

Search history

Search 1: FT=(safety and automatic and gas 1w stove and shut-off) (Results 93)

Search 2: FT=(safety and automatic and gas 1w stove and shut-off and magnet) (Results 17)

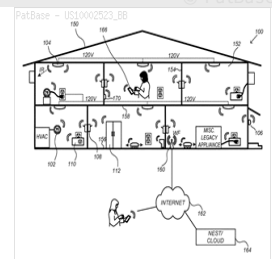
1) Family number: 58741984 (US10002523B)

VISUAL AND AUDITORY USER NOTIFICATION METHODS FOR SMART-HOME HAZARD DETECTOR

Abstract: Source: US10002523B Hazard detector for providing a pre-alarm of a developing hazardous condition can include a detection module that detects a hazard level of smoke or carbon monoxide, a light source that generates light, a speaker that generates an audible sound, a horn that generates an audible alarm that a higher volume than the speaker, and a processing module. The processing module can receive the detected hazard level and compare it with the pre-alarm threshold and the emergency threshold. The processing module can determine that the hazard level is greater than the pre-alarm threshold and less than the emergency threshold and cause an audible pre-alarm speech to be generated via the speaker that warns of the developing hazardous condition.

Probable Assignee: GOOGLE INC

Earliest Publication Date: 20150324



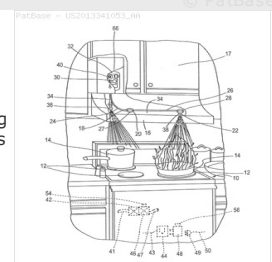
2) Family number: 55406176 (US2013341053A)

FIRE EXTINGUISHING SYSTEM AND DIAGNOSTIC METHODS

Abstract: Source: US2013341053A A fire extinguishing system prevents fires or other emergency conditions on a heating device, such as a stove. The system uses sensors to detect the emergency and alert an operator. The system dumps fire suppressant material onto the heating device. The system also may shut-off power to the heating device. An alarm circuit and associated functionality assures the system is in working order by using diagnostic tests and other checks.

Probable Assignee: GUARDIAN SAFETY SOLUTIONS INT INC

Earliest Publication Date: 20131226



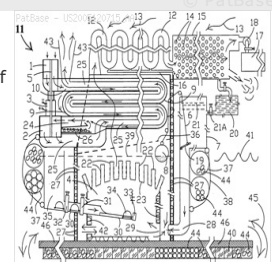
3) Family number: 30545299 (US2005120715A)

HEAT ENERGY RECAPTURE AND RECYCLE AND ITS NEW APPLICATIONS

Abstract: Source: US2005120715A What has been created is a plurality and a variety of processes and a variety of devices correspondingly supportive to each process, wherein, a new partnership between; (1) a heat absorbing radiator compressed air pipes/tubes and (2) a gas turbine engine or a reciprocating piston engine, is used to recapture and reconvert the, otherwise wasted, heat energies expelled by engines, by factories, by smelting plants, by distillation plants, by chillers/coolers/freezers, by cooking ovens, by lamps/stoves, by trash burners, and the heat energies created by the solar heat on the desert/ocean water, into electric power and finally into hydrogen-deuterium fuel, by having the engine's tailpipes submerged in cold compressed air inside the heat absorbing radiator pipes in reverse air flow, to further drive and re-drive the same engine; wherein, in order to capture fusion heat energy the hydrogen bomb is detonated in the deep ocean to catch the flames by the water and the hot water is used to energize the compressed air inside the heat absorbing radiator pipes; wherein, in order to produce fusion energy, an abundant electric arc is passed across liquid deuterium or across gaseous deuterium by the electro-plasma torch and sparkplug in the internal combustion engine, and by detonating a dynamite inside a liquid deuterium; wherein diamond is produced by placing carbon inside the hydrogen bomb; and wherein, deuterium fusion flame is used first in smelting glass to large sizes before running an engine.

