/405 H01R13/00 H01R13/46 H01R23/10 H01R33/74 A47J27/2105 H01R13/453 H01R13/52 G02B7/20 H01R13/7172 H01R13/7175 A47J31/46 A47J31/58 A47J36/14 G01F23/00 H01R13/717 G01F23/268 G01F23/266 A47J27/21083 A47J27/21091 A47J36/34 F16J15/021 F16J15/3204 F16J15/3232 G01F23/263 G01F23/292 H01R13/5205 A47J41/0027 A47J27/21191 A47J27/21116 H01R13/42 H01R13/5227 H05B3/04 H05B3/08 H01R2103/00 A47J36/24 A47J36/00 F16J15/00 A47J27/21058 A47J27/21075 A47J27/21175 A47J41/0022 A47J27/21166 H01H37/04 H01H37/54 A47J27/21 H01H37/043 H01H37/5409 A47J27/21158 A47J27/21066 A47J27/21108 A47J27/21125 H01H37/52 H05B1/0213 H01R13/7137 H01R24/78 H01R24/58 H01R13/631 H01R24/86

European: A47J27/21B3 A47J27/21B4 A47J27/21B4A1 A47J27/21C1 A47J27/21C3 A47J41/00C3T A47J41/00C5 G01F23/26B4 G01F23/26B6 H01R23/26 K47J27/21B3 K47J41/00C3T T01R13/453 T01R13/52



Family:

Publication number	Publication date	Application number	Application date
■ CN102762135 A	20121031	CN201180010290	20110218
■ CN102762135 B	20160629	CN201180010290	20110218
■ CN103458745 A	20131218	CN201180068035	20111223
■ CN103561615 A	20140205	CN201280018093	20120217
■ CN103561615 B	20160928	CN201280018093	20120217
■ CN104039203 A	20140910	CN201280063745	20121224
■ CN104039203 B	20170315	CN201280063745	20121224
■ CN202208434 U	20120502	CN201120160286U	20110513
■ CN202234933 U	20120530	CN201120160096U	20110513
■ CN202261837 U	20120530	CN201120160289U	20110513
■ CN202488774 U	20121010	CN201120560246U	20111223
■ CN202515452 U	20121107	CN201120393177U	20111014
■ CN202619375 U	20121226	CN201120560190U	20111223
■ CN202636659 U	20130102	CN201120560137U	20111223
■ CN202651570 U	20130102	CN201120473947U	20111124
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■ CN202653904 U	20130109	CN201220233386U	20120523
■ CN202662934 U	20130109	CN201220052871U	20120217
■ CN202691026 U	20130123	CN201220108760U	20120321
■ CN202695826 U	20130123	CN201220125764U	20120319
■ CN202712652 U	20130130	CN201220174143U	20120423
■ CN202775861 U	20130313	CN201220052890U	20120217
■ CN202797444 U	20130313	CN201220164492U	20120418
■ CN202797536 U	20130313	CN201090001187U	20100727
■ CN202930725 U	20130508	CN201220623215U	20111124
■ CN202993521 U	20130612	CN201220489429U	20120924
■ CN203218500 U	20130925	CN201220720067U	20121224
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■ CN203272784 U	20131106	CN201320279576U	20130521
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■ CN203883177 U	20141015	CN201420138001U	20121224
■ CN203967372 U	20141126	CN201420401155U	20121224
■ CN203967432 U	20141126	CN201420399996U	20121224
■ CN204011828 U	20141210	CN201220721777U	20121224
■ CN204144502 U	20150204	CN201420139023U	20121224
■ DE202012100895 U1	20120712	DE201220100895U	20120313
■ DE202012100895 U9	20120920	DE201220100895U	20120313
■ EP2536317 A2	20121226	EP20110711114	20110218
■ EP2654520 A1	20131030	EP20110815854	20111223
■ EP2654520 B1	20171206	EP20110815854	20111223
■ EP2675326 A2	20131225	EP20120718311	20120217
■ EP2793661 A1	20141029	EP20120821121	20121224
■ GB200913194 A0	20090902	GB20090013194	20090729
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WO2011GB52590	20111223				

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Assignee(s): OTTER CONTROLS SHENZHEN LIMITED ; AOTAI TEMPERATURE CONTROLLER SHENZHEN CO ; AOTAI TEMPERATURE CONTROLLER SHENZHEN CO ; OTTER CONTROLS SHENZHEN CO ; OTTER CONTROLS LIMITED

