

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO	
RAD: 14-26170- -2	FECHA: 2015-06-19 19:30:45
DEP: 2020 DIRECCION DE NUEVAS CREACIONES	EVE: 378 FASE NACIONAL INCLUIDO CAPITULO I
TRA: 11 PCT-PATENTE DE INVENCION CAPITULOS I Y II	FOLIOS: 5
ACT: 476 TRASTITULARSOLI	

DIRECCIÓN DE NUEVAS CREACIONES

2020
Bogotá, D.C.,

Abogado(a)/Señor(a)
MARGARITA CASTELLANOS ABONDANO

Asunto: Radicación: 14-26170- -2
Trámite: 11
Evento: 378
Actuación: 476
Oficio: 6957
Folios: 5

Patente de Invención	X			Patente de Modelo de Utilidad	
Vía Nacional					
Vía PCT (Fase Nacional)	X	Capítulo I	X	Capítulo II	
No. Solicitud Internacional	PCT/US2011/066807				
Fecha de Presentación Internacional	22/12/2011				

Como resultado del examen de fondo realizado, con fundamento en el Artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se comunica:

1. Documentos estudiados

Reivindicaciones:	Rad. N° 14-026170-00000-0000	07/febrero/2014
Dibujos:	Rad. N° 14-026170-00000-0000	07/febrero/2014
Descripción:	Rad. N° 14-026170-00000-0000	07/febrero/2014
Prioridad:	US 13/ 136, 811	11/agosto/2011

2. Análisis de la Prioridad

Se acepta la reivindicación de prioridad porque ésta solicitud fue presentada dentro del plazo establecido (Art. 9 D 486) y su contenido técnico corresponde con el de la prioridad reivindicada.

3. Objeto de la invención

De acuerdo con lo establecido en el numeral 1.2.2.2 del Capítulo Primero del Título X de la Circular Única para efectos del examen de patentabilidad, se tendrá en cuenta la tasa pagada por el solicitante al momento de comenzar el examen para las reivindicaciones adicionales; esto es que cuando la solicitud contenga más de diez (10) reivindicaciones y no se haya pagado la tasa complementaria, sólo se estudiarán las cubiertas por la tasa pagada. Por lo tanto, se estudiarán las reivindicaciones 1 a 20.

Título de la solicitud: “Instalación móvil de análisis y método de uso para obtener y analizar metales preciosos” (Ver página 1 del radicado N° 14-026170-00000-0000).

El problema planteado en esta solicitud consiste en la necesidad de diseñar una instalación móvil para el análisis, fundición y ensayo de metales preciosos.

Para resolver este problema técnico, la solicitud en estudio proporciona una instalación móvil, autónoma de análisis construida en un camión blindado modificado que está completamente equipada para fundir y ensayar metales preciosos, especialmente el oro y la plata.

El objeto de la presente solicitud se relaciona con la Clasificación Internacional de Patentes (CIP): B60P 3/03, 3/14; G01N 21/64, 23/233;

4. De la solicitud de patente

Titulo

El título no corresponde con el objeto de la solicitud porque la materia reivindicada no incluye un método, por lo cual se sugiere al solicitante hacer la corrección necesaria.

Reivindicaciones (Art 30 D 486, Art 22 PCT)

La reivindicación 1 presenta el siguiente término: “...medios...”, los cuales son de carácter general, y por lo tanto, sugieren de forma imprecisa que la protección se extiende a otras posibles variaciones o modificaciones.

Las reivindicaciones 1, 3, 6 a 8, 11, 13, 16 y 19 no están caracterizadas por sus características esenciales sino por resultados a alcanzar y/o funcionalidades definidos por los términos: “...adecuado para contener todas las herramientas y equipos necesarios para fundir y ensayar metales preciosos...”, “...adaptado para permitir que un vendedor de metales preciosos observe los procesos de fundición...”, “...posicionada a la vista de dicho vendedor...”, “...se adapta a la salida de una señal representativa de un peso de un objeto pesado...”, “...adaptado para fundir metales preciosos recibido...para producir un lingote...”, “...dispuesto en dicho vehículo a la vista de dicho vendedor...de un análisis de los mismos...”, “...para determinar un

