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Datasheet for the decision of 4 December 2008

T 1498/06 - 3.2.01 Case Number:

Application Number: 97912455.9

Publication Number: 0934858

IPC: B60R 16/02

Language of the proceedings: EN

Title of invention:

Vehicle information communication device and vehicle information communication system

Applicant:

Toyota Jidosha Kabushiki Kaisha

Opponent:

Headword:

Relevant legal provisions:

Relevant legal provisions (EPC 1973):

EPC Art. 54, 56

Keyword:

Novelty (yes)" "Inventive step (yes)"

Decisions cited:

Catchword:



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Boards of Appeal

Chambres de recours

Case Number: T 1498/06 - 3.2.01

DECISION
of the Technical Board of Appeal 3.2.01
of 4 December 2008

Appellant: Toyota Jidosha Kabushiki Kaisha

1, Toyota-cho Toyota-shi

Aichi-ken, 471-8571 (JP)

Representative: Rees, Alexander Ellison

Urquhart-Dykes & Lord LLP

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Decision under appeal: Decision of the Examining Division of the

European Patent Office posted 5 May 2006 refusing European application No. 97912455.9

pursuant to Article 97(1) EPC 1973.

Composition of the Board:

Chairman: S. Crane
Members: J. Osborne

S. Hoffmann

Summary of Facts and Submissions

- The appeal is directed against the decision posted 5 May 2006 to refuse European patent application No. 97 91 2455.9 (EP-A-0 934 858). The application originates from the International application PCT/JP97/04147 which upon entering the regional phase with the EPO was translated into English.
- II. The following state of the art was cited:

D1: US-A-5 442 553

D2: EP-A-0 383 593

D3: US-A-5 278 759

D4: US-A-4 853 850

D5: JP-A-5 195859

D6: JP-A-7 223516

D7: JP-A-6 297983

D8: JP-A-8 095488

D9: JP-A-6 266997

D10: JP-A-3 203770.

III. The examining division found that the subject-matter of claims 1 according to a main request and an auxiliary request was not new with respect to the disclosure, in

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part implicit, of D1. It also indicated its opinion that in the absence of the implicit disclosure the subject-matter would be rendered obvious by the explicit disclosure of D1.

- IV. Following an exchange of correspondence with the board the appellant requested that the contested decision be set aside and a patent granted on the basis of:
 - description pages 1 to 12, 14 to 89,
 - claims 1 to 11, and
 - drawings sheets 1/15 to 15/15
 - all filed with a letter of 24 October 2008.
- V. Claim 1 reads as follows, wherein in comparison with claim 1 as originally filed amendments in the text have been indicated as addition and [deletion]:

"A vehicle information communication device comprising: control means (12i) for a vehicle (10i), which is mounted in the vehicle and is connected to a vehicle onboard device [having] have a characteristic[s] capable of being changed, and which stores a characteristic value[s] for determining the characteristic[s] of the [said] vehicle onboard device and controls the characteristic[s] of the [said] vehicle onboard device using the characteristic value[s]; and communication control means (20₁), which is provided externally of the vehicle and can be connected to the [said] control means for a vehicle of the vehicle by

wireless communication (16_1) , which comprises receiving means for receiving information from the control means for a vehicle and transmitting means for transmitting information to the control means for a vehicle, characterised in that the communication control means reads and [which] stores the characteristic value[s for determining the characteristics of said vehicle onboard device, including previously determined characteristic values of said control means for a vehicle and also reads characteristic values stored in said control means for a vehicle] from a vehicle and reads and stores characteristic values from other vehicles so as to accumulate the characteristic values, and which obtains a new [stored] characteristic value[s] which is determined based on the accumulated [corresponding to the read] characteristic values, the new characteristic value being the same type of the characteristic value stored in the control means for a vehicle, and updates the characteristic value[s] stored in the [said] control means for a vehicle to the new [said obtained] characteristic value[s]."

Claims 2 to 11 relate to features additional to the subject-matter of claim 1.

VI. The appellant argued essentially as follows:

D1 does not disclose that characteristic values are accumulated and that the new values are based on the accumulated values. Moreover, it does not disclose either explicitly or implicitly that a repair for a single vehicle which is made by replacing a "same type" value could also be used to repair a field of vehicles. As a result, the subject-matter of claim 1 is both new

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and involves an inventive step with respect to the disclosure of D1.

Reasons for the Decision

1. The application relates to the setting of a characteristic of a device in a vehicle by means of a variable control parameter ("characteristic value"). The arrangement operates in such a way that the set values of control parameters for each of a plurality of vehicles are transmitted from the respective vehicles to a central device ("communication control means") which accumulates the transmitted values. On the basis of the accumulated values a new value of the control parameter is determined and transmitted back to the vehicle where it replaces the previous value.