Inventor(s): (std): BONDY PAUL ; BOUNDY PAUL ; BUXTON MARK STUART ; COLLINSON MIKE ; DAVID ANDREW SMITH ; DAVID ANDREW WILLIAM ; FARLAM MARK ; FARLAM MARK RICHARD ; FRANCIS SIDDONS JEREMY ; GAETA ANTONIO ; GAETA ANTONIO M ; GAETA ANTONIO MARTIN ; GAETA TONI ; GAETA TONY ; GEOFFREY WHITE IAN ; HADFIELD ROBERT ; HADFIELD ROBERT HENRY ; HALLAM WRIGHT PETER ; HENDRIK JOHAN ARNOUT NIEUWENHUIS ; HENRY HADFIELD ROBERT ; HUNT ANDREW ; IAN GEOFFREY WHITE ; AN YUAN ; ANDREW HUNT ; ANDREW HUNTER ; ANTONIO GAETA ; ANTONIO MARTIN GAETA ; KEITH MOORE ROBIN ; LINDLEY RICHARD ; LINDLEY RICHARD WILLIAM ; MARK CHERAUTE ; MARK RICHARD FARLAM ; MARK SHERRATT ; MARK STUART BUXTON ; A M GETA ; A M GUETTA ; JEREMY FRANCIS SIDDONS ; MOLE ROBIN ; MOORE ROBIN ; MOORE ROBIN KEITH ; ORRITT TREVOR NEILL ; P H WRIGHT ; PAUL BOUNDY ; PAUL BUNDY ; PETER HAARLEM WRIGHT ; PETER HALLAM WRIGHT ; PETER WRIGHT ; RICHARD CHEE CHEUNG SO ; RICHARD LINDLEY ; RICHARD SO ; RICHARD SU ; RICHARD WILLIAM LINDLEY ; RICHARD ZHIZHANG SU ; R H HADFIELD ; R H HADFIELD ; RICHARD LINDLEY ; ROBERT HADFIELD ; ROBERT HENRY HADFIELD ; ROBERT HENRY HUDDERSFIELD ; MARTIN GAETA ANTONIO ; ROBIN KEITH MOORE ; ROBIN KEITH MORE ; SHERRATT MARK ; SIDDONS JEREMY ; SIDDONS JEREMY FRANCIS ; SIMON M WHITELEY ; SIMON MARK WHITELEY ; SIMON WHITELEY ; SIMON WHITNEY ; ROBIN MOORE ; SIMOUN WHITLEY ; SMITH DAVID ; SMITH DAVID ANDREW ; SMITH DAVID ANDREW SMITH ; SMITH SMITH DAVID ANDREW ; SO RICHARD ; SO RICHARD CHEE CHEUNG ; WHITE IAN ; WHITE IAN GEOFFREY ; WHITELEY SIMON ; WHITELEY SIMON M ; WHITELEY SIMON MARK ; WHITELI SIEMON ; WRIGHT PETER ; WRIGHT PETER H ; WRIGHT PETER HALLAM ; YUAN AN ; TREVOR NEILL ORRITT

Inventor(s): TREVORNEILLORRITT ; TONI GAETA ; TONY GAETA ; SIMOUNWHITLEY ; ROBINKEITHMOORE ; ROBINKEITHMORE ; SIMONWHITELEY ; SIMONWHITNEY ; SIEMON WHITELI ; ROBIN MOLE ; MIKE COLLINSON ; ROBERTHENRYHADFIELD ; RHHADFIELD ; RHHADFIELD ; RICHARDLINDLEY ; RICHARDSU ; RICHARDZHIZHANGSU ; PETERWRIGHT ; PHWRIGHT ; PAULBOUNDY ; PAULBUNDY ; PAUL BONDY ; JEREMY SIDDONS ; AMGUETTA ; MARKCHERAUTE ; MARKSHERRATT ; ANTONIOGAETA ; ANTONIOMARTINGAETA ; ANDREWHUNTER ; IAN WHITE

Agent(s): CROSS JAMES PETER ARCHIBALD ; PATENT CORPORATE BODY ARCO PATENT OFFICE ; CROSS JAMES ;

