## Appeal decision

Appeal No. 2019-3718

Appellant	DENSO CORPORATION
Patent Attorney	YAHAGI, Kazuyuki
Patent Attorney	NONOBE, Taihei
Patent Attorney	KUBO, Takanori
Appellant	DENSO International America, Inc.
Patent Attorney	YAHAGI, Kazuyuki
Patent Attorney	NONOBE, Taihei
Patent Attorney	KUBO, Takanori

The case of appeal against the examiner's decision of refusal of Japanese Patent Application No. 2017-539056, entitled "Systems and Methods for Delegating Control of Vehicle Features to a Wearable Electronic Device", [international publication on Dec. 8, 2016, WO 2016/194290; and national publication of the translated version on Apr. 19, 2018, National Publication of International Patent Application No. 2018-510802] has resulted in the following appeal decision:

Conclusion

The appeal of the case was groundless.

Reason

No. 1 History of the procedures

The application was originally filed on Apr. 22, 2016 as an International Patent Application (claim of priority under the Paris Convention was received by the foreign receiving office on May 29, 2015, United States (US)), reasons for refusal were notified as of Apr. 27, 2018, a written opinion and a written amendment were submitted

on Jul. 6 of the same year, a decision of refusal was made as of Nov. 22 of the same year, an appeal against the examiner's decision of refusal was requested on Mar. 19, 2019, and, at the same time, a written amendment was submitted.

No. 2 Decision to dismiss amendment on the amendment dated Mar. 19, 2019 [Conclusion of Decision to Dismiss Amendment]

The amendment dated Mar. 19, 2019 shall be dismissed.

#### [Reason]

1 Detail of Amendment

The amendment dated Mar. 19, 2019 (hereinafter, referred to as "the Amendment") is one that includes amendment of the scope of claims, and, when statements of Claim 1 before and after amendment are indicated in a manner adding underlines to the amended portions, these are as follows.

## (1) Claim 1 before amendment

"[Claim 1]

A method for delegating ability to control a vehicle feature to be executed by a vehicle controller to a wearable electronic device, comprising:

wirelessly pairing the wearable electronic device to at least one of a smart device and a vehicle controller onboard a vehicle;

delegating ability to control the vehicle feature to the wearable electronic device using at least one of the smart device or the vehicle controller such that a wearer of the wearable electronic device can control the vehicle feature using the wearable electronic device; and

operating the vehicle feature based on commands generated by the user using the wearable electronic device."

### (2) Claim 1 after amendment

"[Claim 1]

A method for delegating ability to control a vehicle feature to be executed by a vehicle controller to a wearable electronic device, comprising:

wirelessly pairing the wearable electronic device to at least one of a smart device and a vehicle controller onboard a vehicle;

delegating ability to control the vehicle feature to the wearable electronic device using at least one of the smart device or the vehicle controller such that a wearer

of the wearable electronic device can control the vehicle feature using the wearable electronic device; and

the vehicle feature being controlled according to operation of the wearable electronic device by a user that is the wearer of the wearable electronic device, the operation corresponding to a command for operating the vehicle feature."

#### 2 Propriety of the Amendment

## 2-1 Purpose of amendment

The amendment of Claim 1 concerning the Amendment is that amends the matter of "operating the vehicle feature based on commands generated by the user using the wearable electronic device" described in Claim 1 before amendment to the matter of "the vehicle feature being controlled according to operation of the wearable electronic device by a user that is the wearer of the wearable electronic device, the operation corresponding to a command for operating the vehicle feature", is that adds limitation to relation between "wearable electronic device", "user", and "command" regarding "operating the vehicle feature", and the fields of industrial application and the problems to be solved are identical between the invention described in Claim 1 before amendment falls under the restriction of the scope of claims prescribed in Article 17-2(5)(ii) of the Patent Act.

Therefore, whether the invention specified by the matters described in Claim 1 after the Amendment (hereinafter, referred to as "the Amended Invention") complies with the provisions of Article 126(7) of the same Act as applied mutatis mutandis pursuant to the provisions of Article 17-2(6) of the same Act (whether or not the Appellant can be granted a patent independently for it at the time of filing of the patent application) will be examined hereinafter.

## 2-2 Independent requirements for patentability

(1) Described matters in Cited Document and the invention described in Cited Document

In Japanese Unexamined Patent Application Publication No. 2015-89808 (hereinafter, referred to as "Cited Document 1") that was shown as Cited Document 1 in reasons for refusal stated in the examiner's decision and distributed before the priority date of the present application, there are described the following matters (underlines were added by the body, and the same applies hereafter).

