

Search history

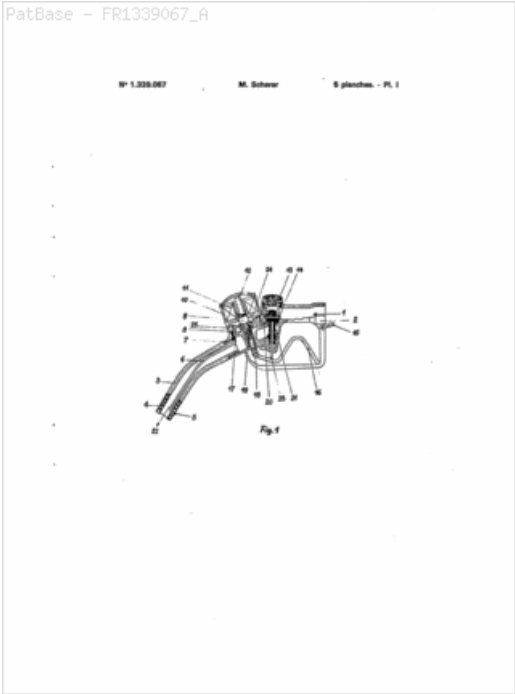
Search 1: TAC=(SENSOR~ AND FLOW~ AND GASOLINE~ AND CONTROLLER~) (Results 957)
Search 2: 1 and communication (Results 245)
Search 3: 2 and geolocalization (Results 0)
Search 4: 2 and vehicle (Results 97)

Title: INSTALLATION DE SECURITE POUR LA DISTRIBUTION DE SUBSTANCES DEGAGEANT DES GAZ INFLAMMABLES NOTAMMENT DE CARBURANTS LIQUIDES POUR AUTOMOBILES INSTALLATION OF SECURITY FOR THE DISTRIBUTION OF SUBSTANCES RELIEVING FLAMMABLE GASES LIQUID FUEL INCLUDING AUTOMOTIVE (Machine translation)

Abstract: Source: FR1339067A (Claim 1) RESUME L'invention s'etend notamment aux caracteristiques ci-apres et a leurs combinaisons possibles:1.

Machine translation: (Claim 1) SUMMARY The invention extends to such features here after and their possible combinations: 1.

Classifications:
International (IPC 8-9): B67D7/48 (Advanced/Invention);
B67D7/42 (Core/Invention)
International (IPC 1-7): B67D5/37
CPC: B67D7/3236 B67D7/48
European: 42E21D B67D7/32E B67D7/48



Family:

Publication number	Publication date	Application number	Application date
FR1339067 A	19631004	FR19620912451	19621016

Priority:
FR19620912451 19621016

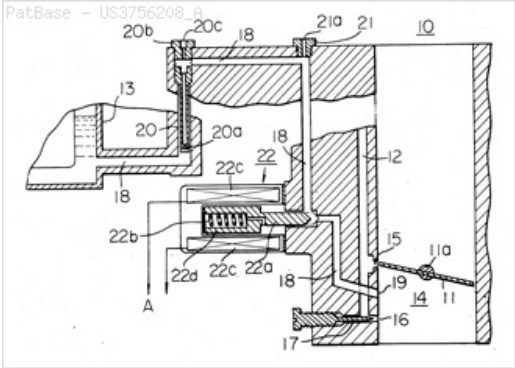
Inventor(s): (std): SCHERER ALBERT

Title: APPARATUS FOR REDUCING HYDROCARBON CONTENT OF EXHAUST GASES DURING DECELERATION

Abstract: Source: US3756208A An air-pollution preventive system to be used in combination with an automotive internal combustion engine having a carburettor with idle and low-speed circuit, which system comprises a decleration circuit to supply, independently of the idle and low-speed circuit, an air-fuel mixture to the engine in an amount and mixture ratio that are suited for the engine operation during deceleration, the deceleration circuit being closed and opened by valve means which is **controlled** upon various driving conditions of the motor **vehicle** particularly upon **vehicle** speeds, angular positions of the throttle valve (or motions of the accelerator pedal), positions of the clutch pedal, vacuums in the intake manifold of the engine, or combinations of two or more of these variables.

Classifications:

International (IPC 8-9): F02M3/00 (Advanced/Invention);
F02M3/00 (Core/Invention)
International (IPC 1-7): F02B75/00 F02D13/04 F02M11/00 F02M3/00
F02M3/04 F02M7/00 F02M7/12
CPC: Y10T477/68 F02M3/005
European: F02M3/00B
US: 123/331 123/9.7B 200/61.91 477/111



Family:

Publication number	Publication date	Application number	Application date
DE2005097 A1	19700903	DE19702005097	19700204
DE2005097 B2	19741010	DE19702005097	19700204
FR2032761 A5	19701127	FR19700004099	19700205
GB1305991 A	19730207	GB19700005080	19700203
SE359615 B	19730903	SE19700001400	19700204
US3756208 A	19730904	US19720224590	19720208

Priority:

JP19690008253 19690205 JP19690008254 19690205

Probable Assignee: NISSAN MOTOR

Assignee(s): (std): NISSAN MOTOR

Assignee(s): NISSAN MOTOR CO ; NISSAN MOTOR CO LTD JA ; NISSAN MOTOR CO LTD YOKOHAMA JAPAN ; NISSAN MOTOR CY LTD

Inventor(s): (std): KONNO M ; KONNO MITSUTAKA ; NAKAJIMA M ; NAKAJIMA MASAO ; TODA Y ; TODA YOSHIO

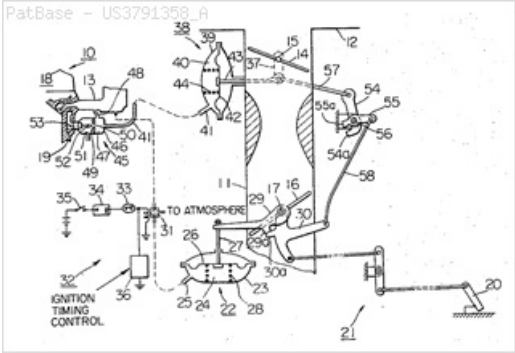
Inventor(s): TODA Y JA ; NAKAJIMA MASAO KAWASAKI ; NAKAJIMA M JA ; KONNO M JA

Title: CARBURETOR **CONTROL** MECHANISM FOR AN AUTOMOTIVE **GASOLINE** POWERED INTERNAL COMBUSTION ENGINE

Abstract: Source: US3791358A A carburetor **control** mechanism adapted for minimizing noxious and harmful components in exhaust gases of an automotive **gasoline** powered internal combustion engine. The carburetor **control** mechanism comprises a first vacuum responsive actuator which is responsive to vacuum prevailing in an intake manifold of the engine to automatically open a carburetor throttle valve during the warming-up period of the engine after the engine is started, a solenoid valve for providing **communication** between the first vacuum responsive actuator and the intake manifold during the warming-up period of the engine, an electric **control** device for **controlling** the solenoid valve and for retarding the ignition timing of the engine during the warming-up period, a second vacuum responsive actuator which is responsive to vacuum prevailing in the intake manifold to automatically open a choke valve, and a thermostat **controlled** device for **controlling** the level of vacuum acting on the second vacuum responsive actuator in accordance with the engine temperature.