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

3) Family number: 40797636 (US2007203727A)

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Title: EMERGENCY SUPPLIES PRE-POSITIONING AND ACCESS CONTROL METHOD

Abstract: Source: US2007203727A [EN] One provides (101) a plurality of carriable containers having emergency supplies contained therein wherein each of these carriable containers is readily carriable by an average adult human. These carriable containers are then placed (103) within one or more corresponding controlled access containers as are provided at one or more publicly accessible locations (102). Prior to a triggering catastrophic event, one or more specific authorized beneficiaries are then preauthorized (104) to have catastrophic event-based access to one or more of these carriable containers. So configured, the authorized beneficiary(s) will in turn have access to the corresponding emergency supplies that are contained within the carriable container when a triggering catastrophic event occurs.

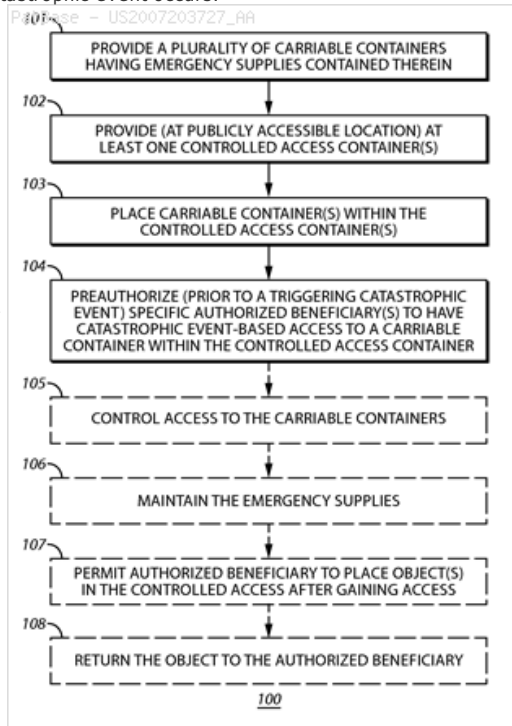
Classifications:

International (IPC 8-9): A01B71/06 A45F5/00 A47F1/04 A61B17/3213 A61B5/00 B01D46/00 B42D1/00 B60J1/00 B62D53/00 B62D59/04 B63B35/44 B65B3/04 B65G15/00 D02G3/00 E02D29/00 E04B1/00 E04B1/34 E04H1/00 E04H14/00 E04H9/00 F02M37/04 G01C21/20 G01T1/02 G05B19/418 G05B21/00 G05D1/02 G06F15/173 G06F17/30 G06F21/00 G06F9/44 G06F9/46 G06K7/01 G06Q10/00 G06Q30/00 G06Q30/06 G06Q40/00 G06Q50/00 G06Q50/26 G06Q90/00 G06Q99/00 G09B19/00 G21F3/00 H04H1/00 H04H20/59 H04L9/00 H04M11/04 (Advanced/Invention); G06Q90/00 (Advanced/Non-invention); A01B71/00 A45F5/00 A47F1/00 A61B17/32 A61B5/00 B01D46/00 B42D1/00 B60J1/00 B62D53/00 B62D59/00 B63B35/44 B65B3/04 B65G15/00 D02G3/00 E02D29/00 E04B1/00 E04B1/34 E04H1/00 F02M37/04 G01C21/20 G01T1/02 G05B19/418 G05B21/00 G05D1/02 G06F15/16 G06F17/30 G06F21/00 G06F9/44 G06F9/46 G06Q10/00 G06Q30/00 G06Q40/00 G06Q50/00 G06Q99/00 G09B19/00 G21F3/00 H04H1/00 H04L9/00 H04M11/04 (Core/Invention)

CPC: G06Q30/0283 G08B27/008 H04H20/59 H04H60/23 G06Q30/02 G06Q90/00 G06Q50/00 G06Q30/04 G06Q10/06 G06Q50/163 G06Q50/30 G06Q30/00 G06Q30/0214 G06Q30/0217 G06Q30/0226 G06Q30/0227 G06Q30/0231 G06Q30/0233 G07F17/0042 E04H9/08 E04H9/12 F41H5/24 G06Q10/10 A62B31/00 B63C9/02 A62B99/00 A62B1/02 E04H9/06 H04L63/10 G07C9/00087 B01D46/0023 B01D46/0036 B01D2273/30 G21F3/00 G06Q30/06 G06Q30/0633 G06Q10/087 A61B50/10 A61B50/13 A61B50/312 G06Q40/08 A45C15/00 G06Q10/08 G06Q50/265 G06Q99/00 G06Q10/02 G06Q50/26 Y02A50/454 Y02A50/14 G16H40/20 G16H50/80 A47K11/026 G06Q20/401 G06Q50/22 E04H9/14 G06Q10/00 G06Q50/10