Amendments

- 2. The essential changes in claim 1 in comparison with the version as originally filed and the corresponding basis in the translation into English as originally filed are:
 - the control means is operable to control an individual characteristic using an individual characteristic value whereas original claim 1 specified a plurality of characteristics. The individual value is explicitly disclosed in, for instance, page 18, upper half. Moreover, it is clear to the skilled person that the concept to which the application relates is wholly independent of the number of characteristics controlled;

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- the feature that the characteristic values stored in the communication control means includes previously determined characteristic values has been deleted. This is in accordance with the first sentence on page 44 that the received data may either be added to the stored data or replace it;
- the feature has been added that the communication control means is provided externally of the vehicle and can receive and transmit information wirelessly. This was disclosed in respect of the first embodiment on page 52, first full sentence and is a fundamental feature of the second embodiment;
- it has been added that the communication control means reads and stores characteristic values also from other vehicles, which feature was taken from claim 5;
- the new characteristic value is determined on the basis of the accumulated characteristic values whereas according to original claim 1 the values were "corresponding" to "read" values. Basis for the amendment was originally disclosed in respect of the first and second embodiments on page 49, first full sentence together with the paragraph bridging pages 52, 53;
- it has been added that the new characteristic value is of the same type as the accumulated characteristic values. This is not explicitly disclosed. However, it is unambiguously derivable from the original application when considered as a whole. In the description relating to the first

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embodiment parameters (characteristic values) whose conditions are to be set, such as the sound volume generated when a door is locked, are stored in an EEPROM. The value of the parameter is predetermined but may be changed by a user (page 39, first paragraph, final sentence). Data comprising the value of the parameter stored may be transmitted to the dealer acting as the communication control means (page 41, first full sentence). Similarly, data may be transmitted from the dealer to update the parameter stored in the EEPROM (sentence bridging pages 41, 42). Since the updated parameter serves the same purpose as before it is implicit that it is of the same type.

Novelty

- 3. D1 discloses a wireless diagnostic and software upgrade system for vehicles. Each vehicle is equipped with a series of functional components and associated with each component is a control and a sensor for a parameter relevant to the component. Data from the sensors is collected in a memory and then supplied to a transmitter. A series of remote stations wirelessly receive the collected data from a plurality of vehicles, analyse it and communicate it to a base station where it is stored and diagnosed. If analysis of data indicates that a characteristic of a control needs to be changed an appropriate signal is transmitted from the remote station to the vehicle.
- 3.1 One example of a parameter which may be monitored by the system according to D1 is the ignition timing of an internal combustion engine. In the terminology of

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present claim 1 the timing of the ignition would be a "characteristic" and a parameter which is used in order to achieve the desired timing (termed a 'timing constant' in D1) would be a "characteristic value". A record of the ignition timing would be wirelessly transmitted to the remote station and, if it were found to have deviated from a desired range, a signal to set a new timing constant would be transmitted to the vehicle.

3.2 According to D1 the data transmitted for analysis is a controlled parameter monitored by a sensor. In the example disclosed the data transmitted is the ignition timing, expressed as a crankshaft angle, which results from the stored timing constant (characteristic value). The difference between the data transmitted in each direction according to D1 is clear from the following wording of its claim 1:

"a microprocessor coupled to the plurality of sensors and to the memory to receive the dynamic data ... and a transceiver coupled to the microprocessor to receive the dynamic data from the memory and transmit the dynamic data to a remote diagnostic station and to provide program upgrades to the microprocessor in response to signals received from the remote diagnostic station".

3.3 Present claim 1 specifies that the communication control means reads and stores characteristic values, i.e. parameters which are used in the control of devices in the vehicles. Since D1 does not disclose that the communication control means reads and stores characteristic values it follows that it also does not

disclose the features of present claim 1 that the new characteristic value is based on accumulated characteristic values and that the characteristic values are of the same type.

3.4 On the basis of the foregoing the board concludes that the subject-matter of present claim 1 is new with respect to D1. The remaining cited documents are less relevant.

Inventive step

- 4. The subject-matter of claim 1 differs from the disclosure of D1 by the features contained in the characterising portion of the claim. These features have the effect that a parameter which is used in the control of a device in a vehicle may be updated to have a value based on the settings for the same parameter obtained from a plurality of vehicles. A practical application suggested in the description is the chosen level of instrument illumination which may vary in dependence on the environment in which a vehicle is used.
- 4.1 The concept of updating a parameter to have a value based on the settings for the same parameter in a plurality of vehicles is not rendered obvious by the cited state of the art. The teaching of D1 is restricted to diagnosis of problems and their rectification, whereby the data passed in each direction is of a different type. D2 relates to load sharing between on-board and remote computers. The data transferred in both directions is of the same type but is specific to the particular vehicle. The teaching of

D3 concerns the structure and operation of a system for reprogramming non-volatile memories in a vehicle. A remote computer communicates with the vehicle but does not receive and process data from it. D4 discloses an interface for transferring data between on-board and remote diagnostic computers. The remote computer does not transmit data based on information received from a plurality of vehicles. The teaching of D5 relates merely to the transmission of data to a vehicle whilst that of D6 relates only to transmission of data from a vehicle to a workshop. In accordance with the teaching of D7 parameters to achieve desired characteristics of a vehicle are chosen and then data is transferred to the vehicle in order achieve those characteristics. Both D8 and D10 relate only to updating the navigation data held in a vehicle. D9 teaches the transmission of data held between a master database and a slave database on a vehicle.

4.2 On the basis of the foregoing the board concludes that none of the available state of the art renders the subject-matter of present claim 1 obvious. Since claims 2 to 11 contain all features of claim 1 the same applies also to the subject-matter of those claims.

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Order

For these reasons it is decided that:

L.	The	decision	under	appeal	lS	set	aside.

- The case is remitted to the first instance with the order to grant a patent on the basis of the following documents:
 - description pages 1 to 12, 14 to 89,
 - claims 1 to 11, and
 - drawings sheets 1/15 to 15/15

all filed with a letter of 24 October 2008.

The Registrar: The Chairman:

A. Vottner S. Crane