Classifications:

International (IPC 8-9): F02D9/02 F02M1/10 F02M3/06 F02M7/00 (Advanced/Invention); F02D9/02 F02M7/00 (Advanced/Non-invention); F02D9/02 F02M1/00 F02M3/00 F02M7/00 (Core/Invention)
International (IPC 1-7): F02D37/00 F02D9/02 F02M1/08 F02M1/10 F02M1/14 F02M19/12 F02M3/00 F02M3/06 F02M7/00 F02M7/12 F02M9/00 F02P5/08
CPC: F02M1/10
European: F02M1/10
US: 123/179.18 123/406.11 261/39.1 261/39.2 261/39.5



Family:

Publication number	Publication date	Application number	Application date
AU197249201 A1	19740328	AU19720049201	19721123
AU446708 B2	19740328	AU19720049201	19721123
CA959725 A1	19741224	CA19720157966	19721204
DE2259529 A1	19730614	DE19722259529	19721205
DE2259529 B2	19790920	DE19722259529	19721205
DE2259529 C3	19800529	DE19722259529	19721205
FR2164368 A5	19730727	FR19720043619	19721207
GB1386648 A	19750312	GB19720053640	19721121
JP48064335 A2	19730906	JP19710099152	19711208
JP51010306 B4	19760402	JP19710099152	19711208
JP839163 C3	19761225	JP19710099152	19711208
US3791358 A	19740212	US19720308561	19721121

Priority:

JP19710099152 19711208

Probable Assignee: NISSAN MOTOR

Assignee(s): (std): NISSAN MOTOR

Assignee(s): NISSAN MOTOR CO LTD ; NISSAN MOTOR CO LTD JA ; NISSAN MOTOR CO LTD YOKOHAMA JAPAN ; NISSAN MOTOR CO LTD YOKOHAMA KANAGAWA JAPAN ; NISSAN MOTOR CY LTD ; NISSAN MOTOR COMPANY LIMITED ; MARUOKA HIROYUKI ; MASAKI KENJI

Inventor(s): (std): MARUOKA H ; MARUOKA HIROYUKI ; MASAKI K ; MASAKI KENJI

Inventor(s): MASAKI K JA ; MARUOKA H JA ; HIROYUKI MARUOKA ; KENJI MASAKI

Title: Waste disposal system and method

Abstract: Source: US3882799A Apparatus for and method of disposing of liquid and organic waste material through the exhaust system of an engine wherein the waste material is collected in a holding tank from which it is metered by a pump into the exhaust gases from the engine only under **controlled** conditions. A plurality of pump **control** means are disclosed for operating the pump only in accordance with the prescribed conditions, and waste injection apparatus is disclosed for injecting the waste material directly into the exhaust pipe of the engine.

Classifications:

International (IPC 8-9): B60P3/32 B60R15/04 C02F11/10
E03F7/10 (Advanced/Invention);

C02F11/10 (Advanced/Non-invention);

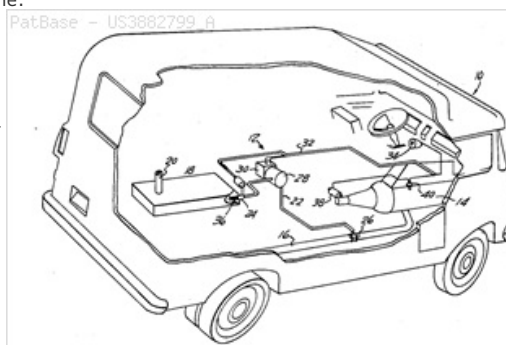
B60P3/32 B60R15/00 C02F11/10 E03F7/00 (Core/Invention)

International (IPC 1-7): A47K11/02 B60P3/00 B60R15/00 B60R15/04
C02C1/00 E03D5/00 E03D9/10 F02G5/02 F23J

CPC: B60P3/32 B60R15/04

European: B60P3/32 B60R15/04

US: 110/9R 210/251 4/111.1 4/458 60/317



Family:

Publication number	Publication date	Application number	Application date
AU197249878 A1	19740613	AU19720049878	19721208
AU207249878 A1	19740613	AU19720049878	19721208
CA961204 A1	19750121	CA19720147920	19720725
DE2254004 A1	19730809	DE19722254004	19721104
FR2162418 A1	19730720	FR19720043059	19721204
GB1409882 A	19751015	GB19720043361	19720919
GB1409883 A	19751015	GB19730004203	19720919
GB1409884 A	19751015	GB19730004166	19720919
GB1409885 A	19751015	GB19730004167	19720919
GB1409886 A	19751015	GB19730004168	19720919
JP48065773 A2	19730910	JP19720123054	19721209
US3882799 A	19750513	US19730365511	19730531
ZA7207951 A	19730829	ZA19720007951	19721109

Priority:

AU19720049878 19721208 US19710206711 19711210 US19730365511 19730531

Probable Assignee: THERMASAN CORP

Assignee(s): (std): THERMASAN CORP

Assignee(s): THERMASAN CORP ANN ARBOR MICH V ST A ; THETFORD CORP ; ANN ARBOR BANK AND TRUST CO ;
DETROIT BANK AND TRUST CO ; DETROIT BANK AND TRUST CO AGENT FOR ITSELF ANN ARB ;
HOFFMAN JOHN A ; SARGENT CHARLES L

Inventor(s): (std): HOFFMAN J ; HOFFMAN JOHN A ; HOFFMAN JOHN ADOLPH ; SARGENT C ; SARGENT CHARLES L ;
SARGENT CHARLES LEE

Inventor(s): SARGENT CHARLES LEE YPSILANTI ; HOFFMAN JOHN ADOLPH BRIGHTON ; JOHN ADOLPH HOFFMAN ;
CHARLES LEE SARGENT ; CHARLES LEE SARGENT AND JOHN ADOLPH HOFFMAN

Title: SYSTEM FOR MINIMIZING INTERNAL COMBUSTION ENGINE POLLUTION EMISSION

Abstract: Source: US3906913A A mixing device is provided for an internal combustion engine which simultaneously atomizes liquid fuel, mixes this fuel with an optimal quantity of hydrogen and combines this mixture with a prescribed quantity of air. A throttling mechanism **controls** the fuel delivery to the engine and also limits the fuel to air equivalence ratio to be predetermined upper bound to inhibit the production of air pollutants and to a lower bound which is above the lean flammability of the mixture.