precio del mercado...cerca de dicho vehículo...”, “...adaptado para recibir por lo menos dicha señal...de metal precioso de dicho lingote...”, “...adaptada para imprimir al menos el resultado de dicho cálculo” (Reiv. 1), “...para proporcionar espacio para estar de pie en dicha parte de la carga para un adulto humano en posición vertical” (Reiv. 3), “...para disimular la función de dicho vehículo como una instalación móvil...” (Reiv. 6), “...posicionado para proporcionar un ocupante...y dicha pantalla de computador” (Reiv. 7), “...adaptada para eliminar los humos generados...de dicha parte de carga” (Reiv. 8), “...adaptada para recibir al menos dicho lingote...” (Reiv. 11), “...configurado para suministrar energía eléctrica a por lo menos dicho horno” (Reiv. 13), “...para mostrar una imagen de dicha al menos una cámara...”, “...adaptado para registrar una imagen de dicha al menos una cámara...”, “...adaptada para transmitir al menos una imagen de la misma a un receptor en una ubicación remota...” (Reiv. 16), “...para establecer y mantener, al menos...a dicha instalación móvil...” (Reiv. 19). Es así que estos términos no definen características estructurales esenciales, puesto que la reivindicación incluiría no sólo la solución propuesta por el solicitante, sino todas las alternativas presentes o futuras que lleguen a esos resultados. Se sugiere reemplazarlos por las características esenciales estructurales que contribuyen a la obtención de esos efectos. Es oportuno aclarar que, las funcionalidades pueden estar presente en la reivindicación pero no le pueden dar novedad y/o nivel inventivo a un producto, dado que, que cuando se reivindica un producto, las funcionalidades sirven para entender la relación que hay entre los diferentes elementos estructurales de un producto, pero son solo los elementos estructurales los que definen a dicho producto haciendo a las funcionalidades opcionales.

La reivindicación 1, no es clara porque presenta señales: “salida, precio” como características esenciales del aparato. Las señales al no ser tangibles no pueden hacer parte de las características estructurales de un aparato y por lo tanto un aparato no puede caracterizarse por tener señales.

La reivindicación 7, 10, 11, 13 y 16 a 20 no es clara porque presenta los términos “...operativamente a...” y “...h...”, “...v...”, “...vi...” mal redactados, traducidos o escritos.

La reivindicación 10 no es clara porque el término “próximo” es relativo por lo cual no permite distinguir la invención del estado de la técnica. Se sugiere sustituirlo por un término o rango concreto.

Las reivindicaciones 4, 17 no son claras porque los términos: “aproximadamente”, “otros sensores”, es impreciso, por lo cual no permite distinguir la invención del estado de la técnica. Se sugiere sustituirlo por un término preciso o un rango concreto.

Las reivindicaciones 1, 3, 6, 7, 11, 13, 16, 17, 19 no son claras porque las expresiones: “predeterminada”, “por lo menos”, “al menos”, precediendo una característica no es limitativo, porque hace opcional a la característica y no limita el alcance de la reivindicación. Se sugiere incluir las características opcionales o preferentes en una reivindicación dependiente.

5. Determinación del Estado de la Técnica

El estado de la técnica se determinó con base en la fecha de prioridad: 11 de agosto de 2011 y no se encontraron documentos que divulguen en su totalidad la materia reivindicada en la reivindicación 1.

6. Conclusión

No se encontraron anterioridades que anticipen en su totalidad las características reclamadas en la reivindicación 1, sin embargo, es necesario que el solicitante realice las correcciones y/o aclaraciones a las objeciones de claridad del capítulo reivindicatorio.

En cumplimiento del artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le indica que debe dar respuesta dentro del término de sesenta (60) días contados a partir del día siguiente de la fecha de notificación de la presente comunicación. En caso de no dar respuesta al presente requerimiento, o si a pesar de la respuesta subsistieran los impedimentos para la concesión, se denegará la patente.

Se invita al solicitante se sirva indicar, si así lo considera, su renuncia al término faltante de sesenta (60) días para dar respuesta a este requerimiento y presentarla por escrito.

Finalmente, se le recuerda al solicitante que si como respuesta a este requerimiento llegara a modificar el capítulo reivindicatorio y éste contenga más de diez (10) reivindicaciones, no pagará la tasa de modificación voluntaria pero sí la correspondiente al pago por reivindicación adicional.

Notifíquese el presente oficio conforme a lo dispuesto en el numeral 5.2, literal e), del capítulo quinto del título primero de la Circular Única No. 10 de 2001.



JOSÉ LUIS SALAZAR LÓPEZ
Director de Nuevas Creaciones (c)

El anterior requerimiento fue notificado por fijación en lista, de fecha 2015-06-23

Elaboró: Diana Melisa Avila

Revisó: Sonia Andrea Diaz Pirazan

Search history

Search 1: TAC=(security and truck and surveillance) (Results 0)
Search 2: TAC=(security and truck) (Results 1590)
Search 3: TAC=(security and truck) and IC=(b60) (Results 565)
Search 4: TA=((truck or vehicle) and printer and (computer or pc)) and IC=(b60) (Results 65)
Search 5: TA=((truck or vehicle) and printer and (computer or laptop or pc)) and IC=(b60) (Results 66)

Title: **COMPUTER** SYSTEM FOR **VEHICLES**

Abstract: A **computer** system for **vehicles** for calculating and indicating various operating values. Connected to a central processing unit (11) are pick-offs (16, 20, 22, 24) for sensing operating quantities, and a clock circuit (27) for giving the time. Further connected to the central processing unit are on the one hand a permanent read only memory (12) for the calculating functions of the central processing unit, and on the other hand a random access memory (13) and an alphanumeric **printer** (33). An alphanumeric keyboard (32) is connected to the central processing unit to program the random access memory and for manually controlled typing on the **printer**.