(1a) "[Claim 1]

A method for an in-vehicle computing system, comprising:

receiving input from a wearable device; and

automatically adjusting one or more vehicle settings based on the received input."

(1b) "[0001]

The disclosure relates to an in-vehicle computing system and associated vehicle controls based on input from various mobile and wearable devices.

...

[0019]

The in-vehicle computing system 109 may also be communicatively coupled to additional devices operated by the user but located external to the vehicle 102, such as one or more wearable devices 150. In the depicted embodiment, the wearable device 150 is located outside of the vehicle 102, although it will be appreciated that in alternate embodiments, the wearable device may be located inside the cabin 100. As elaborated at FIG. 2, the wearable device may include a portable electronic device, an electronic wrist band, an electronic head band, a portable music player, an electronic activity tracking device, a pedometer, a smart-watch, a GPS system, etc. The wearable device 150 may be connected to the in-vehicle computing system via a communication link 136 which may be wired or wireless, as discussed with reference to the communication link 130, and configured to provide two-way communication between the wearable device and the in-vehicle computing system. For example, the wearable device 150 may include one or more sensors, and the communication link 136 may transmit sensor output from the wearable device 150 to the in-vehicle computing system 109 and the touch screen 108. Input received from the wearable device 150 may be indicative of various aspects of the user's physical condition, surroundings, etc. The in-vehicle computing system 109 may analyze the input received from the wearable device 150, such as while the user is outside the vehicle, and assess the user's state (e.g., condition, potential preferences, etc.) and select settings for various in-vehicle systems (such as a climate control system or an audio system) based on the assessment.

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[0033]

<u>The in-vehicle computing system 300 may include one or more processors</u> <u>including an operating system processor 314 and an interface processor 320.</u> The operating system processor 314 may execute an operating system on the in-vehicle computing system, and control input/output, display, playback, and other operations of the in-vehicle computing system. <u>The interface processor 320 may interface with a</u> vehicle control system 330 via an inter-vehicle system communication module 322.

[0041]

<u>The vehicle control system 330 may include controls for controlling aspects</u> of various vehicle systems 331 involved in different in-vehicle functions. These may <u>include</u>, for example, controlling aspects of a vehicle audio system 332 for providing audio entertainment to the vehicle occupants, <u>aspects of a climate control system 334</u> for meeting the cabin cooling or heating needs of the vehicle occupants, as well as aspects of a telecommunication system 336 for enabling vehicle occupants to establish telecommunication linkage with others.

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## [0046]

In addition to receiving control instructions from the in-vehicle computing system 300, the vehicle control system 330 may also receive input from one or more external devices 340 operated by the user, such as from a wearable device 346 and a mobile device 342. This allows aspects of the vehicle systems 331 and vehicle controls 361 to be controlled based on user input received from the external devices 340.

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## [0049]

FIG. 4 is a flow chart of a method 400 of operating an in-vehicle computing system to control one or more vehicle systems based on user input received from a mobile device and/or a wearable device. For example, the method 400 may be performed by the in-vehicle computing system 300 of FIG. 3 based on input from wearable devices 206-210 and a mobile device 204 of FIG. 2. [0050]

Method 400 includes, at 402, receiving input from a wearable device. Specifically, input may be received at the in-vehicle computing system from one or more wearable devices. The wearable devices may be worn by a user and may include one or more wearable sensors such as a heart rate sensor, a temperature sensor, a perspiration level sensor, a pedometer, etc. Receiving input from the wearable device includes receiving sensor signals from the various wearable sensors of the wearable device based on interaction of the user with the wearable device. In one example, at 403, where the wearable device is communicatively coupled to the in-vehicle computing system via a communication link or network, receiving input from the wearable device includes receiving input directly from the wearable device. In another example, at 404, where the wearable device is communicatively coupled to a mobile device (e.g., via a

communication link or network) and in turn, when the mobile device is communicatively coupled to the in-vehicle computing system via a communication link or network, receiving input from the wearable device includes receiving input indirectly from the wearable device via the mobile device.

[0051]

At 406, the method includes processing the sensor signals at the in-vehicle computing system to infer a user state. The input received from the wearable device may be indicative of various aspects of the user's state including, but not limited to, a physical condition 407 of the user, a cognitive load 408 of the user, a physical activity level of the user, a media preference 409 of the user, and the user's environment 410. Input regarding the physical condition of the user may include, for example, input regarding a heart rate or pulse rate of the user (from a heart rate or pulse rate sensor of the wearable device), a sweat level of the user (from a perspiration level sensor), a body temperature (from a temperature sensor), etc. A physical activity level of the user may include input as to whether the user is running, jogging, walking, or sprinting (such as from a pedometer). Input regarding the user cognitive load may include input indicative of a stress level of the user (e.g., based on a combination of outputs from a heart rate sensor, a blood pressure sensor, a blood sugar sensor, etc.). Input regarding the user environment may include input regarding the user's geographic location, the current and expected weather at the location, ambient temperature and humidity conditions, ambient noise level, etc.