Probable Assignee: CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATION TRUST

Earliest Publication Date: 19880712

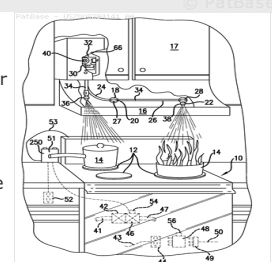


4) Family number: 44049040 (US2009294141A)

FIRE EXTINGUISHING SYSTEMS AND METHODS

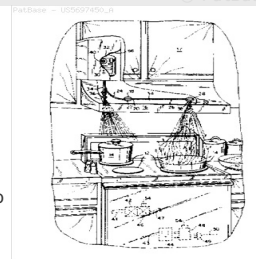
Abstract: Source: US2009294141A A fire extinguishing system for suppressing fires on cook stoves, fryers or other heating or heated devices with fire suppressant dispensed through nozzles is powered by batteries which provide current for both a detection circuit including a pair of heat sensors and control circuitry and current for a gas or electric house current shut-off. The appliance shut-off device is operated by the standard hardwired interconnect cable that provides a signal between the control board and shutoff device or by an optional sonic receiver assembly that is acoustically tuned to detect an audible alarm emitted by a signal from the main control board. Preferably, the heat sensors are diodes, but in alternative embodiments may be thermistors or active temperature sensors. Mounting of heat sensors and nozzles are facilitated by tees and 90 degree elbows. While the standard interconnect cable is usually used between the control circuitry and shutoff device, a wireless link, such as the sonic receiver assembly, may also be used with the shutoff device.

Probable Assignee: GUARDIAN PATENT LLC

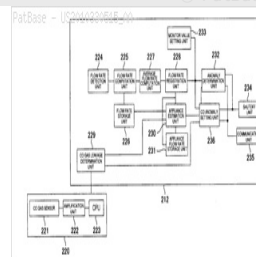


5) Family number: 11446590 (US5697450A)**FIRE EXTINGUISHING SYSTEMS AND METHODS**

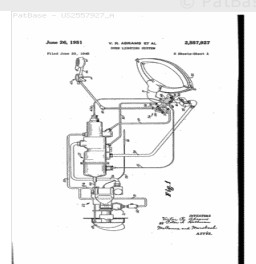
Abstract: Source: US5697450A In a preferred embodiment, a fire extinguishing system for suppressing fires on cook stoves, fryers or other heating or heated devices with fire suppressant dispensed through nozzles is powered by batteries which provide current for both a detection circuit including a pair of heat sensors and control circuitry and current for a gas or electric house current shut-off. Preferably, the shut-off is operated acoustically upon sounding of an audible alarm which emits a signal to which the shut off is acoustically tuned. Preferably, the heat sensors are diodes but, in alternative embodiments may be thermistors or active temperature sensors. While a wireless link, such as an acoustical link, is preferred between the control circuitry and shut-off, a wired link may also be used. In order to facilitate mounting of both the heat sensors and nozzles, magnetic housings are utilized which retain studs extending from tees, 90 degree elbows or both. A heat sensor housing is secured to the magnetic mount by magnetic force, which heat sensor housing is in turn held securely proximate the heat source at appropriate locations.

Probable Assignee: GUARDIAN PATENT LLC**Earliest Publication Date:** 19961203**6) Family number: 43684649** (US2010330515A)**GAS SHUTOFF DEVICE AND ALARM-COMPATIBLE SYSTEM METER**

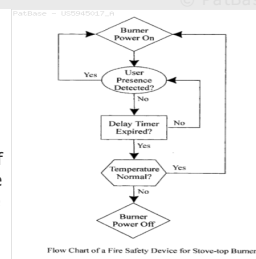
Abstract: Source: US2010330515A An object of the invention is to appropriately control the use limit function of an appliance according to the concentration level of CO gas. A gas shutoff device is made up of a flow rate registration unit 28 for registering as an appliance flow rate, an average flow rate found by classifying and storing in a flow rate storage unit 26 after flow rate detection, a CO gas leakage determination unit 29 for inputting an output signal responsive to the concentration level of CO gas from a CO alarm 20, an appliance estimation unit 30, when a signal is output by the CO gas leakage determination unit 29 and the flow rate is registered in the flow rate registration unit 28, for storing a flow rate pattern group stored in the flow rate storage unit 26 and the registered flow rate and estimating a CO gas leakage appliance, an appliance flow rate storage unit 31 for storing the flow rate pattern group, and a communication unit 35 for reporting appliance information.

Probable Assignee: PANASONIC CORP**Earliest Publication Date:** 20090903**7) Family number: 23763687** (US2557927A)

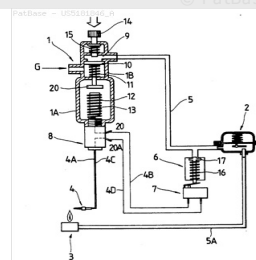
Abstract: Source: US2557927A (Claim 1) 1. In an oven lighting system for a **gas stove** or range, the combination of, an oven burner connected to a gas supply, an oven pilot burner connected to a gas supply, a constantly burning pilot burner in spaced relation to the oven pilot burner, means for lighting said oven pilot burner from said constantly burning pilot burner, a valve for controlling the flow of gas to said oven burner having an open and a closed position, manual means for positioning said valve in the closed position, permanent magnet means for holding the oven burner valve in the closed position, means responsive to the heat of said oven pilot burner for neutralizing the effect of said permanent magnet when said oven pilot burner is lighted, and means for urging said valve to the open position whereby gas flows to said oven burner.