Classifications:

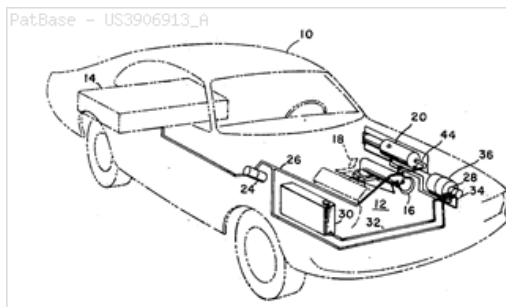
International (IPC 8-9): C01B3/34 C01B3/36 C10G9/00 F01N3/26 F02B19/10 F02D19/08 F02M25/12 F02M31/08 F02M31/087 F02M33/00 (Advanced/Invention); C10G9/00 F02M33/00 (Advanced/Non-invention); C01B3/00 C10G9/00 F01N3/26 F02B19/00 F02D19/00 F02M25/00 F02M31/02 F02M33/00 (Core/Invention)

International (IPC 1-7): C01B2/14 C01B3/34 C01B3/36 C10G11/28 C10G9/48 C10J3/00 C10L F02B43/00 F02B75/10 F02M13/08 F02M21/04 F02M25/00 F02M25/02 F02M25/10 F02M25/12 F02M27/00 F02M31/06

CPC: Y10S123/12 F02M13/08 F02D19/0697 F02D19/0628 F02D19/0644 F02D19/0671 F02D19/081 Y02T10/36 Y02P20/129 F02M25/12 C01B3/346 C01B3/36 Y02T10/121

European: C01B3/34S C01B3/36 F02D19/08 F02D19/08C F02M13/08 F02M25/12

US: 123/1.00A 123/121 123/198.00A 123/198A 123/1A 123/3 123/525 123/575 123/DIG.12 422/110 423/650 48/215 48/95

**Family:**

Publication number	Publication date	Application number	Application date
AU197472350 A1	19760226	AU19740072350	19740814
AU197472351 A1	19760226	AU19740072351	19740814
CA1020421 A1	19771108	CA19740206750	19740809
CA1029556 A1	19780418	CA19740206892	19740813
DE2438217 A1	19750227	DE19742438217	19740808
DE2439873 A1	19750313	DE19742439873	19740820
FR2240361 A1	19750307	FR19740027516	19740808
FR2241488 A1	19750321	FR19740028516	19740820
GB1485834 A	19770914	GB19740034936	19740808
GB1485836 A	19770914	GB19740034938	19740808
IT1019838 A	19771130	IT19740026179	19740809
IT1020039 A	19771220	IT19740026425	19740820
JP50081989 A2	19750703	JP19740091433	19740809
JP50082430 A2	19750703	JP19740091432	19740809
SE407264 B	19790319	SE19740010204	19740809
SE407264 C	19790809	SE19740010204	19740809
SE7410204 A	19750211	SE19740010204D	19740809
SE7410516 A	19750221	SE19740010516D	19740819
US3906913 A	19750923	US19730387342	19730810
US3955941 A	19760511	US19750548559	19750210

Priority:

US19730387342 19730810 US19730390049 19730820 US19750548559 19750210

Probable Assignee: CALIFORNIA INST OF TECHN

Assignee(s): (std): US HEALTH ; NASA ; US GOVERNMENT ; DIE REGIERUNG DER VEREINIGTEN ; CALIFORNIA INST OF TECHN

Assignee(s): CALIFORNIA INST OF TECHNOLOGY ; CALIFORNIA INSTITUTE OF TECHNOLOGY ; DIE REGIERUNG DER VEREINIGTEN STAATEN VON AMERIKA ; DIE REGIERUNG DER VEREINIGTEN STAATEN VON AMERIKA VERTRETEN DURCH NATIONAL AERONAUTICS AND SPACE ADMINISTRATION WASHINGTON D C V ST A ; DIE REGIERUNG DER VEREINIGTEN STAATEN VON AMERIKA VERTRETEN DURCH NATIONAL AERONAUTICS AND SPACE ADMINISTRATION WASHINGTON DC VSTA ; GOUVERNEMENT ETATS UNIS AMERIQUE ; GOVERNMENT OF THE UNITED STATES OF AMERICA ; NATIONAL AERONAUTICS AND SPACE US ; NATIONAL AERONAUTICS AND SPACE ADMINISTRATION ; NASA NATIONAL AERONAUTICS AND SPACE ADMINISTRATION ; REGIERUNG DER VEREINIGTEN STAATEN VON AMERIKA VERTRETEN DURCH NATIONAL AERONAUTICS AND SPACE ADMINISTRATION WASHINGTON D C ; IL GOVERNO DEGLI STATI UNITI D AME RICA RAPPRESENTATO DA ; RUPE JACK H ; KUSHIDA RAYMOND O ; HOUSEMAN JOHN ; US GOV ; REGIERUNG DER VEREINIGTEN STAATEN VON AMERIKA VERTRETEN DURCH NATIONAL AERONAUTICS AND SPACE ADMINISTRATION WASHINGTON DC ; GOVERNMENT OF THE UNITED STATES OF AMERICA

Inventor(s): (std): HOUSEMAN J ; KUSHIDA R O ; KUSHIDA RAYMOND O ; KUSHIDA RAYMOND OSAMU ; RUPE J H ; RUPE JACK H ; RUPE JACK HARMON ; HOUSEMAN JOHN

Inventor(s): HOUSEMAN JOHN PASADENA ; RUPE JACK HARMON SUNLAND ; RUPE JACK HARMON SUNLAND CLAIF V ST A ; RUPE JACK HARMON SUNLAND CLAIF VSTA ; KUSHIDA RAYMOND OSAMU PASADENA ; RAYMOND OSAMU KUSHIDA ; J H RUPE ; JACK HARMON RUPE ; JOHN HOUSEMAN ; JOHN HOUSEMAN JACK HARMON RUPE AND RAYMOND OSAMU KUSHIDA

Title: PETROL DISPENSING NOZZLE

Abstract: Source: GB2002720A A petrol dispensing nozzle 10 (Figure 2) comprising a petrol dispensing path (conduit 24, valve 20, spout 16) and a displaced vapour recovery path (passage 32, valve 22 and conduit 26) has a short end part (14) articulated to the main nozzle part (12), the end part (14) having a magnet (30) which is switchable, electrically or mechanically, to direct its flux either towards the fillpipe of a vehicle, thereby to cause a seal to abut the fillpipe to prevent the escape of vapour to atmosphere, or away from the direction of the spout and towards a magnet keeper (34). A pressure sensor (38) detects whether or not the end part (14) is sealed against the fillpipe, and causes the filling operation to stop if there is no seal, e.g., by interrupting an electrical circuit (switch 40, figure 9).