Classifications:

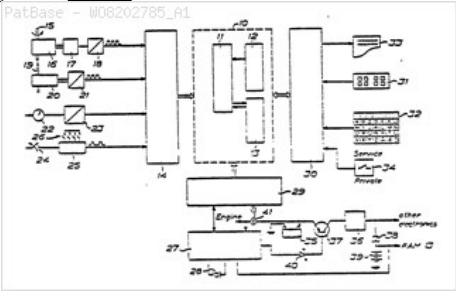
International (IPC 8-9): B60S5/00 G06F17/00 G06Q50/00 G07C5/08 G07C5/10 (Advanced/Invention);

G06F17/00 (Advanced/Non-invention);
B60S5/00 G06F17/00 G06Q50/00 G07C5/00 (Core/Invention)

International (IPC 1-7): G06F15/20 G06F15/21 G07C5/08

CPC: B60S5/00 G07C5/10 G07C5/08 H04L29/08558

European: B60S5/00 G06F15/20 G07C5/08 G07C5/10



Family:

Publication number	Publication date	Application number	Application date
AU198167819 A1	19820826	AU19810067819	19810213
DK446382 A	19821008	DK19820004463	19821008
EP0083578 A1	19830720	EP19810900485	19810213
JP58500224 T2	19830210	JP19810500711T	19810213
NO823402 A	19821011	NO19820003402	19821011
SE424233 B	19820705	SE19790007308	19790903
SE424233 C	19821014	SE19790007308	19790903
SE7907308 A	19810304	SE19790007308	19790903
SE7907308 L	19810304	SE19790007308	19790903
WO8202785 A1	19820819	WO1981SE00037	19810213

Priority:

SE19790007308 19790903 WO1981SE00037 19810213

Probable Assignee: OVO IDE OCH PRODUKTUTVECKLING

Assignee(s): (std): DYRDAK WALDEMAR ; HOLENDER WLODEK ; OVO IDE OCH PRODUKTUTVECKLING

Assignee(s): OVO IDE OCH PRODUKTUTVECKLING AB

Inventor(s): (std): DYRAK W ; DYRDAK WALDEMAR ; HOLENDER WLODEK ; DRYDAK W ; HOLENDER W ; DYRDAK W

Inventor(s): W DYRDAK ; W HOLENDER ; W DYRAK ; W DRYDAK

Designated states: AT AU BR CH DE DK FI FR GB JP LI LU NL NO US

Title: SYSTEM FOR JUDGING AND DISPLAYING GAP AT **VEHICLE** DOOR

Abstract: Source: JP59005906A **PURPOSE:**To perform highly accurate measurement, by judging and displaying the gap at a door part by such a means, by which controlled data is recorded by a **printer** through a judgment display panel, a speaker, or a personal **computer**. **CONSTITUTION:**When a photoelectric switch 3 is actuated, light is irradiated on the side surface of a **vehicle** 1 from a line sensor camera 2, which is provided at the side of the **vehicle** 1. The reflected light from the **vehicle** 1 is received by the line sensor camera 2 again and sent to a data processor 4. Said data signal is controlled by a system **computer** 5. A gap 10a at a door part 10 is judged and displayed by such a means, by which the controlled data is recorded by a **printer** 9 through a judgement display panel 6, a speaker 7, or personal **computer** 8. Since an image brightness pattern is compared with a reference value and whether it is correct or not is judged, highly accurate measurement can be performed.

Classifications:

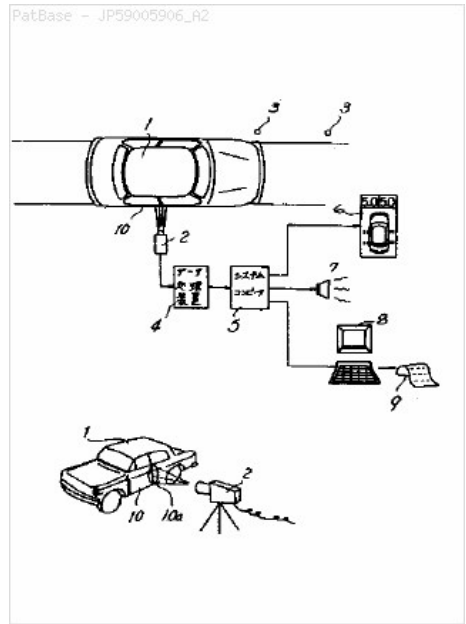
International (IPC 8-9): B62D65/00 G01B11/14 (Advanced/Invention);

B62D65/00 G01B11/14 (Core/Invention)

International (IPC 1-7): B60J5/04 G01B11/14

CPC: G01B11/14

European: G01B11/14



Family:

Publication number	Publication date	Application number	Application date
JP59005906 A2	19840112	JP19820115875	19820703

