

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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VOLKSWAGEN GROUP OF AMERICA, INC.,  
Petitioner,

v.

JOAO CONTROL & MONITORING SYSTEMS, LLC,  
Patent Owner.

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Case IPR2015-01610  
Patent 6,542,076 B1

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Before DAVID C. MCKONE, STACEY G. WHITE, JASON J. CHUNG,  
*Administrative Patent Judges.*

Opinion for the Board filed by *Administrative Patent Judge*, WHITE.

Opinion Concurring filed by *Administrative Patent Judge*, CHUNG.

WHITE, *Administrative Patent Judge.*

FINAL WRITTEN DECISION  
*Inter Partes* Review  
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

## I. INTRODUCTION

Volkswagen Group of America, Inc. (“Petitioner”) filed a Petition requesting *inter partes* review of claims 3, 18, 65, 67, 68, 70, 73, 91, 94, 96, 103, 110, 116, 119, 120, and 205 of U.S. patent No. 6,542,076 B1 (Ex. 1001, “the ’076 patent”) pursuant to 35 U.S.C. §§ 311–319. Joao Control & Monitoring Systems, LLC, (“Patent Owner”) filed a Preliminary Response. (Paper 6). Based on our review of these submissions, we instituted *inter partes* review of claims 3, 18, 65, 67, 68, 70, 73, 91, 94, 96, 103, 110, 116, 119, 120 and 205 of the ’076 patent on grounds of unpatentability asserted under 35 U.S.C. §§ 102, 103. Paper 11 (“Dec.”). Specifically, we authorized this *inter partes* review to proceed as to the following grounds:

| Reference(s)                                                                     | Basis | Claim(s) Challenged                                        |
|----------------------------------------------------------------------------------|-------|------------------------------------------------------------|
| Kniffin <sup>1</sup>                                                             | § 102 | 3, 18, 65, 67, 68, 70, 73, 91, 103, 116, 119, 120, and 205 |
| Kniffin and one of Spaur, <sup>2</sup> Behr, <sup>3</sup> or Kubler <sup>4</sup> | § 103 | 94 and 110                                                 |
| Kniffin and Neely <sup>5</sup>                                                   | § 103 | 96                                                         |
| Ryoichi <sup>6</sup>                                                             | § 102 | 3, 18, 65, 67, 70, 73, 91, 103, 116, 119, and 205          |
| Ryoichi and one of Spaur, Behr, or Kubler                                        | § 103 | 94 and 110                                                 |
| Ryoichi and Neely                                                                | § 103 | 68, 96, and 120                                            |

*Id.* at 24–25.

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<sup>1</sup> U.S. Patent No. 6,072,402 (Ex. 1010) (“Kniffin”).

<sup>2</sup> U.S. Patent No. 5,732,074, filed Jan. 16, 1996 (Ex. 1020) (“Spaur”).

<sup>3</sup> U.S. Patent No. 5,808,566, filed June 23, 1995 (Ex. 1021) (“Behr”).

<sup>4</sup> U.S. Patent No. 5,726,984, filed Oct. 5, 1995 (Ex. 1022) (“Kubler”).

<sup>5</sup> U.S. Patent No. 4,602,127 (Ex. 1018) (“Neely”).

<sup>6</sup> U.S. Patent No. 5,113,427 (Ex. 1011) (“Ryoichi”).

Patent Owner filed a Patent Owner's Response (Paper 22, "PO Resp."), and Petitioner filed a Reply (Paper 26, "Reply"). No oral hearing was conducted. Paper 20.

We have jurisdiction under 35 U.S.C. §318(a) and 37 C.F.R. § 42.73. For the reasons discussed below, Petitioner has demonstrated by a preponderance of the evidence that claims 3, 18, 65, 67, 68, 70, 73, 91, 94, 96, 103, 110, 116, 119, 120, and 205 of the '076 patent are unpatentable.