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[0053]

At 418, the method includes automatically transmitting control instructions from the in-vehicle computing system to one or more vehicle systems to apply the selected settings to the target vehicle systems. For example, <u>if the input from the</u> <u>wearable device is indicative of a high physical activity level of the user, the in-vehicle</u> <u>computing system may infer that the user is likely to desire air-conditioning.</u> Thus, without requiring input from the user, the in-vehicle computing system may automatically adjust the cabin climate control settings to increase cabin cooling, or increase flow of cooled air to the user's section of the cabin. Accordingly, settings for the air vents and an air conditioner may be determined and transmitted to the climate control system.

[0054]

In this way, at 412-418, <u>the in-vehicle computing system automatically adjusts</u> vehicle settings by receiving sensed information from a wearable device and/or a mobile

device and by using the sensed information before receiving some any sort of user command from the user. This includes before receiving a command from the user at the in-vehicle computing system, such as via the user pushing a button, or touch screen, etc., as well as before receiving a command from the user at the in-vehicle computing system via the wearable device or the mobile device, such as via the user pressing a button of the mobile device, providing a voice command from the mobile device to the in-vehicle computing system, etc.

車内コンピューティングシステム 300 301 オペレーティン ーザインター 格納デバイス マイクロホン グシステムプロ 308 メモリ 316 フェース 302 セッサ 314 318 インターフェースプロ 音声処理ユニッ センササブシス セッサ 320 Ŀ テム 310 304 車両間システム 通信モジュール 外部のデバイス 322 インターフェー アンテナ 306 7 312 360 3 車両制御システム 330 外部のデバイス 340 車両システム 331 車丙制御装置 携帯デバイス 342 アプリケーション 344 361 オーディオシステム 332 ウェアラブルデバイス 346 ハンドル制御 環境制御システム 334 ウェアラブルセンサ 350 アプリケーション 348 装置 362 電気通信システム 336 1 ブルートゥースデバイス 352 外部の格納デバイス354 . .

(1c) In Cited Document 1, there are shown the following figures. [☑ 3]

【図3】

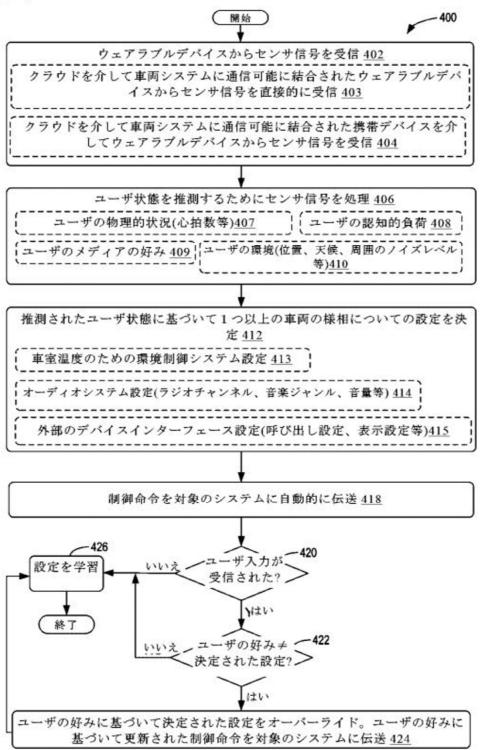
[FIG. 3]

車内コンピューティングシステム 300 In-vehicle computing system 300 マイクロホン 302 Microphone 302 格納デバイス 308 Storage device 308 オペレーティングシステムプロセッサ 314 Operating system processor 314 メモリ 316 Memory 316 ユーザインターフェース 318 User interface 318 音声処理ユニット 304 Speech processing unit 304 センササブシステム 310 Sensor subsystem 310 アンテナ 306 Antenna 306

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外部のデバイスインターフェース 312 External device interface 312 インターフェースプロセッサ 320 Interface processor 320 車両間システム通信モジュール 322 Inter-vehicle system communication module 322 外部のデバイス 340 External devices 340 携帯デバイス 342 Mobile device 342 アプリケーション 344 Application 344 ウェアラブルデバイス 346 Wearable device 346 ウェアラブルセンサ 350 Wearable sensors 350 ブルートゥースデバイス 352 Bluetooth devices 352 外部の格納デバイス 354 External storage devices 354 車両制御システム 330 Vehicle control system 330 車両システム 331 Vehicle system 331 オーディオシステム 332 Audio system 332 環境制御システム 334 Climate control system 334 電気通信システム 336 Telecommunication system 336 車両制御装置 361 Vehicle controls 361 ハンドル制御装置 362 Steering control 362