Priority:

JP19820115875 19820703

Probable Assignee: MITSUBISHI MOTORS CORP

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

Assignee(s): MITSUBISHI JIDOSHA KOGYO KK

Inventor(s): (std): OYABU MAMORU

Title: **Vehicle** number plates and their production

Abstract: Source: GB2126389A Data representing a library of characters to be reproduced on a number plate, along with ancillary information such as a security code, are contained in a data store 4 which programs the memory of a micro **computer** or microprocessor 1. Items of this data are selected by means of a keyboard 2 according to the characters which are required for a particular number plate, and the **computer** 1 then controls the operation of a **printer** 3 so that the latter produces a graphic image of the selected characters on a carrier 5 which forms at least part of the finished number plate. The **computer** 1 may also control a second **printer** 6 so that from time to time a hard copy can be obtained of all of the number plates which have been produced.

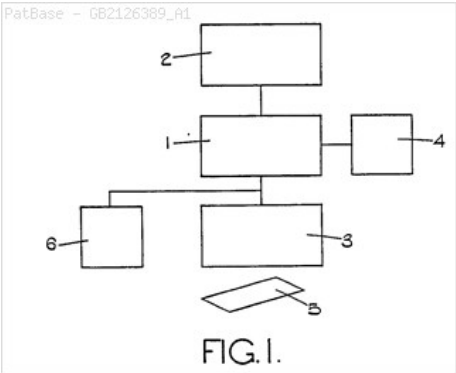
Classifications:

International (IPC 8-9): B60R13/10 (Advanced/Invention);
B60R13/00 (Core/Invention)

International (IPC 1-7): B41J3/00 B60R13/10

CPC: B60R13/10

European: B60R13/10



Family:

Publication number	Publication date	Application number	Application date
GB2126389 A1	19840321	GB19830022892	19830825
GB2126389 B2	19851224	GB19830022892	19830825
GB8322892 A0	19830928	GB19830022892	19830825

Priority:

GB19820024690 19820827 GB19830022892 19830825

Probable Assignee: BTR PLC

Assignee(s): (std): BTR PLC

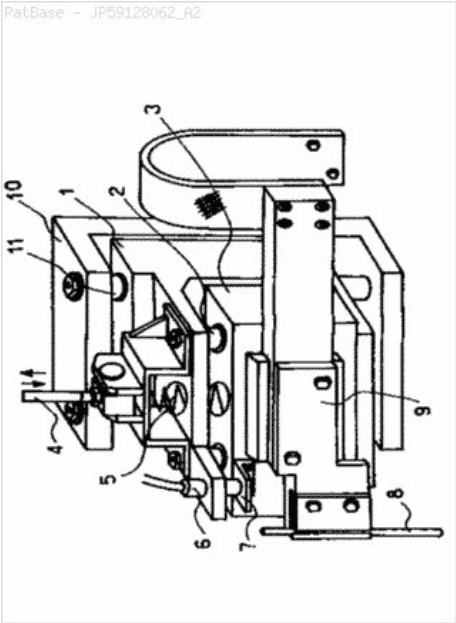
Inventor(s): (std): PAWSON IAN KARL ; HEPWORTH ADRIAN STEABBEN

Inventor(s): ADRIAN STEABBEN HEPWORTH ; IAN KARL PAWSON

Title: AUTOMATIC PRINTING SYSTEM FOR NAME PLATE FOR **VEHICLE**

Abstract: Source: JP59128062A **PURPOSE:**To enhance efficiency and accuracy in a printing work, by a method wherein a central **computer** for controlling the entire part of a **vehicle**-assembling factory and a **printer** are connected on-line with each other, and data required for printing are transmitted from the central **computer** to the **printer**. **CONSTITUTION:**When working, data required for printing on a name plate for a **vehicle** are transmitted from the central **computer** 20 to a data-relaying device 30 through a data free way 21. Then, the device 30 selects a system comprising a **printer**-controlling **computer** 51 and a **printer** 61 or a system comprising a **printer**-controlling **computer** 52 and a **printer** 61. For example, when the system at the left in the figure is selected, the data required for printing are fed to the **computer** 51 and the **printer** 61. Thereafter, the plate is set by an automatic plate feeder 70 on the basis of a command from the **computer** 51, and printing is conducted on the plate by the **printer** 61.