Earliest Publication Date: 19510626**8) Family number: 11690351** (US5945017A)**FIRE SAFETY DEVICE FOR STOVE-TOP BURNER**

Abstract: Source: US5945017A Most residential fires originated in the kitchen areas and were the results of negligence during cooking. As the least regulated cooking appliance in a kitchen, stove-top burners were often the culprits. Burners were left on without user presence and caused utensil melt down, igniting fire. It is the objective of this invention to minimize such risks. An electric or gas burner can be improved by the installation of an automated fire safety device that first determines whether the burner is being attended to and if not, senses the temperature of the cooking utensil on it and automatically shuts off the flow of electricity or gas to the burner when the temperature of the cooking utensil begins to exceed a predetermined temperature range. A motion detector is integrated into the safety device and serves as the front-end to a temperature sensor switch. The switch is designed to trigger a power shut-off mechanism when high utensil temperature is encountered. The mechanism will be deactivated if motion is detected within a set periphery of the stove appliance. It will automatically be reactivated a set time later after no motion is detected. This invention will not interfere with normal cooking procedures while drastically reducing the possibility of kitchen fires due to cooking.

Probable Assignee: CHENG LILY I**Earliest Publication Date:** 19990831**9) Family number: 11034503** (US5181846A)**SAFETY APPARATUS IN GAS HEATING DEVICE**

Abstract: Source: US5181846A A safety apparatus for use with a gas burner having a thermoelectrically activated on-off safety valve for controlling gas flow to the burner, a governor for maintaining constant gas pressure to the burner, a gas channel interconnecting safety valve and governor, and a thermocouple for generating a thermoelectromotive force in the presence of a flame to electrically maintain the safety valve in an open position, is disclosed. The safety apparatus includes a gas pressure operator for sensing a predetermined excessive pressure within the gas channel and which initiates a shut-off of the gas supply to the burner upon sensing the high pressure gas in the channel. A connecting device is electrically connected to a solenoid in the safety valve for controlling the on/off position of the safety valve and is electrically connected to the thermocouple. An operation sensing device is in communication with the gas pressure operator such that when in the presence of the predetermined high gas pressure the gas pressure operator senses such high pressure gas in the channel and activates the operation sensing device to electrically disconnect the generated thermoelectromotive force supplied to the safety valve such that the safety valve moves to an off position thereby stopping the flow of gas within the channel and extinguishing the flame at the burner.



Probable Assignee: SAMSUNG ELECTRONICS CO LTD

Earliest Publication Date: 19920328

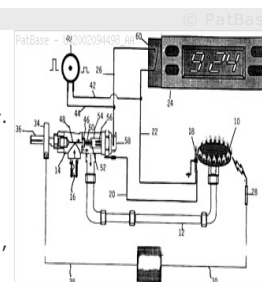
10) Family number: 28227552 (US2002094498A)

PROGRAMMABLE BURNER FOR GAS STOVES

Abstract: Source: US2002094498A A programmable burner for gas stoves, which is constituted by a gas burner and a safety valve that includes a thermocouple, which is located in coincidence with an external edge of the burner. The safety valve is maintained open when the thermocouple is detecting the presence of a flame on the gas burner and is closed when the burner has been turned off. An electrode is placed near of the external periphery of the burner for igniting. A spark generation module is connected with the electrode for generating the sparks for igniting the burner. A spark interrupter is connected to the spark generation module, the spark interrupter being located over a burner knob that is connected to the safety valve, for activating or deactivating the spark generation of the spark generation module. Finally a programmable device is connected with the thermocouple and the security valve, for programming the ignition time of the burner in accordance with a preestablished operation time by user.