Classifications:

International (IPC 8-9): B65B3/00 B67D5/378

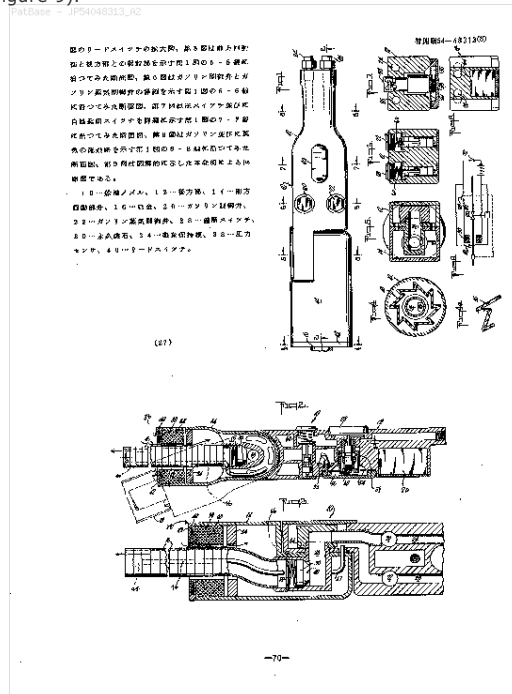
B67D7/54 (Advanced/Invention);

B67D7/42 (Core/Invention)

International (IPC 1-7): B60S5/02 B65B3/00 B67D5/32 B67D5/37

CPC: B67D7/54 B67D2007/545 H01F2007/208

European: B67D7/54 L67D7/54H T01F7/20C1



Family:

Publication number	Publication date	Application number	Application date
CA1095475 A1	19810210	CA19780309271	19780814
DE2835488 A1	19790301	DE19782835488	19780812
DE2835488 C2	19870521	DE19782835488	19780812
FR2400482 A1	19790316	FR19780023912	19780816
FR2400482 B1	19840629	FR19780023912	19780816
GB2002720 A1	19790228	GB19780033387	19780815
GB2002720 B2	19820210	GB19780033387	19780815
JP54048313 A2	19790416	JP19780099592	19780817

Priority:

CA19780309271 19780814	US19770825289 19770817	US19770825289 19770817
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Probable Assignee: EXXON RESEARCH ENGINEERING CO

Assignee(s): (std): EXXON RESEARCH ENGINEERING CO

Assignee(s): EXXON RESEARCH ENGINEERING CY ; YOUNG DALE A ; EXXON RES AND ENG CO ; EXXON RESEARCH AND ENGINEERING CO ; EXXON RESEARCH AND ENGINEERING CO LINDEN N J US ; EXXON RESEARCH AND ENGINEERING COMPANY

Inventor(s): (std): DEIRU EE YANGU ; YOUNG DALE A

Inventor(s): A YOUNG DALE

Agent(s): SWABEY OGILVY RENAULT

Title: MAGNETICALLY LATCHABLE LIQUID DISPENSING NOZZLE

Abstract: Source: US4262712A A **gasoline** dispensing nozzle is magnetically held in place to the fueling filler neck of the **vehicle**, while at the same time providing for a tight seal at the nozzle filler neck interface preventing escape of vapors to the atmosphere. Vapor directional **control** means may be included in the nozzle or be operably associated therewith, which will permit the recovery or redirecting of **gasoline** vapors issuing from the **vehicle** fuel tank during the refueling process. At the filler end of the nozzle is a switchable permanent magnet to latch, support and hold the nozzle to the **vehicle** fillpipe. To remove the nozzle when refueling is completed, the magnetic flux is switched in a different direction away from the fillpipe to a metal element known as a keeper. A pressure sensing mechanism is provided at the outer face of the magnet so that when a suitable seal is made between the nozzle magnet and the filler neck surface, a signal is provided via the pressure **sensor** that the seal has been made. The nozzle is designed to have a forward portion which swivels or pivots about an axis on the rear portion of the nozzle. The forward portion, i.e. torque arm, is relatively short in length and provides a minimum amount of moment arm with respect to the axis so that minimum peel forces are generated by the weight of nozzle and hoses which permits smaller size magnets to be utilized.

Classifications:

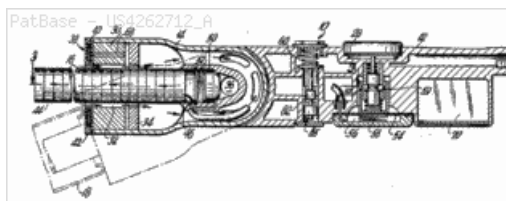
International (IPC 8-9): B67D7/54 (Advanced/Invention);
B67D7/42 (Core/Invention)

International (IPC 1-7): B65B31/00 B67C3/28

CPC: Y10S141/01 B67D7/54 H01F2007/208 Y10T137/8807

European: B67D7/54 T01F7/20C1

US: 137/615 141/392 141/DIG.1



Family:

Publication number	Publication date	Application number	Application date
US4262712 A	19810421	US19780958735	19781108

Priority:

US19780958735 19781108

Probable Assignee: EXXON RESEARCH ENGINEERING CO
Assignee(s): (std): EXXON RESEARCH ENGINEERING CO
Assignee(s): EXXON RESEARCH AND ENGINEERING CO
Inventor(s): (std): YOUNG DALE A

Title: Fluid register system

Abstract: Source: US4313168A A method, system and data network for a fluid register system used for the delivery of fluid commodities to customers at various delivery sites features a portable data capsule containing pricing information; an electrical fluid delivery volume measurement device; and a vehicular mounted calculator for retrieving the pricing data from said data capsule and calculating a billing amount for each fluid delivery with respect to a fluid delivery volume measurement.

Classifications:

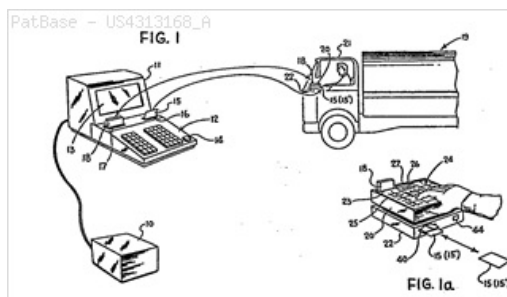
International (IPC 8-9): B67D5/00 B67D5/08 B67D5/14 B67D7/08 B67D7/14 B67D99/00 G01F25/00 G07F13/02 G07F9/02 (Advanced/Invention); B67D7/08 B67D99/00 G01F25/00 G07F13/00 G07F9/02 (Core/Invention)

International (IPC 1-7): B67D5/00 B67D5/02 B67D5/04 B67D5/08 B67D5/14 B67D5/20 B67D5/24 G01D9/06 G01F1/115 G01F25/00 G06F15/21 G06F15/22 G06F15/24 G06F15/42

CPC: B67D7/08 G01F25/0007 B67D7/14 B67D7/085 G06Q50/06 G07F9/02 G07F13/025

European: B67D7/08 B67D7/14 G01F25/00A G06Q50/06 G07F13/02B G07F9/02

US: 222/30 364/465 364/510 700/283 705/413



Family:

Publication number	Publication date	Application number	Application date
AU198168197 A1	19810917	AU19810068197	19810310
AU545007 B2	19850627	AU19810068197	19810310
CA1167965 A1	19840522	CA19810372607	19810309
CA1191951 A1	19850813	CA19810447781	19810309
CA1191951 A2	19850813	CA19840447781	19840217
DE3168989 D1	19850328	DE19813168989	19810306
DE3177197 D1	19900809	DE19813177197	19810306
DK106881 A	19810911	DK19810001068	19810309
EP0035888 A2	19810916	EP19810300946	19810306
EP0035888 A3	19820811	EP19810300946	19810306
EP0035888 B1	19850220	EP19810300946	19810306
EP0146665 A2	19850703	EP19840100798	19810306
EP0146665 A3	19851211	EP19840100798	19810306
EP0146665 B1	19900704	EP19840100798	19810306
NO156147 B	19870421	NO19810000794	19810309
NO156147 C	19870805	NO19810000794	19810309
NO810794 A	19810911	NO19810000794	19810309
US4313168 A	19820126	US19800128647	19800310
US4482964 A	19841113	US19840573105	19840123

Priority:

CA19810372607 19810309 CA19810447781 19810309 US19810283102 19810713
EP19810300946 19810306 US19840573105 19840123 US19800128647 19800310

Probable Assignee: EXXON RESEARCH AND ENGINEERIN CO

Assignee(s): (std): IMP OIL LTD ; EXXON RESEARCH ENGINEERING CO

Assignee(s): GULL INC ; EXXON RESEARCH AND ENGINEERING COMPANY ; IMPERIAL OIL LIMITED ; EXXON RESEARCH AND ENGINEERING CO A DE CORP ; EXXON RESEARCH AND ENGINEERING CO FLORHAM PARK N J US ; STEPHENS WALTER R ; BERSTEIN PATRICIO ; EXXON RESEARCH ; EXXON RESEARCH AND ENGINEERIN CO ; EXXON RESEARCH AND ENGINEERING CO

Inventor(s): (std): STEPHENS W R ; BERSTEIN P E K ; BERNSTEIN P E K ; STEPHENS WALTER RANDOLPH ; BERSTEIN PATRICIO ESTEBAN KATZ ; STEPHENS WALTER R ; BERSTEIN PATRICIO

Inventor(s): W R STEPHENS ; P E K BERSTEIN ; PEK BERSTEIN ; BERSTEIN PATRICIO ESTEBAN KATZ THORNHILL ONTARIO C ; BERSTEIN PATRICIO ESTEBAN KATZ THORNHILL ONTARIO CA ; PATRICIO ESTEBAN KATZ BERSTEIN ; STEPHENS WALTER RANDOLPH ISLINGTON ONTARIO CA ; WALTER RANDOLPH STEPHENS ; WR STEPHENS

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; SWABEY OGILVY RENAULT; OGILVY RENAULT

Designated states: BE DE FR GB IT SE

Title: FUEL **CONTROL** SYSTEM

Abstract: Source: US4373502A A fuel **control** system for **gasoline** operated **vehicles** includes a metering device connected to the fuel line for **controlling** the rate of **flow** to the carburetor to permit a normal rate under ordinary driving conditions and an increased rate of **flow** under accelerated conditions with a filter being connected to the fuel line upstream from the metering device to prevent blockage of the main metering valve in the metering device and a second filter downstream from the metering device to act as a auxiliary reservoir.

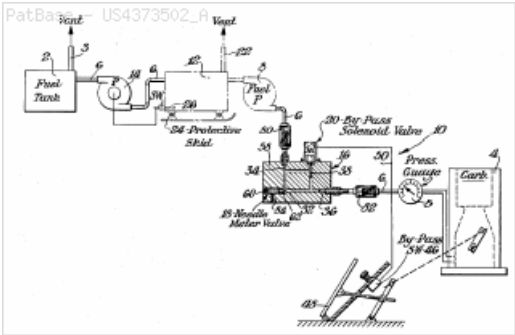
Classifications:

International (ipc 8-9): F02M7/06 F02M7/133 (Advanced/Invention); F02M7/00 (Core/Invention)

CPC: Y10S261/38 F02M7/06 F02M7/133

European: F02M7/06 F02M7/133

US: 123/512 261/37 261/5 261/51 261/68 261/DIG.38



Family:

Publication number	Publication date	Application number	Application date
US4373502 A	19830215	US19810244067	19810316

Priority:

US19800197695 19801016	US19810244067 19810316
Probable Assignee:	MILETECH INC A CORP OF DE
Assignee(s): (std):	MILETECH INC
Assignee(s):	MILETECH INC A CORP OF DE
Inventor(s): (std):	RE RONALD

Title: FUEL VAPORIZATION SYSTEM FOR AN INTERNAL COMBUSTION ENGINE

Abstract: Source: US4542717A The present invention is directed towards a fuel vaporization system designed primarily for use in automobile or like **vehicle** internal combustion engines. Liquid fuel such as **gasoline** is independently forced into a vaporization structure concurrently with the injection of water. The vaporization structure is disposed in direct heat receiving relation to the exhaust manifold of the engine such that heat received therefrom serves to vaporize the water and **gasoline** mixture prior to its exiting. The vaporized mixture is then fed into the intake manifold and more specifically into each of the plurality of cylinders of the engine. A **control** assembly includes a pressure switch structured to determine pressure within the vaporization structure to the extent that a decrease of the internal pressure below a predetermined level causes activation of the delivery systems and a continuing supply of water and **gasoline** mixture to the vaporization assembly until the predetermined pressure is reached and maintained.

Classifications:

International (IPC 8-9): F02M25/022 F02M31/08

F02M31/18 (Advanced/Invention);

F02M25/00 F02M31/02 (Core/Invention)

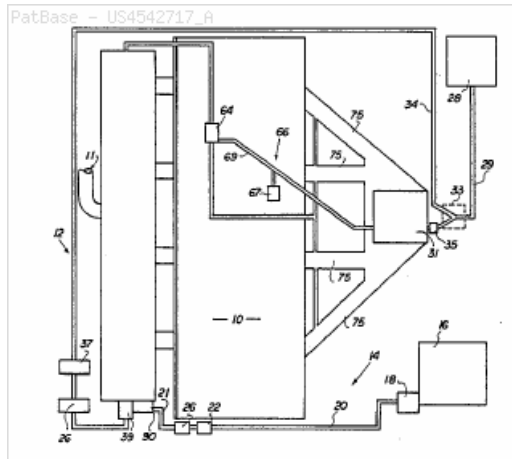
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CPC: F02M31/18 F02M25/0227 F02M25/0228 F02M25/032

Y02T10/121 Y02T10/126

European: F02M25/022 F02M31/18

US: 123/25.00B 123/25B 123/543 123/552



Family:

Publication number	Publication date	Application number	Application date
KR850003185 A	19850613	KR19840005840	19840924
KR900000808 B1	19900217	KR19840005840	19840924
US4542717 A	19850924	US19830535705	19830926

Priority:

KR19840005840 19840924 US19830535705 19830926

Probable Assignee:

CHOI JAE SUK

Assignee(s): (std):

CHOE JEI S ; CHOI JAE SUK

Inventor(s): (std):

CHOI JAE SUK ; CHOE JEI S

Title: 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.