【図4】



【**义** 4 】 [FIG. 4]

開始 Start

ウェアラブルデバイスからセンサ信号を受信 402 Receive sensor

signals from wearable device 402

クラウドを介して車両システムに通信可能に結合されたウェアラブルデバイス からセンサ信号を直接的に受信 403 Receive sensor signals directly from wearable device communicatively coupled to vehicle system via cloud 403 クラウドを介して車両システムに通信可能に結合された携帯デバイスを介して ウェアラブルデバイスからセンサ信号を受信 404 Receive sensor signals from wearable device via mobile device communicatively coupled to vehicle system via cloud 404 ユーザ情報を推測するためにセンサ信号を処理 406 Process sensor signal to infer user information 406 ユーザ物理的状況(心拍数等) 407 User physical situation (heart rate, etc.) 407 ユーザの認知的負荷 408 User cognitive load 408 ユーザのメディアの好み 409 User media preference 409 ユーザの環境(位置、天候、周囲のノイズレベル等) 410 User environment (location, weather, ambient noise level, etc.) 410 推測されたユーザ状態に基づいて1つ以上の車両の様相についての設定を決定 4 1 2 Determine settings for one or more vehicle aspects based on inferred user state 412 車室温度のための環境制御システム設定 413 Climate control system setting for cabin temperature 413 オーディオシステム設定(ラジオチャンネル、音楽ジャンル、音量等) 4 1 4 Audio system setting (radio channel, music genre, volume, etc.) 414 外部のデバイスインターフェース設定(呼び出し設定、表示設定等) 415 External device interface setting (call settings, display setting, etc.) 415 制御命令を対象のシステムに自動的に伝送 418 Automatically transmit control instructions to target systems 418 ユーザ入力が受信された? 420 User input received? 420 ユーザの好み≠決定された設定? 422 User preference ≠ Determined settings? 422 はい YES いいえ NO 設定を学習 426 Learn settings 426 終了 End ユーザの好みに基づいて決定された設定をオーバーライド。ユーザの好みに基

づいて更新された制御命令を対象のシステムに伝送 424 Override determined settings based on user preference. Transmit updated control instructions to target system based on user preference. 424

As above, in Cited Document 1 (summarized portions (1a)-(1c)), there is disclosed a technology that "relates to an in-vehicle computing system and associated vehicle controls based on input from various mobile and wearable devices" ([0001]), and, in Claim 1 of the scope of claims thereof, there is a description as shown in the summarized portion (1a) as a "method for an in-vehicle computing system".

In addition, according to the summarized portion (1b), the following matters can be recognized regarding an embodiment of the above-mentioned "method for invehicle computing system".

a That in-vehicle computing system 300 may include one or more processors, including an operating system processor 314 and an interface processor 320, and

the interface processor 320 may interface with a vehicle control system 330 via an inter-vehicle system communication module 322. ([0033])

b That vehicle control system 330 may include controls for controlling aspects of various vehicle systems 331 involved in different in-vehicle functions, and these may include control of aspects of a climate control system 334 for meeting cabin cooling or heating needs of the vehicle occupants. ([0041])

c That, in addition to receiving control instructions from the in-vehicle computing system 300, the vehicle control system 330 may also receive input from one or more external devices 340 operated by a user, such as from a wearable device 346 and a mobile device 342, and this enables aspects of vehicle systems 331 and vehicle controls 361 to be controlled based on user input received from the external devices 340. ([0046])

d That in-vehicle computing system is operated to control one or more vehicle systems based on user input received from the mobile device and/or the wearable device. ([0049])

e That, when the wearable device is communicatively coupled to the in-vehicle computing system via a communication link or network, receiving input from the wearable device includes receiving input directly from the wearable device. ([0050])

f That, when input from the wearable device indicates a high physical activity level of the user, the in-vehicle computing system may infer that the user is likely to desire air conditioning, and, by this, without requiring input from the user, the in-vehicle computing system may automatically adjust cabin climate control settings to increase cabin cooling or to increase a flow of cooled air to the section of the user in the cabin. ([0053])

g That the in-vehicle computing system automatically adjusts vehicle settings by receiving sensed information from a wearable device and/or a mobile device and by using the sensed information before receiving any sort of user command from the user, and this includes before receiving a command from the user at the in-vehicle computing system, such as via the user pushing a button, or touch screen, etc., as well as before receiving a command from the user at the in-vehicle computing system via the wearable device or the mobile device, such as via the user pressing a button of the mobile device, providing a voice command from the mobile device to the in-vehicle computing system. ([0054])

According to the above, in Cited Document 1, it is recognized that there is described the following invention (hereinafter, referred to as "Cited Invention").