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US: 141/10 180/14.1 180/14.100P 198/321 224/101 235/382.5 235/382.500S 250/472.1 250/519.1 345/85P 379/37 379/37P 434/236 434/236S 455/3.01 455/3.010 52/169.6 52/3 52/741.1 52/741.100S 52/745.05 52/745.050P 52/79.1 52/79.100S 600/300 600/300P 701/23 705/1 705/1.1 705/1.100P 705/14.16 705/14.160P 705/14.19 705/14.190S 705/14.27 705/14.270S 705/14.28 705/14.280S 705/14.31 705/14.310S 705/14.33 705/14.330S 705/2 705/26.8 705/2P 705/314 705/314P 705/325 705/325S 705/400 705/400P 705/5 705/500 705/500P 705/52 705/52P 705/5P 705/75 705/75S 707/802 707/802S 707/E17.005 707/E17.005S 726/2 726/2S 96/222 96/222P



Family:

Publication number	Publication date	Application number	Application date
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WO07115184 A2	20071011	WO2007US65658	20070330
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WO07127732 A2	20071108	WO2007US67303	20070424
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WO07133670 A2	20071122	WO2007US11375	20070511
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Priority:

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Probable Assignee: SOVEREIGN DEED LLC

Assignee(s): (std): BOTOS MATTHEW J ; MOORE BARRETT H ; SEIDEL GREGORY E ; SOVEREIGN DEED LLC

Inventor(s): (std): BOTOS MATTHEW J ; MOORE BARRETT H ; SEIDEL GREGORY E

Inventor(s): MOORE BARRETT

Agent(s): FITCH EVEN TABIN AND FLANNERY; KRATZ RUDY; KRATZ RUDY I; KRUEGER JAMES P; KRATZ RUDY I ET AL; SAMPLES KENNETH H ET AL

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 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

4) Family number: 60449682 (KR101553050B)

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Title: A SMART GAS CIRCUIT BREAKER

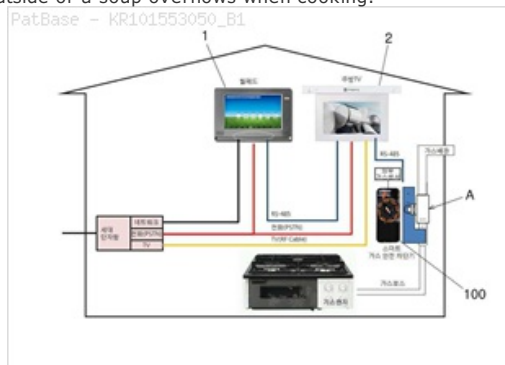
Abstract: Source: KR101553050B [EN] The present invention relates to a smart gas circuit breaker which automatically shuts off a gas valve. The smart gas circuit breaker comprises: a housing comprising a front surface cover and a main body; a battery supplying power performing an automatic lock function in case of power outage; a main controller unit (MCU) which communicates with a kitchen TV set, receives detection signals of a plurality of sensors mounted inside and outside to transmit the detection signals to the kitchen TV set, and receives a control signal of the kitchen TV set by control of the kitchen TV set to drive a motor by the control signal; a gear operation unit comprising a drive gear to rotate a fuse cock and a transfer gear; a motor operation unit comprising a connection gear to transfer rotation to the transfer gear of the gear operation unit and a motor to supply a rotational movement to the connection gear; an ultrasonic sensor to detect a gas flow error when gas flows through a gas breaker longer than a prescribed time period; a power outage sensor to detect power outage when a main power source does not receive power for a prescribed time period; an external temperature measurement sensor to detect a fire when an external temperature rises to or above a prescribed temperature; and an external gas sensor to detect a gas leak when the gas leaks to the outside or a soup overflows when cooking.