Probable Assignee: COM ACROS WHIRLPOOL S A DE C V

Earliest Publication Date: 20020430



11) Family number: 45118033 (TW132760Y)

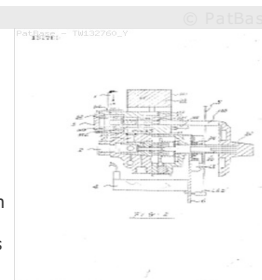
[NOVEL GAS STOVE SAFE AUTOMATIC SHUT-OFF INSTALLMENT] SUPPLEMENTS ONE (MACHINE TRANSLATION)

Abstract: Source: TW132760Y

Machine translation: This creation is refers to application document number 77,201,468th (novel gas stove safe automatic shut-off installment) the second supplement document; Its main characteristic lies in electromagnetism of drive the original case security valve assembly lowers by a consumption quantity the motor drive substitution, enhances the movement sensitivity, promotes security of the use gas furnace and furnace accessories, and reduces the failure rate.

Probable Assignee: WUDE ZHONG

Earliest Publication Date: 19880811



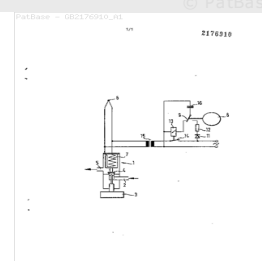
12) Family number: 28619209 (GB2176910A)

ELECTRICAL CONTROL MEANS FOR GAS FLOW TO A BURNER

Abstract: Source: GB2176910A Electrical control means for a gas burner serves to terminate the gas supply to the burner, and thereby a cooking process, by means of an automatic time switch (8), the burner having a thermal safety element (6, 7). For this purpose, the automatic time switch (8) connects a previously charged capacitor (10) to the winding of a relay (13) which in its turn by way of a switch contact (14) influences the current circuit of the thermal safety element (6, 7) in such a manner that the gas supply to the burner is interrupted.

Probable Assignee: BOSCH SIEMENS HAUSGERAETE

Earliest Publication Date: 19860613



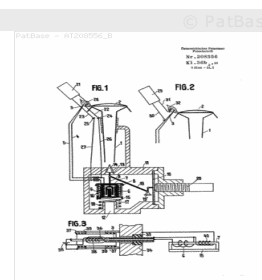
13) Family number: 25602020 (AT208556B)

SICHERUNGS- UND ZUENDVORRICHTUNG FUER EINEN BRENNER BACKUP AND IGNITION DEVICE FOR A BURNER (MACHINE TRANSLATION)

Abstract: Source: AT208556B [Source: Claim 1] 1.

Probable Assignee: SCHWEIZ GASAPP FABRIK SOLOTHUR

Earliest Publication Date: 19600411



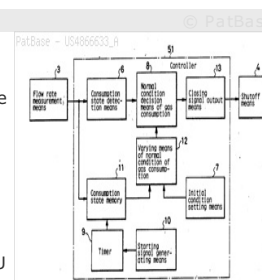
14) Family number: 2907161 (US4866633A)

GAS SHUTOFF APPARATUS

Abstract: Source: US4866633A A flow rate of a gas is measured by a flow rate measurement means, and when the flow rate exceeds a predetermined reference value, occurrence of an abnormal state such as escape of the gas is detected and a shutoff means is automatically closed by control of a microcomputer, furthermore, "a gas consumption pattern" showing combination of an amount of gas consumption, maximum flow rate and continuous consumption time of a consumer is observed in a predetermined time period, and a reference value of the gas consumption pattern is decided on the basis of the consumption state, moreover, a decision level of abnormal state is varied and set as a new reference values corresponding to the gas consumption pattern.

Probable Assignee: MATSUSHITA ELECTRIC INDUSTRIAL CO LTD 1006 OAZQA KADOMA KADOMA SHI OSAKA FU 571 JAPAN

Earliest Publication Date: 19880421



15) Family number: 38868150 (CH347497A)

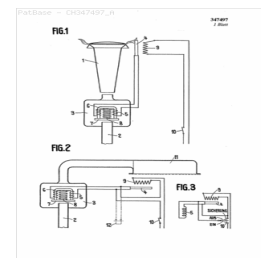
VERFAHREN UND VORRICHTUNG ZUM ANZUENDEN UND SICHERN EINES BRENNERS METHOD AND DEVICE FOR SECURING TO AND ARE OF A BURNER (MACHINE TRANSLATION)