"A method for an in-vehicle computing system 300, comprising:

receiving input from a wearable device 346; and

automatically adjusting one or more vehicle settings based on the received input, wherein

the in-vehicle computing system 300 may include one or more processors including an operating system processor 314 and an interface processor 320,

the interface processor 320 may interface with a vehicle control system 330 via an inter-vehicle system communication module 322,

the vehicle control system 330 may include controls for controlling aspects of various vehicle systems 331 involved in different in-vehicle functions, and these may include control of aspects of a climate control system 334 for meeting cabin cooling or heating needs of the vehicle occupants,

in addition to receiving control instructions from the in-vehicle computing system 300, the vehicle control system 330 may also receive input from one or more external devices 340 operated by a user, such as from a wearable device 346 and a mobile device 342, and this enables aspects of vehicle systems 331 and vehicle controls 361 to be controlled based on user input received from the external devices 340,

the in-vehicle computing system 300 is operated to control one or more vehicle systems 331 based on the user input received from the mobile device 342 and/or wearable device 346,

when the wearable device 346 is communicatively coupled to the in-vehicle

computing system 300 via a communication link or network, receiving input from the wearable device 346 includes receiving input directly from the wearable device 346,

when input from the wearable device 346 indicates a high physical activity level of the user, the in-vehicle computing system 300 may infer that the user is likely to desire air conditioning, and, by this, without requiring input from the user, the in-vehicle computing system 300 may automatically adjust cabin climate control settings to increase cabin cooling or to increase a flow of cooled air to the section of the user in the cabin, and wherein

the in-vehicle computing system 300 automatically adjusts vehicle settings by receiving sensed information from the wearable device 346 and/or the mobile device 342 and by using the sensed information before receiving any sort of user command from the user, and this includes before receiving a command from the user at the invehicle computing system, such as via the user pushing a button, or touch screen, etc., as well as before receiving a command from the user at the in-vehicle computing system via the wearable device 346 or the mobile device 342, such as via the user pressing a button of the mobile device 342, providing a voice command from the mobile device 342 to in-vehicle computing system 300."

### (2) Comparison

The Amended Invention and Cited Invention will be compared.

A Since the "in-vehicle computing system 300" of Cited Invention is one that "may include one or more processors including an operating system processor 314 and an interface processor 320", and it is also obvious that it is mounted on a vehicle, it corresponds to the "vehicle controller" and "vehicle controller onboard a vehicle" of the Amended Invention.

B Since the "wearable device 346" of Cited Invention, as described in Cited Document 1, "may include a portable electronic device, an electronic wrist band, an electronic head band, a portable music player, an electronic activity tracking device, a pedometer, a smart-watch, a GPS system, etc." ([0019]), positioned as an "electronic device", it corresponds to the "wearable electronic device" of the Amended Invention.

C Cited Invention includes "when the wearable device 346 is communicatively coupled to the in-vehicle computing system 300 via a communication link or network, receiving input from the wearable device 346 includes receiving input directly from the wearable device 346".

Here, in Cited Document 1, it is described that "the wearable device 150 may be connected to the in-vehicle computing system via a communication link 136 which may be wired or wireless, ..., and configured to provide two-way communication between the wearable device and the in-vehicle computing system." ([0019]), and, thus, it is technically obvious that the above "communication link" in Cited Invention includes a communication link according to "wireless". In addition, it is also technically obvious that, in order to "communicatively couple" the "wearable device 346" to the "in-vehicle computing system 300" by such "communication link", those should be paired wirelessly.

Therefore, taking also the above-mentioned A and B into consideration, "the wearable device 346 is communicatively coupled to the in-vehicle computing system 300 via a communication link or network" of Cited Invention corresponds to "wirelessly pairing the wearable electronic device to at least one of a smart device and a vehicle controller onboard a vehicle" of the Amended Invention.

D It is also possible to refer to "aspects of various vehicle systems 331 involved in different in-vehicle functions", "aspects of a climate control system 334 for meeting cabin cooling or heating needs of vehicle occupants", and "aspects of vehicle systems 331 and vehicle controls 361" of Cited Invention as "a feature of a vehicle" or a "vehicle feature" which is possessed by each element constituting a vehicle.