Classifications:

International (IPC 8-9): F17D5/02 F23N5/24

G05B9/02 (Advanced/Invention)

CPC: F17D5/02 F23N5/24 G05B9/02



Family:

Publication number	Publication date	Application number	Application date
KR101553050 B1	20150930	KR20140059109	20140516

Priority:

KR20140059109 20140516

Probable Assignee: DONGYOUNG MEDIA CO LTD

Assignee(s): (std): DONGYOUNG MEDIA CO LTD
Assignee(s): LTD DONGYING MEDIA ; DONGYOUNG MEDIA CO
Inventor(s): (std): DNAG YOO SANG

5) Family number: 42672142 (US2008309488A)

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Title: PASSIVE MICROWAVE FIRE AND INTRUSION DETECTION SYSTEM

Abstract: Source: US2008309488A [EN] A passive microwave receiver array, operating in the one meter to sub-millimeter wavelengths range and including an internationally protected range of frequencies of varying bandwidth, may be used for fire and intrusion detection. One or more receiver array can be used to provide a plurality of frequency ranges that can be detected. In an interior installation, one or more receiver array can be placed inside a wall. In other embodiments, the receiver and array can be in the form of a hand-held or wearable device. This method and apparatus achieves high performance by exploiting conventional low noise amplification block conversion circuits and provides the detection of thermal signals through clear, smoky, misty, or environmentally untenable conditions as well as the detection of fire and intrusion events through a non-metallic wall.

Classifications:

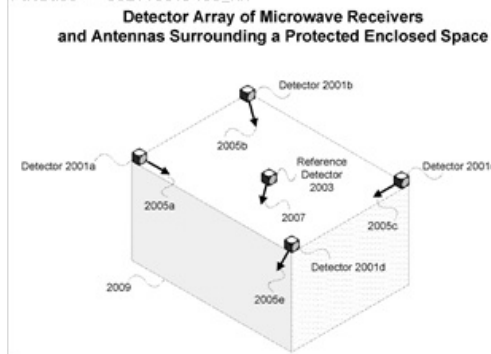
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European: A61B5/01 A61B5/05 A61B5/05M A61B5/41B G01K11/00D G01K13/00B G01K3/14 G08B13/189 G08B13/24C G08B17/12 G08B19/00B G08B29/18D

US: 1/1 169/16 169/16S 169/43 169/43P 169/61 324/629 324/629P 340/521 340/539.22 340/539.26 340/552 340/552P 340/561 340/561P 340/565 340/565P 340/567 340/573.1 340/584 340/586 340/628 340/933 374/122 374/122P 374/122S 600/504 600/504P 600/549 600/549P

PatBase - US2008309488_AA



Family:

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CA2695158 AA	20091211	CA20072695158	20071101
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Probable Assignee: ICOVE AND ASSOCIATES LLC

Assignee(s): (std): BANWARTH DAVID M ; FELD NEIL ; ICORE AND ASSOCIATES LLC ; ICOVE AND ASSOCIATES LLC ; ZEMEL MICHAEL B ; UNIV TENNESSEE RES FOUNDATION ; ICOVE DAVID J ; LYSTER CARL T

Assignee(s): UNIVERSITY OF TENNESSEE RESEARCH FOUNDATION ; OF TENNESSEE RESEARCH FOUNDATION UNIV ; LYSTER CARL ; ZEMEL MICHAEL ; ICOVE DAVID

Inventor(s): (std): FELD NEIL ; ICOVE DAVID J ; LYSTER CARL T ; ZEMEL MICHAEL B ; BANWARTH DAVID M

Agent(s): KIRBY EADES GALE BAKER; MITCHELL MATTHEW BENEDICT DAVID; EITAN MEHULAN AND SADOT; SMITH GAMBRELL AND RUSSELL; PCT LAW GROUP PLLC; THOMAS H; CAMERON LLP; JACKSON THOMAS H ET AL; JACKSON THOMAS H

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

6) Family number: 66748908 (IN201741028002A)

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Title: AN AUTOMATIC SYSTEM AND METHOD FOR THE DETECTING AND ARRESTING OF THE LPG SPILLAGE FROM THE GAS STOV

Abstract: Source: IN201741028002A [EN] The present invention provides a system and a method for the automatic re positioning of the stove knob back to the off condition upon the detection of the LPG leakage from the stove burner and on position of the stove knob. The LPG leakage is detected by utilizing the MQ2 series gas sensor which senses and sends the corresponding analog signals to the connected micro controller for further correction actions. The micro controller upon receiving the corresponding signal from the sensor activates the stepper motor. The gear train includes two gears meshed for enabling the rotational movement to the knob of the gas stove and another at the shaft of the stepper motor which is hinged near the knob gear. The operation of the stepper starts induces the rotation of the gear fixed at the shaft for providing an anticlockwise rotational movement and a corresponding clockwise rotational movement at the gear attached to the knob for positioning the knob back to off position and subsequently arrest the gas leakage.