*A. Related Proceedings*

The parties inform us that the '076 patent is at issue in approximately one dozen lawsuits pending in courts around the country. Paper 17, Pet. 1–2. In addition, *ex parte* reexamination No. 90/013,302 was filed with respect to the '076 patent and has been stayed in light of this proceeding. Paper 16. The '076 patent also is the subject of a co-pending petition for *inter partes* review (IPR2015-01508).

*B. The '076 patent*

The '076 patent describes a control, monitoring, and/or security apparatus and method for vehicles. Ex. 1001, 1:25–32. The apparatus described in the '076 patent allows an owner, occupant, or other authorized individual to control or to perform various monitoring and security tasks in regards to a vehicle from a remote location and at any time. *Id.* at 3:5–11.

An embodiment of the apparatus of the '076 patent includes a transmitter system which is "a remote system, which may or may not be physically connected to the remainder of the apparatus. Further, the transmitter system is not located in the [vehicle] . . . , but rather, is located external from, and/or separate and apart from, the vehicle." *Id.* at 3:50–56.

The apparatus also includes a CPU that is connected electrically and/or linked to one or more vehicle equipment systems (e.g., vehicle ignition or anti-theft systems). *Id.* at 4:35–37; 4:61–5:14. The vehicle equipment systems may be activated, de-activated, reset, or controlled by the apparatus. *Id.* at 5:15–18. This activation or control may be achieved by a user entering a code on the transceiver of the transmitter system. *Id.* at 6:30–36. The code is transmitted to the CPU and then the CPU communicates with the appropriate vehicle equipment system. *Id.* at 7:16–21.

*C. Illustrative Claim*

As noted above, Petitioner challenges claims 3, 18, 65, 67, 68, 70, 73, 91, 103, 116, 119, 120, and 205 of the '076 patent, of which claims 3, 73, and 205 are independent. Claim 3 is illustrative of the challenged claims and is reproduced below:

3. A control apparatus, comprising:

a first control device, wherein the first control device at least one of generates a first signal and transmits a first signal for at least one of activating, de-activating, disabling, and re-enabling, at least one of a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, and a vehicle appliance, of a vehicle, wherein the first control device is located at the vehicle,

wherein the first control device at least one of generates the first signal and transmits the first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the vehicle, wherein the second signal is transmitted from the second control device to the first control device, wherein the second signal is automatically received by the first control device, and further wherein the second control device at least one of

generates the second signal and transmits the second signal in response to a third signal,

wherein the third signal is at least one of generated by a third control device and transmitted from a third control device, wherein the third control device is located at a location which is remote from the vehicle and remote from the second control device, wherein the third signal is transmitted from the third control device to the second control device, and further wherein the third signal is automatically received by the second control device.

## II. CLAIM CONSTRUCTION

As acknowledged by the parties, the '076 patent has expired. *See* Pet. 9; PO Resp. 8. We construe expired patent claims according to the principles set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). *See In re Rambus*, 694 F.3d 42, 46 (Fed. Cir. 2012). “In determining the meaning of the disputed claim limitation, we look principally to the intrinsic evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips*, 415 F.3d at 1312–17). A patentee may act as a lexicographer by giving a term a particular meaning in the specification with “reasonable clarity, deliberateness, and precision.” *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

### A. Term Preliminarily Construed in the Decision to Institute

For purposes of the Decision to Institute, we construed the term “control device.” Dec. 5–9. Neither party raised any concerns regarding this construction during trial. *See* PO Resp. 10–11; Reply 1. Based on our review of the full record, we discern no reason to modify or further discuss

in this Final Written Decision our construction for this claim term. For convenience, the claim construction is reproduced in the table below.

| Term           | Citations   | Construction                                                                                                                                                                            |
|----------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Control Device | Ex. 2002, 6 | A device or a computer, or that part of a device or a computer, which performs an operation, an action, or a function, or which performs a number of operations, actions, or functions. |

*B. First, Second, and Third Signal Terms*

Patent Owner provides proposed constructions for the first, second, and third signal terms. PO Resp. 11–12. Specifically, Patent Owner asserts that the “first signal” is “a signal sent by a first device”; the “second signal” is “a signal sent by a second device”; and the “third signal” is “a signal sent by a third device.” *Id.* at 12.