Classifications:
International (IPC 8-9): B60R13/10 B62D65/00 G05B15/02 (Advanced/Invention);
B60R13/00 B62D65/00 G05B15/02 (Core/Invention)
International (IPC 1-7): B23K11/02 B23K9/095 B62D65/00 G05B15/02
CPC: B60R13/10
European: B60R13/10



Family:

Publication number	Publication date	Application number	Application date
JP59128062 A2	19840724	JP19830000260	19830106

Priority:
JP19830000260 19830106

Probable Assignee: HONDA MOTOR CO LTD

Assignee(s): (std): HONDA MOTOR CO LTD ; NISSAN MOTOR

Assignee(s): HONDA GIKEN KOGYO KK ; NISSAN JIDOSHA KK

Inventor(s): (std): TANGE TSUTOMU ; NOMIYAMA MASANORI ; KATO HISASHI ; KAKIMOTO YUKIO ; AOYAMA HARUO

Title: OPERATION CONTROL DEVICE OF AUTOMOBILE

Abstract: Source: JP60093131A PURPOSE:To enable the suitable data, by which an automobile can perform its economic running, to be given to the driver or the operation controller, by calculating the detection outputs of sensors, which detect the speed of an engine and its load, so as to output the arithmetic result. CONSTITUTION:A microcomputer 10 reads at every second the speed of an engine 1 from a speed detecting sensor 9 while its load from a load sensor 8, storing these data in a corresponding address to a random access memory (RAM) of the computer 10. Then a value of the address is added by one because the data are stored as a frequency, for instance, the speed is divided into ten sections of every 400rpm over the range from 500 to 4,400rpm, while the load is divided into ten sections 10 percent by 10 percent. While the frequency of the corresponding address is added one by one in accordance with the speed and the load respectively detected by the sensors 8, 9. In this way, the operating condition of a vehicle is known by printing a content, stored in the RAM10 after the predetermined operation, by a printer 16, and operation improving fuel consumption can be guided on the basis of the operating condition.

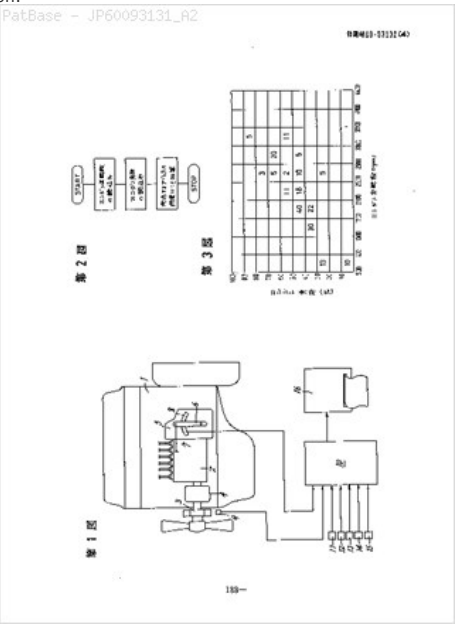
Classifications:

International (IPC 8-9): B60K26/04 F02B77/08 F02D29/02 F16H59/42 F16H59/74 F16H61/00 G07C5/00 (Advanced/Invention);
B60K26/00 F02B77/08 F02D29/02 F16H59/00 F16H59/42 F16H61/00 G07C5/00 (Core/Invention)

International (IPC 1-7): B60K26/04 F02B77/08 F02D29/02 F16H5/66 G07C5/00 G08G1/09

CPC: F02B77/084

European: F02B77/08E



Family:

Publication number	Publication date	Application number	Application date
JP1810465 C3	19931227	JP19830201570	19831027
JP5014315 B4	19930224	JP19830201570	19831027
JP60093131 A2	19850524	JP19830201570	19831027

Priority:

JP19830201570 19831027

Probable Assignee: HINO MOTORS LTD

Assignee(s): (std): HINO MOTORS LTD

Assignee(s): HINO JIDOSHA KOGYO KK

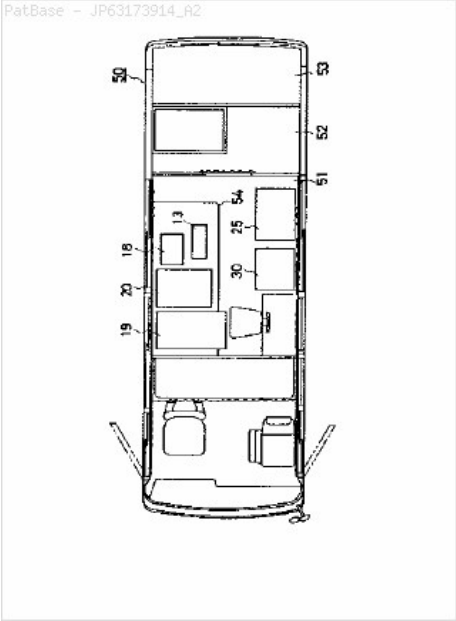
Inventor(s): (std): AOYAMA FUJIO ; ICHINO FUMIYUKI ; KOIDE HIDENORI ; NAKAJIMA MASARU

Inventor(s): ICHINO FUMYUKI

Title: SURVEYING INVESTIGATION **VEHICLE**

Abstract: Source: JP63173914A PURPOSE: To perform photo survey on the spot within a short time, by incorporating a photographic developing dark room, a surveyed data processing means and an analytical drawing means in one **vehicle**. CONSTITUTION: An operation chamber 51 having various devices arranged therein, a photographic developing dark room 52 and a receiving chamber 53 for receiving machine parts are provided in a surveying investigation **vehicle** 50. An analytical drawing machine 19, personal **computers** 13, 20, a **printer** 18, an XY plotter 25 and a three-dimensional space digitizer 30 are arranged in the operation chamber 51. This surveying investigation **vehicle** 50 is carried to the surveying spot and a mark is set to take a surveying photograph. The surveying photograph is developed in the dark room 52. The surveying of the mark is performed and the surveyed data are inputted to the personal **computer** 13. The developed photograph is set to the analytical drawing machine 19 and processed along with the inputted mark point data to display a figure on a display device. This figure is smoothed by keyboard operation to be plotted on the XY plotter.