Furthermore, Cited Invention is an invention in which "in addition to receiving control instructions from the in-vehicle computing system 300, the vehicle control system 330 may also receive input from one or more external devices 340 operated by a user, such as from a wearable device 346 and a mobile device 342, and this enables aspects of vehicle systems 331 and vehicle controls 361 to be controlled based on user input received from the external devices 340", and is an invention in which "the in-vehicle computing system 300 is operated to control one or more vehicle systems 331 based on the user input received from the mobile device 342 and/or wearable device 346". And, since it is obvious at least that, by these constitutions, it is constituted so as to enable a user wearing the wearable device 346 to control a feature of a vehicle using the wearable device 346, it can be said that such constitution and the constitution of the Amended Invention, "delegating ability to control the vehicle feature to the wearable electronic device using at least one of the smart device or the vehicle controller such that a wearer of the wearable electronic device can control the vehicle feature using the wearable electronic device", are common within the limitation of constitution "enabling a wearer of the wearable electronic device to control a vehicle feature using the wearable electronic device".

E "A method for an in-vehicle computing system 300" of Cited Invention and "a method for delegating ability to control a vehicle feature to be executed by a vehicle

controller to a wearable electronic device" of the Amended Invention are common within the limitation of "method".

According to the above, the Amended Invention and Cited Invention are identical in the point of being

### "A method, comprising:

wirelessly pairing a wearable electronic device to at least one of a smart device and a vehicle controller onboard a vehicle, and

enabling a wearer of the wearable electronic device to control a vehicle feature using the wearable electronic device.", and are different in the following point although not quite satisfactorily.

### <Different Feature>

A point that the Amended Invention is one in which "method" is "a method for delegating ability to control a vehicle feature to be executed by a vehicle controller to a wearable electronic device", and is one that "comprises: delegating ability to control the vehicle feature to the wearable electronic device using at least one of the smart device or the vehicle controller; and the vehicle feature being controlled according to operation of the wearable electronic device by a user that is the wearer of the wearable electronic device, the operation corresponding to a command for operating the vehicle feature", whereas

Cited Invention is one in which "method" is "a method for an in-vehicle computing system 300", and is one in which "the vehicle control system 330 may include controls for controlling aspects of various vehicle systems 331 involved in different in-vehicle functions, and these may include control of aspects of a climate control system 334 for meeting cabin cooling or heating needs of the vehicle occupants; in addition to receiving control instructions from the in-vehicle computing system 300, the vehicle control system 330 may also receive input from one or more external devices 340 operated by a user, such as from a wearable device 346 and a mobile device 342, and this enables aspects of vehicle systems 331 and vehicle controls 361 to be controlled based on user input received from the external devices 340; the in-vehicle computing system 300 is operated to control one or more vehicle systems 331 based on the user input received from the mobile device 342 and/or wearable device 346".

### (3) Judgment

The above-mentioned different feature is examined.

### А

(A) Cited Invention is an invention in which "in addition to receiving control instructions from the in-vehicle computing system 300, the vehicle control system 330 may also receive input from one or more external devices 340 operated by a user, such as from a wearable device 346 and a mobile device 342, and this enables aspects of vehicle systems 331 and vehicle controls 361 to be controlled based on user input received from the external devices 340", and it is technically obvious that, in order to "enable" the above-mentioned "aspects of vehicle systems 331 and vehicle controls 361" "to be controlled based on user input received from the external device 346 and a mobile device 342", ability for controlling a vehicle feature such as at least "aspects of vehicle systems 331 and vehicle controls 361" is delegated to the above-mentioned "wearable device 346".

(B) Furthermore, Cited Invention is one in which the "in-vehicle computing system 300 is operated to control one or more vehicle systems 331 based on the user input received from the mobile device 342 and/or wearable device 346", and is one that is constituted in such a way that "when the wearable device 346 is communicatively coupled to the invehicle computing system 300 via a communication link or network, receiving input from the wearable device 346 includes receiving input directly from wearable device 346". Therefore, it is also obvious that delegation of ability for controlling a vehicle feature such as "aspects of vehicle systems 331 and vehicle computing system 300".