We agree, for example, that a first signal is sent by a first device. For example, claim 3 recites, in relevant part, that the “first control device” generates and transmits the first signal. The parties’ dispute, however, is directed to whether there may be an intermediate device between the transmitting device (e.g., second device) and the signal’s destination (e.g., first device). In Patent Owner’s view, there may not be an intermediate device, between the first and second devices, that modifies or changes the signal. *See* PO Resp. 32.

As part of our analysis, we note that the Applicant provided an express definition of the term “signal” in the First Remarks filed on November 23, 2007, during prosecution of the patent application that issued as the U.S. patent No. 7,397,363 (“the ’363 patent”) (Ex. 2002). The ’076 patent and the ’363 patent each descend from U.S. Patent Application No.

08/622,749. *See* Ex. 1001, at [63].<sup>7</sup> Patent Owner relied upon this same filing in support of its arguments regarding the construction of “remote,” “control device,” and “located at.” *See* Dec. 6–7. The Applicant provided this definition several years after the issuance of the ’076 patent. *See* Ex. 1001, at [45] (Apr. 1, 2003 issuance date). As the Federal Circuit has noted, however, “[a] statement made during prosecution of related patents may be properly considered in construing a term common to those patents, regardless of whether the statement pre- or post-dates the issuance of the particular patent at issue.” *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1343 (Fed. Cir. 2015) (citing *Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004)).

In that 2007 filing, the term “signal” was defined as “an indication, or an indication having or conveying data, information, or a message, or a conveyor of data, information, or a message, or an indication representing data or information.” Ex. 2002, 11. We are persuaded that this definition is instructive to understanding the proper scope of these claim terms. Thus, a first signal, for example, is an “an indication, or an indication having or conveying data, information, or a message, or a conveyor of data, information, or a message, or an indication representing data or information that is sent by a first device.”

We have not been directed to evidence in the specification sufficient to show that the Applicant desired to narrow this very broad definition of signal in a manner that would exclude signals that pass through intermediaries. As defined by the Applicant, a signal may be an indication,

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<sup>7</sup> This information was modified by a Certificate of Correction issued July 1, 2003. *See* Ex. 1001, 95.

information, or a message and we are not persuaded that it is impermissible for an intermediary to pass this information on and to add further data to the information that it received.

For the foregoing reasons, we construe the term “first signal” to be “a signal sent by a first device”; “second signal” to be “a signal sent by a second device”; and “third signal” to be “a signal sent by a third device.” The recited signals all are construed to be “an indication, or an indication having or conveying data, information, or a message, or a conveyor of data, information, or a message, or an indication representing data or information.” Finally, we are not persuaded that these terms exclude signals that may pass through an intermediary and any such intermediary may append additional information to the received signals.

### III.ANALYSIS

#### *A. Analysis of Asserted Ground of Anticipation by Kniffin*

Petitioner asserts that claims 3, 18, 65, 67, 68, 70, 73, 91, 103, 116, 119, 120, and 205 of the '076 patent are unpatentable under 35 U.S.C. § 102 as anticipated by Kniffin. Pet. 12–32. Petitioner relies on claim charts showing how this reference allegedly discloses the claimed subject matter. *Id.* Petitioner further relies on a declaration from Scott Andrews. Ex. 1002.

##### *1. Overview of Kniffin*

Kniffin describes a secure entry system that uses radio transmissions to communicate with locks, keys, and related components. Ex. 1010, Abstract. Figure 1 is reproduced below.