Classifications:
International (IPC 8-9): B60P3/00 G01C11/00 (Advanced/Invention)
International (IPC 1-7): B60P3/00 G01C11/00



Family:

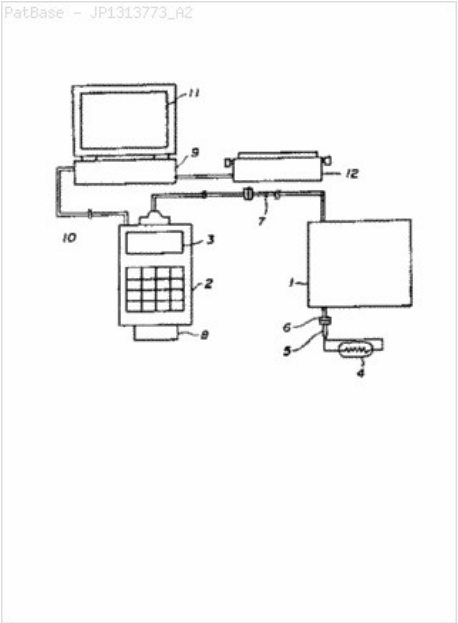
Publication number	Publication date	Application number	Application date
JP63173914 A2	19880718	JP19870006783	19870114

Priority:
JP19870006783 19870114
Probable Assignee: PASCO CORP
Assignee(s): (std): PASCO CORP
Assignee(s): PASUKO KK
Inventor(s): (std): HASEGAWA HIROYUKI ; SATO YASUO

Title: FAULT DIAGNOSIS SUPPORTING DEVICE FOR ON-VEHICLE ELECTRONIC DEVICE

Abstract: Source: JP1313773A PURPOSE: To easily execute an objective fault diagnosis by calculating the data of a sensor and an actuator, etc., obtained by an electronic controller which have been received by a tester by a computer, and providing a CRT screen for bringing the data to image display and a printer. CONSTITUTION: An electronic controller 1 to which a sensor 4 has been connected and which has an actuator, etc., and a tester 2 having a storage device 8 are connected by a wiring 7, so that data can be transmitted and received mutually by using a serial transmission system. Subsequently, a host computer 9 which is provided with a CRT screen 11 for graphing and displaying the data, and to which a printer 12 has been connected is connected to the tester 2 through an RS-232C communication circuit 10. In such a way, analog data information of the sensor and the actuator, etc., obtained from the electronic controller 1 can be brought to image display on the CRT screen 11, and data information can be printed, therefore, an objective fault diagnosis can be executed.

Classifications:
International (IPC 8-9): B60R16/02 G01D21/00 G01M17/00 G01M17/007 G01R31/00 G08B5/00 G08C15/00 H04Q9/00 (Advanced/Invention); B60R16/02 G01D21/00 G01M17/00 G01M17/007 G01R31/00 G08B5/00 G08C15/00 H04Q9/00 (Core/Invention)
International (IPC 1-7): B60R16/02 G01D21/00 G01R31/00 G08B5/00 G08C15/00 H04Q9/00



Family:

Publication number	Publication date	Application number	Application date
JP1313773 A2	19891219	JP19880145178	19880613

Priority:

JP19880145178 19880613

Probable Assignee: MITSUBISHI ELECTRIC CORP

Assignee(s): (std): MITSUBISHI ELECTRIC CORP

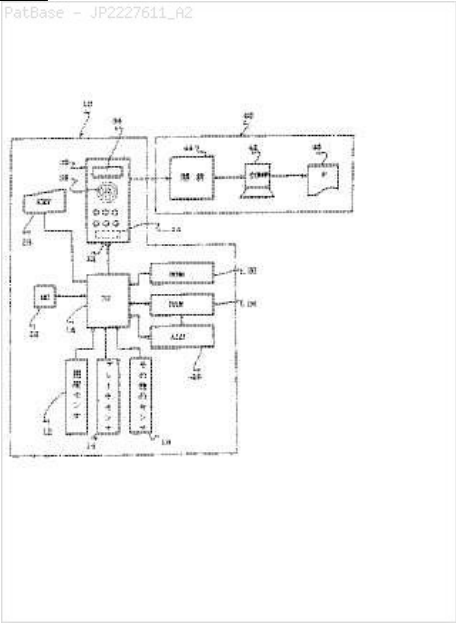
Inventor(s): (std): HAYAKAWA MITSURU ; HIRANO SHIGEAKI ; KIMURA KAZUJI ; MAEKAWA HIROTOSHI ; MORI KAZUNARI