(C) Then, while Cited Invention is one in which "when input from the wearable device 346 indicates a high physical activity level of the user, the in-vehicle computing system 300 may infer that the user is likely to desire air conditioning, and, by this, without requiring input from the user, the in-vehicle computing system 300 may automatically adjust cabin climate control settings to increase cabin cooling or to increase a flow of cooled air to the section of the user in the cabin", it "comprises that, the in-vehicle computing system 300 automatically adjusts vehicle settings by receiving sensed information from the wearable device 346 and/or the mobile device 342 and by using the sensed information before receiving any sort of user command from the user, and this includes before receiving a command from the user at the in-vehicle computing system via the user pushing a button, or touch screen, etc., as well as before receiving a command from the user at the in-vehicle computing system via the wearable device 342, such as via the user pressing a button of the user at the user pressing a button of the mobile device 342 to in-

vehicle computing system 300". Therefore, it is also obvious, from "via the wearable device 346 or the mobile device 342, such as via the user pressing a button of the mobile device 342" mentioned above, that commands for controlling a vehicle feature are provided "to the in-vehicle computing system 300".

(D) Therefore, it is also possible to interpret the constitution of Cited Invention concerning control of "vehicle systems 331" as "comprising: delegating ability to control the vehicle feature to the wearable electronic device using at least one of the smart device or the vehicle controller; and the vehicle feature being controlled according to operation of the wearable electronic device by a user that is the wearer of the wearable electronic device, the operation corresponding to a command for operating the vehicle feature" of the Amended Invention concerning the aforementioned different feature, and, in addition, it is also possible to refer to "a method for the in-vehicle computing system 300" of Cited Invention as "a method for delegating ability to control a vehicle feature to be executed by a vehicle controller to a wearable electronic device". From the above, the aforementioned different feature is not a substantive different feature.

(E) Accordingly, it can be said that the Amended Invention is identical with Cited Invention.

B In addition, even if the aforementioned different feature is a substantive different feature,

(A) In Cited Invention, it should be said that it is recognized by a person skilled in the art as common general technical knowledge that it is necessary to delegate ability for controlling a vehicle feature such as at least "aspects of vehicle systems 331 and vehicle controls 361" to the above mentioned "wearable device 346" to "enable" the abovementioned "aspects of vehicle systems 331 and vehicle controls 361" "to be controlled based on user input received from the external devices 340" "such as from a wearable device 346 and a mobile device 342", and, furthermore, Cited Invention is constituted in such a way that "the in-vehicle computing system 300 is operated to control one or more vehicle systems 331 based on the user input received from the mobile device 342 and/or wearable device 346; and, when the wearable device 346 is communicatively coupled to the in-vehicle computing system 300 via a communication link or network, receiving input from the wearable device 346 includes receiving input directly from the wearable device 346". Therefore, no significant difficulty is recognized in using the in-vehicle computing system 300 at the time of delegating ability for controlling a vehicle feature to the above wearable device 346. (B) In addition, Cited Invention is one in which "in addition to receiving control instructions from the in-vehicle computing system 300, the vehicle control system 330 may also receive input from one or more external devices 340 operated by a user, such as from a wearable device 346 and a mobile device 342, and this enables aspects of vehicle systems 331 and vehicle controls 361 to be controlled based on user input received from the external devices 340", and the "in-vehicle computing system 300" "includes, before receiving a command from the user at the in-vehicle computing system via the wearable device 346 or the mobile device 342, such as via the user pressing a button of the mobile device 342, providing a voice command from the mobile device 342 to the in-vehicle computing system 300". Therefore, it can be concluded that it is also within an assumed range for a person skilled in the art that, by pressing a "button" provided in the above-mentioned "wearable device 346", a vehicle feature is controlled, in effect, the vehicle feature is controlled according to operation of the operation corresponding to commands for operating the vehicle feature.

(C) Accordingly, even if the aforementioned different feature is a substantive different feature, it can be said that the constitution of the Amended Invention concerning the aforementioned different feature would have been invented by a person skilled in the art with ease based on Cited Invention.

(D) Then, also the effect of the Amended Invention falls within a scope that can be predicted by a person skilled in the art based on Cited Invention, and thus it cannot be said to be a special one.

C Meanwhile, the appellant alleges in the written appeal as of Mar. 19, 2019 (the section of "3.(4)") that "the wearable device of the invention of Cited Document 1 is nothing but one that provides to an in-vehicle computing system user data as information for inferring settings that have potential to be selected by a user or are likely to be preferred by the user. In other words, in Cited Document 1, there is no description at all that operation by a user to a wearable device corresponds to commands for operating a vehicle feature, and that, according to the commands (user operation), the vehicle feature is controlled.". Therefore, such allegation will be examined hereinafter.

Since Cited Invention is one in which "when input from the wearable device 346 indicates a high physical activity level of the user, the in-vehicle computing system 300 may infer that the user is likely to desire air conditioning, and, by this, without requiring input from the user, the in-vehicle computing system 300 may automatically adjust cabin climate control settings to increase cabin cooling or to increase a flow of cooled air to the section of the user in the cabin", the wearable device 346 is also, as alleged by the appellant, one that provides to an in-vehicle computing system user data as information for inferring settings that have potential to be selected by a user or likely to be preferred by the user.