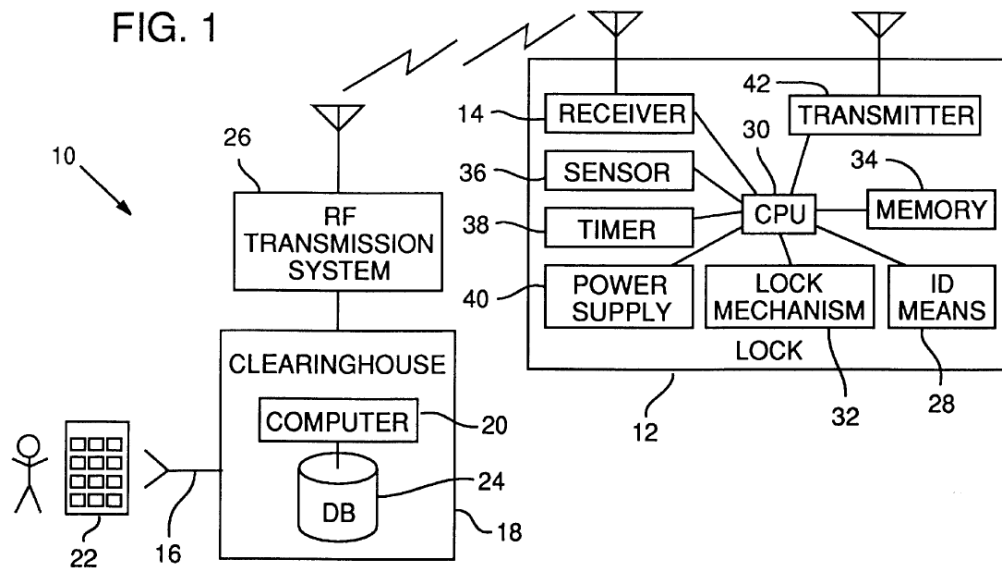


Figure 1 depicts the first embodiment of Kniffin. *Id.* at 2:25–26. In this embodiment, a secure entry system includes a lock (or other access control device) 12 that has an integrated cellular, paging, or other RF receiver 14. Users establish communication with the lock via “a cellular telephone, by a conventional telephone, or by some other communications link 16” that is in communication with clearinghouse 18. *Id.* at 2:32–34. In order to identify the lock that the user wishes to access, computer 20 of clearinghouse 18 synthesizes a series of voice prompts that are relayed to the user over communications link 16 that prompt the user to provide the appropriate identifying information. *Id.* at 2:35–43. If the clearinghouse determines that the user is authorized to access the lock then the clearinghouse will send a signal to lock 12. *Id.* at 2:44–47.

Figure 4 is reproduced below.

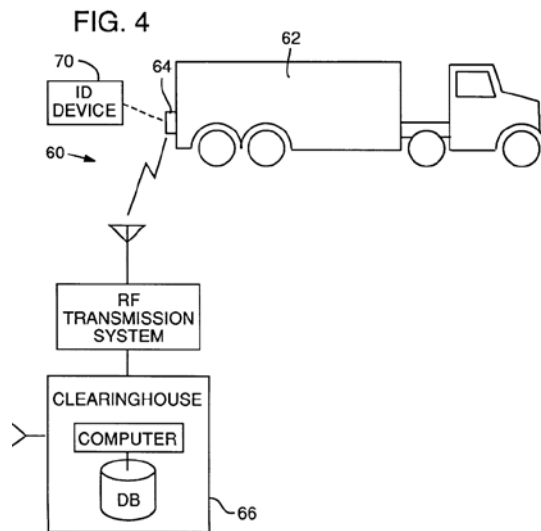
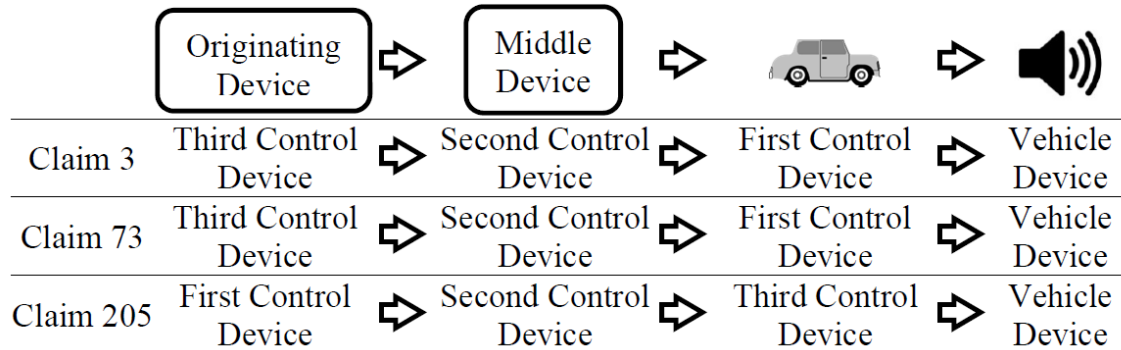