Classifications:

International (ipc 8-9): B01D61/10 B63B1/10 B63B1/12 B63B35/00 B63B35/44 B63B39/06 B63B43/06 B63G1/00 B63G8/30 B63H19/02 B63H9/06 B63H9/10 B63J3/00 B64C31/04 B64C31/06 E02B3/06 F01K13/00 F01K23/10 F01K27/00 F02C1/00 F02C1/05 F02G5/00 F03B13/18 F03D11/04 F03D5/00 F03D5/04 F03G7/00 F24F5/00 F24F6/14 F28D5/00 (Advanced/Invention);

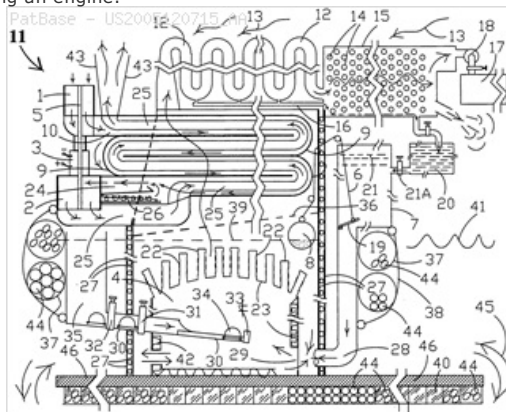
B63B1/24 B63J1/00 F24F1/00 (Advanced/Non-invention); B01D61/02 B63B1/00 B63B35/00 B63B35/44 B63B43/00 B63H9/00 B63J3/00 E02B3/06 F01K23/10 F01K27/00 F02C1/00 F02G5/00 F03B13/00 F03D5/00 F03G7/00 (Core/Invention)

International (ipc 1-7): B01D61/10 B63B17/00 B63B35/00 B63B7/00 F01K23/10 F03D5/02 F03D5/04 F03G7/00 F04B35/00 F24F6/14 F28D5/00

CPC: B63H9/06 B63H9/1021 F05D2260/212 F01K27/00 F02C1/05 F03G7/00 Y02T50/672 Y02T50/676 B63B1/121 Y02W10/33 Y02W10/37 B63B1/107 B63B1/24 B63B39/06 B63B2039/067 B63G1/00 B63G8/30 B63H19/02 B63J1/00 C02F1/04 F05B2240/40 Y02T70/59 B63B35/00 B63B43/06 B63J3/00 E02B3/062 E02B2017/0091 F03B13/182 F03D5/04 F24F5/0035 F24F6/14 Y02B10/30 Y02B10/50 Y02E10/38 F03D13/20 F28D5/00 B01D61/10 B63B35/44 B63B2035/446 B63B2035/4466 B64C31/04 B64C31/06 F03D5/00 F05B2240/921 F05B2240/922 F24F2001/0088 Y02B30/545 Y02E10/70 Y02E10/728 B63H9/10 F05B2210/18

European: B01D61/10 B63B1/10C B63B1/12B B63B35/00 B63B35/44 B63B39/06 B63B43/06 B63G1/00 B63G8/30 B63H19/02 B63H9/06 B63H9/10 B63H9/10C B63J3/00 B64C31/04 B64C31/06 E02B3/06B F01K27/00 F02C1/05 F03B13/18B2D F03D11/04 F03D5/00 F03D5/04 F03G7/00 F24F5/00C7 F24F6/14 F28D5/00 L63B1/24 L63B35/44 L63B35/44E7 L63B35/44E9 L63B39/06R L63B43/06 L63H9/10 L63J1/00 L63J3/00 M02F1/04 P02B17/00M R05B210/18 R05B240/40 R05B240/921 R05B240/922 R05B240/931 R05B260/212 R24F1/00G1 Y02B10/30 Y02B10/50 Y02B30/14 Y02B30/54D Y02E10/38 Y02E10/70 Y02E10/72L Y02E10/72N Y02E20/18 Y02T50/67B2 Y02T50/67F2 Y02T70/59

US: 114/102 114/267 114/382 114/39.1 114/39.2 114/39.26 114/39.29 114/39.31 210/136 210/170 210/259 210/321.87 244/153.00R 244/153R 244/24 405/76 415/5 416/8 417/330 417/332 60/39.01 60/506 60/618 60/618P 60/676 60/698 60/698P 60/772 62/304 62/310 62/314 623/40

**Family:**

Publication number	Publication date	Application number	Application date
AP200704109 A0	20070831	AP20070004109	20050727
AU2005325208 AA	20060727	AU20050325208	20050727
AU2005325208 BB	20120329	AU20050325208	20050727
CA2397847 AA	20040212	CA20022397847	20020812
CA2404410 AA	20040320	CA20022404410	20020920
CA2599414 AA	20070823	CA20052599414	20050727
CN101146981 A	20080319	CN200580049207	20050727
EA200701538 A1	20081030	EA20070001538	20050727
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IN05612DN2007 A	20070831	IN2007DN05612	20070719
US2005120715 AA	20050609	US20050039624	20050120
US2008155985 AA	20080703	US20050795835	20050727
US4756666 A	19880712	US19840631321	19840719
US4859146 A	19890822	US19880177599	19880405
US5027735 A	19910702	US19900472753	19900131
US5052902 A	19911001	US19860820082	19860121
US5056447 A	19911015	US19880255657	19881013
US5094595 A	19920310	US19890376002	19890815
US5435259 A	19950725	US19930097655	19930727
US5507943 A	19960416	US19910811470	19911218
US6293121 BA	20010925	US19980137499	19980820
US6327994 BA	20011211	US19970999729	19971223
US8051637 BB	20111108	US20050795835	20050727
WO06078315 A1	20060727	WO2005US26793	20050727
WO06078315 C1	20061102	WO2005US26793	20050727

Priority:

CA20022397847	20020812	CA20022404410	20020920	PH20040000148	20040325
US19880255719	19881013	US19860820082	19860121	US19840631321	19840719
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US19950506335	19950725	US19910811470	19911218	US20050039624	20050120
WO2005US26793	20050727	US19970999729	19971223	US19980137499	19980820

Probable Assignee: CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATION TRUST

Assignee(s): (std): CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATION TRUST ; CHRISTION SCHOOL OF TECHNOLOGY ; LABRADOR GAUDENCIO A ; LABRADOR GAUDENCIO AQUINO ; GAUDENCIO LABRADOR ; LABRADOR GAUDENCIO ; CHRISTIAN SCHOOL OF TECHNOLOGY