Title: SAFE TRAVELING CONTROLLER

Abstract: Source: JP2227611A PURPOSE:To improve the safety rate of traveling by reading a display means which displays whether or not the current traveling state of a **vehicle** is safe from operation data and travel information and the quantity of variation in points indicating the degree of safe operation. CONSTITUTION:The memory 34 of a drive recording part 30 is stored with operation data detected by a speed sensor 12, a brake sensor 14, and other sensors 16, current points found by an arithmetic part (ALU) 26, etc., with time. Further, the recording part 30 is provided with a display 36 to display the current points found by the ALU 26 and messages for safe traveling together with an alarm tone from a speaker 38. Further, even when the current points become less than a specific value which is determined as the range of the safe traveling, the alarm tone is outputted from the speaker 38. Further, an analytic system 40 is connected to the recording part 30 of the **vehicle** after its traveling and an analytic part 44 which is controlled by a **computer** 42 reads the storage contents of the memory 34 of the recording part 30 and analyzes the traveling contents of the **vehicle**, so that the result is outputted on a **printer** 46.

Classifications:

International (IPC 8-9): B60R16/02 G01C23/00 G01F9/00 G01P15/16 G07C5/00 (Advanced/Invention); G01P15/16 G07C5/00 (Advanced/Non-invention); B60R16/02 G01C23/00 G01F9/00 G01P15/16 G07C5/00 (Core/Invention); G01P15/16 G07C5/00 (Core/Non-invention)
International (IPC 1-7): B60R16/02 G01C23/00 G01F9/00 G01P15/16 G07C5/00



Family:

Publication number	Publication date	Application number	Application date
JP10122896 A2	19980515	JP19970178013	19970703
JP2227611 A2	19900910	JP19890049676	19890228
JP2769542 B2	19980625	JP19890049676	19890228

Priority:

JP19890049676 19890228 JP19970178013 19970703

Probable Assignee: PLAN N KK

Assignee(s): (std): PLAN KK N ; PLAN N KK

Assignee(s): N PLAN KK

Inventor(s): (std): NISHIMURA YOSHIKAZU

Title: Method for the testing and monitoring of brakes in rail **vehicles**

Abstract: Source: US5201834A A method for performing operationally prescribed brake trials before the departure of a railway train, utilizes an indicating and diagnostic system disposed on board the train and operated by the train driver. Sensors in the braking system of each car bogie supply information signals representing pressures, travels and forces to a bogie processor which is connected with a car processor. The car processors are connected by a continuous data bus line with a central processor. The central processor processes the operational information from the brake system according to a processing program into status reports such as general status indications, fault diagnoses and maintenance instructions. The indications and instructions are visually displayed on a monitor and a **printer**, and acoustically reproduced by a speech synthesizer through a loudspeaker. The car processors are programmable by means of mobile **computers** and interrogatable by means of pocket terminals. Stored operational data is interrogable from outside each railway car by means of a mobile personal **computer** at each railroad **vehicle**.

Classifications:

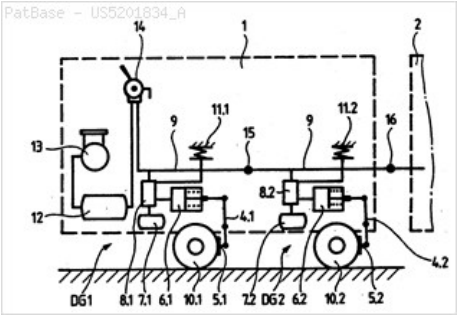
International (IPC 8-9): B60T17/22 B60T8/88 B61H1/00 F16D66/00 F16D66/02 G01M17/007 (Advanced/Invention)

International (IPC 1-7): B60T17/22 B60T8/88 B61H1/00 B61L23/02 F16D66/02 G01L5/28

CPC: B60T8/885 B60T17/228 B60T2270/406 F16D66/00 F16D66/021 F16D2066/005

European: B60T17/22H B60T8/88B F16D66/00 F16D66/02B L60T270/406 R16D66/00F

US: 246/167R 246/169.00R 246/169R 340/505



Family:

Publication number	Publication date	Application number	Application date
AT83717 E	19930115	AT19900103089T	19900217
DE59000626 D1	19930204	DE19905000626	19900217
EP0391047 A1	19901010	EP19900103089	19900217
EP0391047 B1	19921223	EP19900103089	19900217
ES2037484 T3	19930616	ES19900103089T	19900217
JP2290772 A2	19901130	JP19900091332	19900405
US5201834 A	19930413	US19920876111	19920427

Priority:

CH19890001258 19890405	EP19900103089 19900217	EP19900103089 19900217
EP19900103089 19900217	US19920876111 19920427	US19900504577 19900404