Figure 4 depicts the fourth embodiment of Kniffin. *Id.* at 8:5–6. This embodiment is described in the context of an access control device for a delivery truck. *Id.* at 8:6–8. As described in Kniffin’s specification “the access control device 64 is not particularly detailed in FIG. 4, [but] it can take the same form as lock 12 of FIG. 1 (but with a lock mechanism adapted to secure the doors of a delivery truck).” *Id.* at 8:46–48. Here, a delivery company calls clearinghouse 66 and identifies the sequence of deliveries to be made by a truck. When truck 62 arrives at a delivery location, access control device 64 will sense whether this location is the expected location by detecting an identification device 70. *Id.* at 8:25–27. Identification device 70 may be a proximity card mounted at the loading dock or an electronic key carried by an authorized employee. *Id.* at 8:27–30. “If the detected identification device corresponds to the first expected stop that had earlier been programmed, the truck access control device unlocks, permitting access to the truck’s contents.” *Id.* at 8:30–33. At any time, the delivery company can call clearinghouse 66 and modify the route. *Id.* at 8:61–67.

## 2. Discussion

Each of the challenged independent claims (3, 73, and 205) recites a first, second, and third control device. Petitioner asserts that “[c]laims 3, 73, and 205 identify these same control devices but in different orders.” Pet. 8. Petitioner includes the following chart on page 9 of its Petition.



The preceding chart illustrates Petitioner’s allegation that the independent claims recite the same control devices in different orders. *Id.* Patent Owner’s arguments regarding the challenged claims are in accord with Petitioner’s grouping of the control devices. *See e.g.*, PO Resp. 14–15 (discussing the first control device of claims 3 and 73 and the third control device of claim 205 as part of an argument directed to the “first control device” of claim 3). Petitioner and Patent Owner rely upon substantially similar evidence and arguments for these three devices. Thus, our analysis of Kniffin’s disclosures applies to each of the independent claims. For convenience, unless otherwise indicated, we shall use the terms first, second, and third control device to refer to the control devices as described in claim 3.

Petitioner argues that Kniffin discloses these control devices through its discussion and depiction of access control device 64 (first control device) (Pet. 12), clearinghouse 18 or 66 (second control device) (*id.*), and

communications link 16 (third control device) (*id.*). Petitioner asserts that “access control device 64 is adapted to secure the doors of the truck and guard against unauthorized opening.” *Id.* at 14 (citing Ex. 1010, 8:11–14, 8:46–48). Petitioner argues that “[c]learinghouse 66 receives signals from a telephone 22 and communications link 16, and includes an RF transmission system for transmitting the schedule of stops. Moreover, truck access control device 64 is responsive to signals from clearinghouse 66, as Kniffin discloses that truck access control device 64 may be reprogrammed by clearinghouse 66.” Pet. 15–16 (citing Ex. 1010, 8:61–67; Ex. 1002 ¶¶ 11–13). In the first embodiment, users communicate with the clearinghouse via “a cellular telephone, by a conventional telephone, or by some other communications link 16,” and Petitioner argues that the communications link of the fourth embodiment is depicted as having similar communications. *Id.* at 16 (citing Ex. 1010, 2:31–43, 8:61–67; Ex. 1002 ¶¶ 11–13).