Assignee(s): CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATI ; CHRISTION SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATI ; CHRISTION SCHOOL OF TECHNOLOGY CHARITABLE FOUNDATION TRUST

Inventor(s): (std): LABRADOR GAUDENCIO AQUINO ; CHRISTIAN SCHOOL OF TECHNOLOGY ; LABRADOR GAUDENCIO A

Inventor(s): LABRADOR GAUDENCIO ; GAUDENCIO AQUINO LABRADOR ; CHRISTIAN SCHOOL OF TECHNOLOGY CHARITABLE

Agent(s): ROGER SYN AND CO PATENT AND TRADE MARK ATTORNEYS; FURMAN AND KALLIO; OYEN WIGGS GREEN AND MUTALA LLP; GAUDENCIO AQUINO LABRADOR

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

Title: MOBILE FUEL TANK VAPOR EMISSION CONTROL SYSTEM AND METHOD

Abstract: Source: US4829968A A method and on board apparatus to recycle gasoline vapor emissions from the head space of a motor vehicle gasoline tank during refueling and operation of the vehicle. The apparatus comprises a canister to collect and store gasoline vapor from the head space and a vapor fan and sparger combination to retrieve vapor driven from the canister during a heating cycle and to dissolve the vapor in the liquid gasoline in the tank. The canister includes an adsorbent to separate the vapor from air and a vent valve to release air from the canister. Inside the canister is a ceramic heater, a temperature sensor and an adsorbed vapor sensor. A water drain permits condensed moisture to be released from the canister. The sparger comprises a microscopically porous body having a plurality of relatively large blind passages therein, the sparger body being entirely immersed in the liquid gasoline. The method comprises collecting the head space vapor in the canister with an effective adsorber during refueling of the vehicle and subsequently, during operation of the vehicle, driving the adsorbed vapor from the canister with a source of heat and blowing the vapor under sufficient pressure to force the vapor into intimate contact with liquid gasoline inside and on the surface of the sparger. A splash back valve prevents head space vapor and liquid gasoline from traveling back up the fill pipe of the gasoline tank while maintaining hydrostatic communication between the bottom of the tank and the fill pipe.

Classifications:

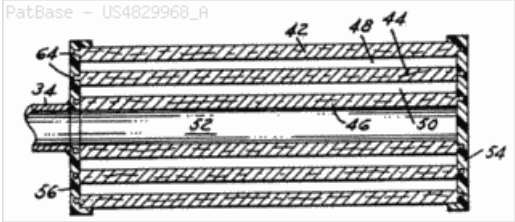
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International (IPC 1-7): F02M37/04 F02M39/00

CPC: B67D7/0476 B60K15/03504 B60K2015/03514 Y10T137/788

European: B60K15/035B B67D7/04C L60K15/035B3

US: 123/516 123/518 123/520 123/522 137/844 261/96 55/88 95/11 95/92 96/111 96/112 96/136



Family:

Publication number	Publication date	Application number	Application date
US4829968 A	19890516	US19870006928	19870127
US5054453 A	19911008	US19890351019	19890512

Priority:

US19870006928 19870127 US19890351019 19890512

Probable Assignee:

DEIMEN JAMES M

Assignee(s): (std):

DEIMEN JAMES M ; ONUFER GEORGE R

Inventor(s): (std):

ONUFER GEORGE R

Title: MULTI-FUEL ENGINE **CONTROL** WITH CANISTER PURGE

Abstract: Source: US4945885A A fuel **control** for a **vehicle** engine using a liquid mixture of two fuels includes a fuel vapor canister open to the fuel tank and canister purge apparatus effective to allow fuel vapors to be drawn from the canister to the engine at a **controlled** purge rate during engine operation. The canister purge apparatus is responsive to a fuel composition **sensor** to vary the purge rate as a function of the fuel composition. If the two fuels are **gasoline** and methanol, the canister purge rate is varied, in a predetermined range of fuel temperature, so as to provide a higher purge rate for mixtures of **gasoline** and methanol, in at least some proportions, than for either **gasoline** or methanol alone. The canister purge rate may further be varied in response to fuel temperature.

Classifications:

International (ipc 8-9): F02D19/08 F02D41/00 F02D41/30

F02M25/08 (Advanced/Invention);

F02B1/04 (Advanced/Non-invention);

F02D19/00 F02D41/00 F02M25/08 (Core/Invention);

F02B1/00 (Core/Non-invention)

International (ipc 1-7): F02D19/08 F02D41/04 F02D41/30

F02D45/00 F02M25/00 F02M25/08 F02M33/02

CPC: F02D19/0697 F02M25/08 F02D41/0025 F02B1/04 F02D19/0628

F02D19/084 F02D19/087 F02D41/0032 F02D2200/0606

F02D2200/0611 F02M25/089 Y02T10/36

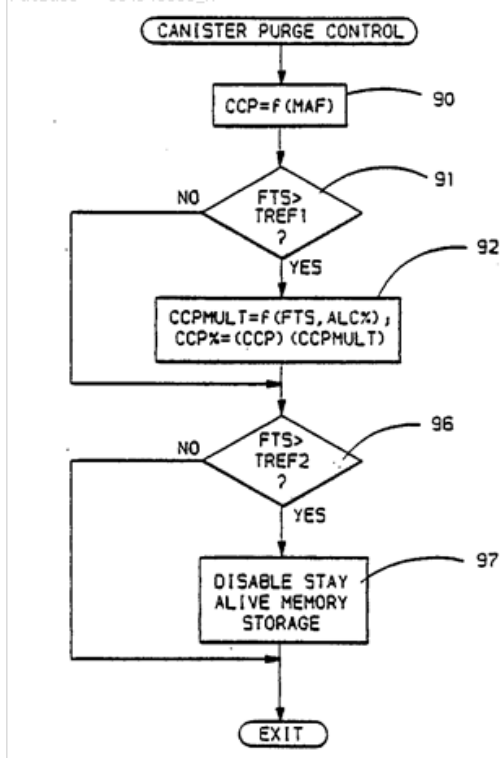
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R02D200/0606 R02D200/0611 R02M25/08

US: 123/518 123/520

PatBase - US4945885_A



Family:

Publication number	Publication date	Application number	Application date
BRPI9002859 A	19910820	BR1990PI02859	19900618
CA2017949 AA	19901216	CA19902017949	19900531
CA2017949 C	19940510	CA19902017949	19900531
DE4019159 A1	19901220	DE19904019159	19900615
DE4019159 C2	19920617	DE19904019159	19900615
GB2232788 A1	19901219	GB19900013555	19900618
GB2232788 B2	19930421	GB19900013555	19900618
GB9013555 A0	19900808	GB19900013555	19900618
US4945885 A	19900807	US19890453166	19891221

Priority:

CA19902017949 19900531 US19890367157 19890616 US19890453166 19891221

Probable Assignee: GEN MOTORS CORP

Assignee(s): (std): GEN MOTORS CORP

Assignee(s): GENERAL MOTORS CORP ; GENERAL MOTORS CORP DETROIT MICH US ; GONZE EUGENE VICTOR ; BROWN DAVID BRIAN

Inventor(s): (std): BROWN DAVID B ; BROWN DAVID BRIAN ; GONZE EUGENE V ; GONZE EUGENE VICTOR

Inventor(s): BROWN DAVID BRIAN STERLING HEIGHTS MICH ; BROWN DAVID BRIAN STERLING HEIGHTS MICH US ; DAVID BRIAN BROWN ; EUGENE VICTOR GONZE

Agent(s): GOWLING LAFLEUR HENDERSON LLP

Title: FLEXIBLE FUEL **SENSOR** SYSTEM

Abstract: Source: US5150683A A method and apparatus for determining the percentage of two different fluids having substantially different dielectric properties such as a **gasoline**/alcohol or a water/oil mixture. An inductive coil element immersed in the mixture exhibits a distributed capacitance level which is directly proportional to the dielectric constant of the fluid mixture surrounding the coil which, in turn, is directly proportional to the percentage of each fluid in the mixture. The loops of wire in the coil act as equivalent electrodes in creating a capacitance between each loop. The dielectric constant of a mixture will increase with the percentage of the higher dielectric fluid thus increasing the capacitance. An amplifier is constructed that oscillates at the resonant frequency of the LC circuit formed by the coil in the mixture. The resonant frequency decreases as capacitance increases. The subject invention includes a circuit which converts a frequency signal generated by energization of the coil to a voltage signal which, in turn, is sent to an engine **controller**. The output signal is used by the engine **controller** to selectively adjust the fuel ratio and the spark timing of the engine in accordance with the percentage of alcohol in the fuel mixture.

Classifications:**International (ipc 8-9):** F02D19/08 F02D41/14 F02P5/152

G01N27/22 G01N33/28 (Advanced/Invention);

F02D41/00 (Advanced/Non-invention);

F02D19/00 F02D41/14 F02P5/152 G01N27/22

G01N33/26 (Core/Invention);

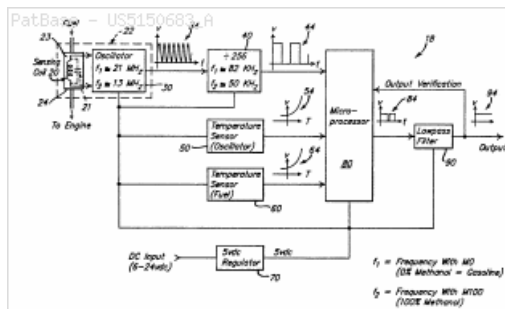
F02D41/00 (Core/Non-invention)

International (ipc 1-7): F02D41/06 F02P5/15**CPC:** Y02T10/36 G01N33/2852 F02D19/084 F02D19/087

F02D41/0025 F02D2200/0611 F02P5/1527 G01N27/221 Y02T10/46

European: F02D19/08 F02D41/14D3 F02P5/152L G01N27/22B

G01N33/28G3 R02D200/0611 R02D41/00F

US: 123/406.45 123/417 123/494 324/655 73/114.38 73/116**Family:**

Publication number	Publication date	Application number	Application date
US5150683 A	19920929	US19910667911	19910312

Priority:

US19910667911 19910312

Probable Assignee: CHRYSLER GROUP LLC**Assignee(s):** (std): CHRYSLER CORP

Assignee(s): CHRYSLER GROUP GLOBAL ELECTRIC MOTORCARS LLC ; CHRYSLER GROUP LLC ; WILMINGTON TRUST CO ; CHRYSLER LLC ; NEW CARCO ACQUISITION LLC ; UNITED STATES DEPARTMENT OF TREASURY ; DAIMLERCHRYSLER CORP ; DAIMLERCHRYSLER CO ; US DEPARTMENT OF TREASURY ; DAIMLERCHRYSLER CO LLC

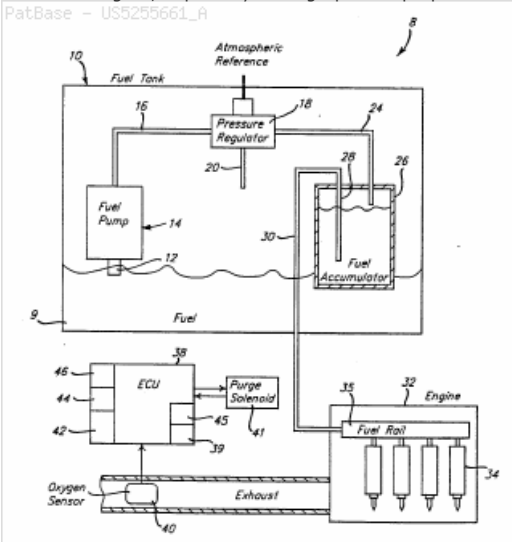
Inventor(s): (std): DEPA HENRY F ; KOPERA JOHN J C

Title: METHOD FOR DETERMINING FUEL COMPOSITION USING OXYGEN **SENSOR** FEEDBACK **CONTROL**

Abstract: Source: US5255661A A flexible fuel **vehicle** is a **vehicle** capable of operating on alcohol, **gasoline**, or any combination of these two fuels. Because of the unique properties of alcohol fuels, modifications to engine operating characteristics are required to compensate for the varying percentage of alcohol in the fuel. A method is provided for determining the percent alcohol content of the fuel in the fuel tank, utilizing the oxygen **sensor** feedback **control** loop to sense changes in air/fuel ratio and relay that information to the engine **controller** so that dependant variables can be adjusted accordingly. The method includes placing the fuel pump in the fuel tank along with a mixed fuel accumulator so that a known and slowly varying percentage of alcohol in the fuel is provided to the engine, especially during open loop operation.

Classifications:

International (IPC 8-9): F02D19/08 F02D33/00 F02D41/00 F02M37/00 (Advanced/Invention); F02D19/00 F02D33/00 F02D41/00 F02M37/00 (Core/Invention)
International (IPC 1-7): F02M7/00
CPC: F02D33/006 F02D19/0665 F02D19/084 F02D19/088 F02D41/0025 F02D41/0042 F02D2200/0612 F02M25/089 F02M37/0052 F02M37/0064 F02M37/0082 F02M37/0088 Y02T10/36
European: F02D19/08 F02D33/00B2 F02D35/00D4G F02D41/00F F02D41/00F4D F02D41/02 F02M25/08L F02M37/00 F02M37/00L4 R02D200/0612 R02M37/00L2 R02M37/00T2 R02M37/00T4
US: 123/672 123/674



Family:

Publication number	Publication date	Application number	Application date
US5255661 A	19931026	US19920933551	19920824

Priority:

US19920933551 19920824

Probable Assignee: CHRYSLER CORP
Assignee(s): (std): CHRYSLER CORP
Inventor(s): (std): LETCHER JOHN E ; NANKEE II ROBERT J