Probable Assignee: DAIMLERCHRYSLER RAIL SYSTEMS GMBH

Assignee(s): (std): INBETEIO AG ; INVENTIO AG

Assignee(s): INVENTIO AG HERGISWIL NIDWALDEN CH ; ABB DAIMLER BENZ TRANSPORTATION (SCHWEIZ) AG ; ABB DAIMLER BENZ TRANSPORTATION AG ; DAIMLERCHRYSLER AG ; DAIMLERCHRYSLER RAIL SYSTEMS GMBH

Inventor(s): (std): MARIO GURAATSUIORI ; KURUTO ANDORETSUGU ; GRAZIOLI MARIO ; ANDEREGG KURT

Inventor(s): GRAZIOLI MARIO CH 7000 CHUR CH ; ANDEREGG KURT CH 9424 RHEINECK CH

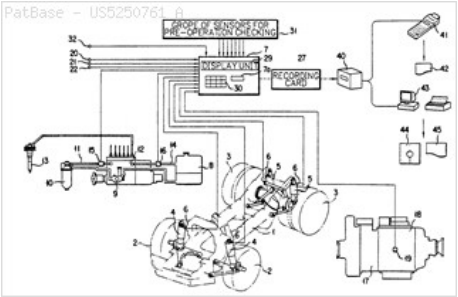
Designated states: AT CH DE ES FR GB IT LI

Title: Managing system for construction **vehicles**

Abstract: Source: US5250761A PCT No. PCT/JP90/01271 Sec. 371 Date Mar. 31, 1992 Sec. 102(e) Date Mar. 31, 1992 PCT Filed Oct. 2, 1990 PCT Pub. No. WO91/05319 PCT Pub. Date Apr. 18, 1991.A managing system for a construction **vehicle** which has for its object to enable management of the **vehicle** relating to pre-operation checking, maintenance and summary of work load, etc to be conducted easily and quickly. This managing system comprises a **vehicle** control monitor (7) for inputting and recording information necessary for management of the **vehicle** from a plurality of information sources, a non-contact type recording card (27) for recording the information recorded in the **vehicle** control monitor (7), a card reader/writer (40) for reading out the information recorded in the recording card (27), and a **printer** (42) and a personal **computer** (43) for compiling management ledgers and displaying data on the basis of the information read out by the card reader/writer.

Classifications:

International (IPC 8-9): B60P1/00 B60R16/02 B60S5/00 B65G61/00 E02F9/26 G01D9/00 G01M17/00 G01M17/007 G06Q50/00 G07C3/00 G07C5/08 G08G1/00 (Advanced/Invention); B60P1/00 B60S5/00 B65G61/00 G01D9/00 G01M17/00 G01M17/007 G06Q50/00 G07C5/00 G08G1/00 (Core/Invention)
International (IPC 1-7): B60P1/00 B60R16/02 B60S5/00 E02F9/26 G01G19/10 G01G19/40 G01M17/00 G06F15/21 G06F15/48 G06K19/10 G06K19/14 G07C3/00 G07C5/00 G08G1/00
CPC: G01D9/005 G07C5/0858
European: G01D9/00S G07C5/08R2B
US: 177/141 177/25.14 701/29.4 701/35



Family:

Publication number	Publication date	Application number	Application date
AU199064159 A1	19910428	AU19900064159	19901002
AU645761 B2	19940127	AU19900064159	19901002
DE69028544 D1	19961017	DE19906028544	19901002
DE69028544 T2	19970320	DE19906028544T	19901002
EP0495104 A1	19920722	EP19900914238	19901002
EP0495104 A4	19930331	EP19900914238	19901002
EP0495104 B1	19960911	EP19900914238	19901002
JP3118693 A2	19910521	JP19890255247	19891002
JP3197261 A2	19910828	JP19890336695	19891227
JP3243438 A2	19911030	JP19900036242	19900219
US5250761 A	19931005	US19920842389	19920331
WO9105319 A1	19910418	WO1990JP01271	19901002

Priority:

JP19890255247 19891002 JP19890336695 19891227 WO1990JP01271 19901002
JP19900036242 19900219

Probable Assignee: KOMATSU SEISAKUSHO KK

Assignee(s): (std): KOMATSU MFG CO LTD

Assignee(s): KOMATSU SEISAKUSHO KK ; KABUSHIKI KAISHA KOMATSU SEISAKUSHO ; KABUSHIKI KAISHA KOMATSU SEISAKUSHO TOKIO TOKYO JP ; KOMATSU LTD

Inventor(s): (std): KOYANAGI SATORU

Inventor(s): KOYANAGI SATORU C O KAWASAKI FACTORY KAWASAKI SHI ; KOYANAGI SATORU C O KAWASAKI FACTORY KAWASAKI SHI KANAGAWA KEN 210 JP ; SATORU KOYANAGI

Designated states: AT AU BE CH DE DK ES FR GB IT LU NL SE SU US