Patent Owner asserts that Kniffin does not disclose all of the elements of the independent claims. PO Resp. 13–25. Specifically, Patent Owner contends that “Kniffin does not generate a signal (the claimed ‘first signal’ . . . ) for instructing the lock mechanism 32 to unlock the doors *in response to a signal from the clearinghouse 66 (which Petitioner asserts corresponds to the claims ‘second control device’)*.” *Id.* at 17. Patent Owner asserts that information received from clearinghouse 66 is merely stored in memory. *Id.* at 18. “In fact, the signal that triggers the access control device 64 of Kniffin to generate a signal for instructing the lock mechanism 32 to unlock the doors is a signal from an ‘identification device 70’ that is present at one of the authorized locations stored in memory 68.” *Id.*

Claim 3 recites “wherein the first control device at least one of generates the first signal and transmits the first signal in response to a second signal.” Ex. 1001, 106:51–54; *see also id.* 122:10–12 (similar language in claim 73), 141:38–40 (claim 205). Thus, in each of the independent claims, the first control device must respond to a signal from the second control device. Petitioner asserts that access control device 64 is the first control device and that clearinghouse 18 or 66 is the second control device. Pet. 12. Therefore, Petitioner must establish that Kniffin discloses that access control device 64 responds to a signal from the clearinghouse. We are not persuaded that Petitioner has made a sufficient showing on this point.

Petitioner alleges that “clearinghouse 66 transmits the schedule to the truck access control device 64 . . . where the schedule is stored in memory 68.” *Id.* at 14. Petitioner then makes the bare assertion that “Kniffin’s truck access control device 64 (the in-vehicle control device), located in the vehicle, is responsive to signals from clearinghouse 66 (the middle device), located remote from the vehicle.” *Id.* at 15. Petitioner also contends that “truck access control device 64 is responsive to signals from clearinghouse 66, as Kniffin discloses that truck access control device 64 may be reprogrammed by clearinghouse 66.” *Id.* at 15–16 (citing Ex. 1010, 8:61–67, Ex. 1002 ¶¶ 11–13). Petitioner, however, does not explain why storing a schedule in memory or reprogramming a device discloses the recited device responsive to a second signal. Nor does Petitioner explain the import or impact of the signal sent from identification device 70. This is key because Kniffin states that “[i]n response to identification of the authorized user at the lock within the prescribed time period, a lock microprocessor CPU 30 instructs a lock mechanism 32 to unlock.” Ex. 1010, 3:64–66. In the fourth

embodiment, access is based on the identity of a location and not that of an individual. *See id.* at 8:17–18 (“Each possible destination is assigned an identification number.”). Access is granted “[i]f the detected identification device corresponds to the first expected stop.” *Id.* at 8:30–31. Access is blocked if “the access control device . . . sense[s] either the absence of an identification device, or will sense an identification device that does not correspond to an authorized stop.” *Id.* at 8:39–45.

Petitioner responds to Patent Owner’s arguments by stating that “[w]hile Kniffin describes controlling the in-vehicle lock mechanism, Kniffin also describes storing data in an in-vehicle memory, in response to data received by the access control device from a clearinghouse.” Reply 6 (citing Pet. 12–13). Petitioner asserts that Patent Owner’s arguments regarding Kniffin’s disclosures as related to the lock do not address Kniffin’s disclosures as related to activating memory. *Id.* at 7. We, however, are not persuaded that Petitioner has put forth sufficient evidence to establish that the mere act of storing information in memory discloses the disputed limitation.

The specification of the ’076 patent describes the “operational steps and/or sequence of operation of the apparatus and method of the present invention.” Ex. 1001, 38:62–64. In order “to prevent an unauthorized access” the system compares the received program command with “data which may be stored in apparatus program memory.” *Id.* at 39:23–34. Kniffin’s stored schedule of stops appears to be similar to the stored data described in the ’076 patent. The control device, however, is not responsive to the stored data, but rather it responds to the program code. *See id.* at 39:35–49. Thus, we are not persuaded that Kniffin’s disclosure of storing

the schedule is sufficient to disclose the disputed limitation. Therefore, we are not persuaded that Petitioner has demonstrated that Kniffin discloses a first control device that is responsive to a second control signal.