However, it should be said that it is also obvious or within an assumed range that, in addition to providing information for such inferring, Cited Invention provides, as described in the above-mentioned A and B, commands for controlling a vehicle feature to the in-vehicle computing system 300 by pressing a button of the wearable device 346.

In effect, in Cited Document 1, it is described that "the in-vehicle computing system automatically adjusts vehicle settings by receiving sensed information from a wearable device and/or a mobile device, and by using the sensed information before receiving some any sort of user command from the user. This includes before receiving a command from the user at the in-vehicle computing system, such as via the user pushing a button, or touch screen, etc., as well as before receiving a command from the user at the in-vehicle computing system via the wearable device or the mobile device, such as via the user pressing a button of the mobile device, providing a voice command from the mobile device to the in-vehicle computing system." ([0054]), and thus it can be said that it is also described or suggested that a vehicle feature may be controlled by pressing a button of the wearable device 346.

Therefore, the above-mentioned allegation by the appellant cannot be adopted.

#### D Summary

As above, the Amended Invention is identical with Cited Invention, or would have been invented by a person skilled in the art with ease based on Cited Invention, and thus the appellant cannot be granted a patent for it independently at the time of filing of the patent application.

Therefore, the Amendment violates the provisions of Article 126(7) of the Patent Act as applied mutatis mutandis pursuant to the provisions of Article 17-2(6) of the same Act, and thus the Amendment should be dismissed under the provisions of Article 53(1) of the same Act which is applied mutatis mutandis by replacing certain terms pursuant to Article 159(1) of the same Act.

No. 3 Regarding the invention 1 The Invention As the Amendment was dismissed as above, it is recognized that the invention according to Claim 1 of the present application is as described in the matters specified by Claim 1 of the scope of claims amended by the amendment dated Jul. 6, 2018, and the invention according to Claim 1 of the present application (hereinafter, referred to as "the Invention") is as shown in the above-mentioned "No. 2 1 (1) Claim 1 before amendment".

## 2 Reasons for refusal stated in the examiner's decision

The reasons for refusal stated in the examiner's decision include the following reasons.

(1) The invention according to Claim 1 of this application is the invention described in the following Cited Document 1 distributed in Japan or a foreign country before the filing date (before the priority date), and, therefore, falls under Article 29(1)(iii) of the Patent Act and the appellant should not be granted a patent for it.

(2) The invention according to Claim 1 of this application could have been invented with ease by a person ordinarily skilled in the art of the invention before the application was filed based on the invention described in the following Cited Document 1 distributed in Japan or a foreign country before the filing date (before the priority date), and, therefore, the appellant should not be granted a patent for it under the provisions of Article 29(2) of the Patent Act.

Cited Document 1: Japanese Unexamined Patent Application Publication No. 2015-89808

### 3 Cited Document

Regarding Claim 1 before amendment, Cited Document 1 cited in the reasons for refusal stated in the examiner's decision and the described matters thereof are as has been described in the above-mentioned "No. 2 2 2-2 (1)".

### 4 Judgment by the body

The Invention is as shown in the above-mentioned "No. 2 1 (1) Claim 1 before amendment", and is one that is made by eliminating the limitation associated with "operating the vehicle feature" described in the above-mentioned "No. 2 2 2-1" from the Amended Invention.

Then, the Amended Invention that corresponds to an invention that includes the matters specifying the invention of the Invention, and, further, adds other limitations is, as described in the above-mentioned "No. 2 2 2-2 (3)", identical with Cited Invention or would have been invented by a person skilled in the art with ease based on Cited Invention, and, therefore, it can be said that also the Invention is, by similar reason, identical with Cited Invention or would have been invented by a person skilled in the art with ease based on Cited Invention.

# No. 4 Closing

As above, the Invention is identical with Cited Invention or would have been invented by a person skilled in the art with ease based on Cited Invention, and thus the appellant should not be granted a patent for the Invention because it falls under Article 29(1)(iii) of the Patent Act, or should not be granted a patent for it in accordance with the provisions of Article 29(2) of the Patent Act.

Accordingly, without examining the inventions according to the remaining claims, the present application should be rejected.

Therefore, the appeal decision shall be made as described in the conclusion.

Jan. 20, 2020

Chief administrative judge: S Administrative judge: U Administrative judge:

SHIMADA, Shinichi UJIHARA, Yasuhiro DEGUCHI, Masaya