Abstract: Source: CH347497A (Claim 1) 1. Verfahren zum Anzuenden und Sichern eines Brenners, wobei man bei Betriebsaufnahme des Brenners eine Zuendvorrichtung in Funktion setzt und zugleich derart auf eine Brennersicherung einwirkt, dass man den Brennstoff einleiten kann, dadurch gekennzeichnet, dass man eine thermoelektrische Brennersicherung vorsieht und zur Betriebsaufnahme mit einem elektrischen Strom auf deren Magnetsystem einwirkt, solange die Zuendvorrichtung in Funktion ist, und dadurch die Einleitung des Brennstoffes nur bei wirksamer Zuendvorrichtung ermöglicht. II. Vorrichtung zur Durchfuehrung des Verfahrens nach Patentanspruch I, gekennzeichnet durch eine elektrische Zuendvorrichtung und eine elektrische Sicherungsvorrichtung, die beide durch ein und dieselbe Stromquelle beeinflusst werden koennen. UNTERANSPRUECHE 1. Verfahren nach Patentanspruch I, dadurch gekennzeichnet, dass man die Zuendvorrichtung und mindestens ein in deren Bereich befindliches Thermoelement mittels elektrischer Fremdenergie erhitzt und mit der dabei erzeugten thermoelektrischen Energie auf die Brennersicherung einwirkt.

Machine translation: (claim 1) 1 A method for It should ends and securing of a burner, with the emphasis on operating rate of the burner, an ignition device in function and at the same time such acts on a burner assurance that one can initiate the fuel, characterized in that there is provided a thermoelectric burner assurance and the start of operations with a electrical current to the magnet system acts as long as the ignition device is in operation, thereby allowing the initiation of the fuel only for effective ignition device. II. Apparatus for carrying out the method according to claim I, characterized by an electrical ignition device and an electrical safety device that can both be influenced by one and the same power source. UNTERANSPRUECHE first Method according to claim I, characterized in that the ignition device and at least one located in the region of thermo-element is heated by means of electrical auxiliary energy and acts with the thus generated thermoelectric energy to the burner control.

Probable Assignee: SCHWEIZERISCHE GASAPPARATEFABR

Earliest Publication Date: 19600715



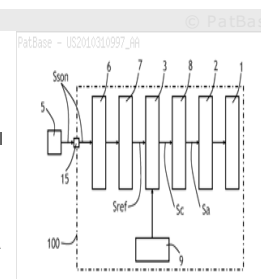
16) Family number: 47809434 (US2010310997A)

DOMESTIC GAS APPLIANCE WITH FLAME CONTROL

Abstract: Source: US2010310997A A domestic gas appliance is disclosed. In one implementation the appliance includes a burner and a gas control valve situated to deliver and vary a flow of a gas to the burner. The gas control valve has an actuator that induces an opening and/or closing of the flow control valve dependent on a control signal delivered to the actuator. A control device is electrically coupled to the actuator and is used to control the opening and closing of the gas control valve. The control device is coupled to an audio input and is configured to receive an analog sound signal and to generate the control signal based on the analog sound signal. A method of modulating a flame in a burner of a domestic gas appliance is also disclosed. In one implementation the method includes producing an analog sound signal and subsequently creating a reference signal based on the analog sound signal. A control signal is produced using the reference signal with the relationship between the reference signal and the control signal being linear, logarithmic or potential. The control signal is delivered to an actuator of a gas control valve that is situated to control the flow of gas to the burner, the control signal acting upon the actuator to cause the actuator to open and/or close to modulate the flame in the burner.

Probable Assignee: COPRECITEC SL

Earliest Publication Date: 20101204



17) Family number: 19811785 (GB733630A)

IMPROVEMENTS IN IGNITION AND FLAME-FAILURE CONTROL APPARATUS FOR FLUID-FUEL BURNING APPLIANCES

Abstract: Source: GB733630A 733,630. Igniting and controlling gas burners. ROBERTSHAW-FULTON CONTROLS CO. May 30, 1952, No. 13806/52. Class 75 (3) Ignition and flame failure control apparatus for a burner appliance having one or more pilot burners associated with a main oven burner comprises a main valve 20 for controlling the fuel supply to the main burner 10 and to the pilot burner 214 (or to at least one of a plurality of pilot burners when provided) which is ignitable by a catalytic igniter 161 through a flash tube 218, and thermally-responsive means, e.g. a rod and tube element 212, exposed to the heat of the flame at the pilot burner 214 (or said alternative pilot burner), and adapted in the event of failure of said flame to discontinue the fuel supply to the main burner 10 even while the main valve 20 is open, as by closing a further valve 210. Another embodiment is described of the same construction as the control apparatus described in Specification 667,033, excepting that a catalytic igniter replaces a constantly burning pilot burner of that apparatus. Specification 625,696, [Group XXIX], also is referred to.

Probable Assignee: ROBERTSHAW FULTON CONTROLS CO

Earliest Publication Date: 19550713