For the foregoing reasons we determine that Petitioner has not carried its burden to demonstrate by a preponderance of the evidence that independent claims 3, 73, and 205 are anticipated by Kniffin. By that same regard, we also are not persuaded that Petitioner has established the unpatentability of dependent claims 18, 65, 67, 68, 70, 91, 94, 96, 103, 110, 116, 119, and 120 as relates to the asserted grounds that include Kniffin. The various anticipation and obviousness grounds asserted for each of those claims relies upon the assertions and arguments discussed above in relation to Petitioner's assertions regarding Kniffin's disclosures as applied to the independent claims. Petitioner has not argued that the above discussed deficiency is remedied by arguments or evidence put forth in any of the other Kniffin-based grounds. Therefore, Petitioner has not satisfied its burden in relation to its assertions of unpatentability based on Kniffin as directed to claims 3, 18, 65, 67, 68, 70, 73, 91, 94, 96, 103, 110, 116, 119, 120, and 205 of the '076.

*B. Analysis of Asserted Grounds Based on Ryoichi*

*1. Analysis of Asserted Ground of Anticipation by Ryoichi*

Petitioner asserts that claims 3, 18, 65, 67, 70, 73, 91, 103, 116, 119, and 205 of the '076 Patent are unpatentable under 35 U.S.C. § 102 as anticipated by Ryoichi. Pet. 42–56. Petitioner relies on claim charts showing how this reference allegedly discloses the claimed subject matter. *Id.* at 50–55. Petitioner further relies on a declaration from Scott Andrews. Ex. 1002.

## 2. Overview of Ryoichi

Ryoichi describes “a radio-signal-responsive control system for controlling various devices on a motor vehicle.” Ex. 1011, 1:9–11. Figure 1 of Ryoichi is reproduced below.