Classifications:**International (IPC 8-9):** F24F11/00 G01N15/06 G01N33/00 (Advanced/Invention)**Family:**

Publication number	Publication date	Application number	Application date
IN201741028002 A	20170825	IN201741028002	20170807

Priority:

IN201741028002 20170807

Probable Assignee: B ABHIJEETH**Assignee(s):** B ABHIJEETH ; E THAMIZHMARAN ; K PALANIKUMAR ; S RAHAVENDHOR ; S SOLOMON JAISINGH ; T SRINIVASAN**Inventor(s):** B ABHIJEETH ; E THAMIZHMARAN ; K PALANIKUMAR ; S RAHAVENDHOR ; S SOLOMON JAISINGH ; T SRINIVASAN**7) Family number: 29324423** (US2003196277A)

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Title: APPARATUS AND METHOD FOR ARTICLE CLEANING

Abstract: Source: US2003196277A [EN] The present invention provides an article cleaning apparatus comprising an air management mechanism, a cleaning basket assembly, a fluid regeneration device, a working fluid device, a clean fluid device, and a controller. The working fluid device is coupled to the fluid regeneration device, the cleaning basket assembly, and the air management mechanism. The clean fluid device is coupled to the cleaning basket assembly and the fluid regeneration device. The controller is coupled to the air management mechanism, the cleaning basket assembly, the working fluid device, the regeneration device, and the clean fluid device. The controller is configured to control a cleaning process. The present invention also provides a method for performing the cleaning process.

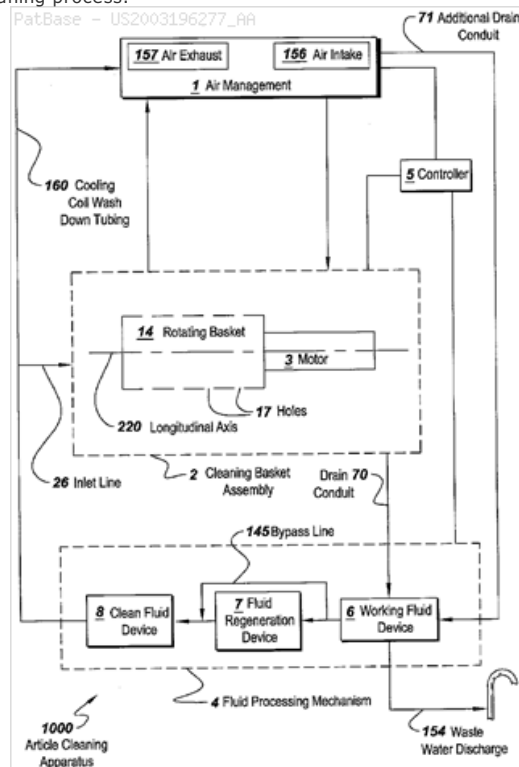
Classifications:**International (IPC 8-9):** D06B23/20 D06B5/10 D06F35/00

D06F43/00 D06F43/08 (Advanced/Invention);

D06B23/00 D06F43/00 (Core/Invention)

International (IPC 1-7): B08B1/00 D06B1/00 D06F1/00 D06F29/00

D06F43/00 D06F43/08 D06L1/00

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US2005144989 AA	20050707	US20050070184	20050302
US2006059632 AA	20060323	US20050263164	20051031
US2007157397 AA	20070712	US20070687685	20070319
US7210182 BB	20070501	US20020330734	20021230
US7308808 BB	20071218	US20020127001	20020422
US7603878 BB	20091020	US20050263164	20051031
WO03089709 A2	20031030	WO2003US12320	20030422
WO03089709 A3	20040325	WO2003US12320	20030422

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