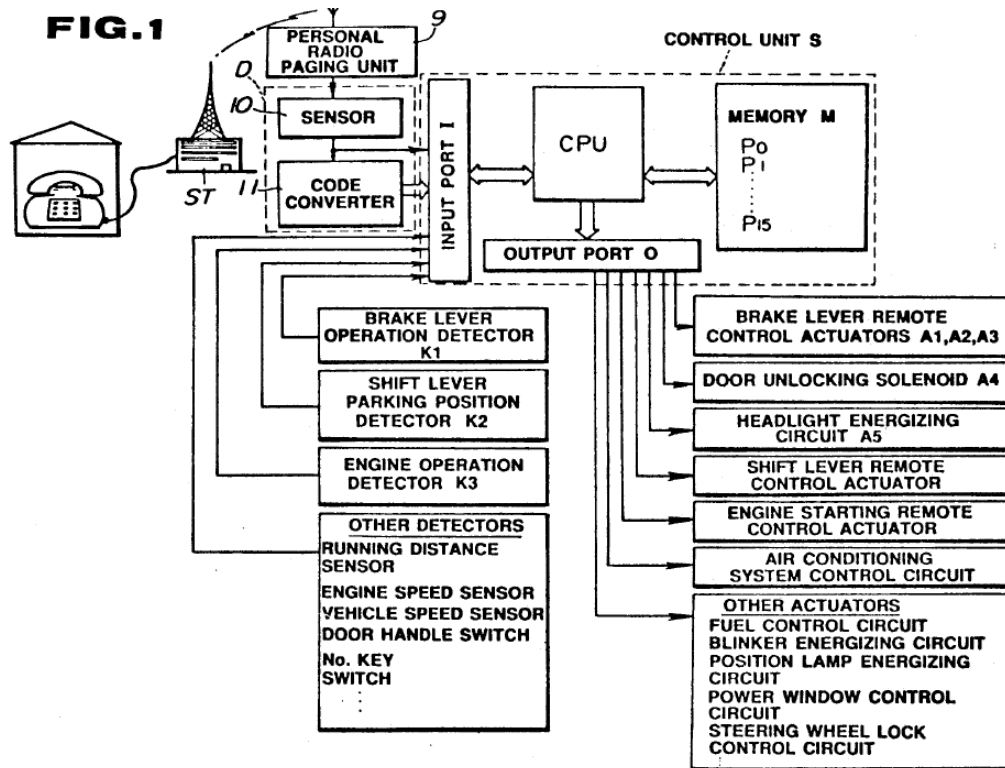


Figure 1 is a block diagram of the first embodiment of Ryoichi’s radio-signal-responsive vehicle device control system. *Id.* at 3:24–26. Personal radio paging unit 9 is inserted into the door of the vehicle. *Id.* at Fig. 3, 7:52–55. A calling number is dialed on telephone unit TEL and that number represents a code number corresponding to a desired message signal. *Id.* at 7:60–64. A radio wave indicating the message is radiated automatically from fixed radio station ST and that wave is received by personal radio paging unit 9. *Id.* at 7:64–67. In response, personal radio paging unit 9 generates a sound that is detected by sensors 10 and these sensors turn on code converter 11 and control unit S. *Id.* at 8:1–5. Code converter 11

converts the received electric signal into the format for the control unit S. *Id.* at 8:5–15. Then the converted code signal is sent to control unit S, which selects and executes a program corresponding to the received code signal. *Id.* at 8:15–17. For example, control program PO is a program for operating the handbrake remotely. *Id.* at 8:17–22.

*a. Independent Claims 3, 73, and 205*

Petitioner’s arguments as to the independent claims may be summarized as follows: Petitioner argues that Ryoichi discloses the three recited control devices<sup>8</sup> through its discussion and depiction of personal radio paging unit 9 (first control device) (Pet. 42–43), fixed radio station ST (second control device) (*id.* at 43), and telephone unit TEL (third control device) (*id.*). Petitioner asserts that “[p]ersonal radio paging unit 9 (the in-vehicle device), located in the vehicle, generates sounds representing message signals, and the sounds are converted into code read by control unit S to run a program, e.g., unlocking the doors.” *Id.* at 44 (citing Ex. 1011, 4:57–5:15; 8:1–22; Ex. 1002 ¶¶ 35–36). According to Petitioner, personal radio paging unit 9 is responsive to signals sent by radio station ST and paging unit 9 generates calling sounds in response to the signals from radio station ST. *Id.* (citing Ex. 1011, 7:64–8:3; Ex. 1002 ¶¶ 35–37). In addition, radio station ST is contended to be responsive to signals from telephone

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<sup>8</sup> As with Kniffin, Petitioner espouses similar analysis of the first control device of claims 3 and 73 and the third control device of claim 205; as well as for the second control device of all three claims; and the third control device of claims 3 and 73 and the first control device of claim 205. Thus, our analysis of Ryoichi’s disclosures applies to each of the independent claims. For convenience, unless otherwise indicated, we shall use the terms first, second, and third control device to refer to the control devices as described in claim 3.

TEL because users enter a message into the touchpad of telephone TEL and a signal representing the entered message is sent to radio station ST for transmission. *Id.* at 44–45 (citing Ex. 1011, 7:60–8:1; Ex. 1002, ¶¶ 35–37).

Patent Owner argues that Ryoichi fails to teach the second control device. PO Resp. 30. Petitioner asserts that Ryoichi discloses this element through its discussion and depiction of fixed radio station ST. Pet. 44. Petitioner asserts that personal radio paging unit 9 (first control device) is responsive to signals sent from fixed radio station ST and the fixed radio station ST is responsive to signals sent from telephone TEL (third control device). *Id.* at 44–45. According to Patent Owner, fixed radio station ST is part of the communications system or network and as such it cannot be the second control device. PO Resp. 30. Patent Owner’s Response to the Petition, however, contains no discussion as to why a device that is part of the communication system may not be a second control device. *See* PO Resp. 30. Presumably, Patent Owner’s contention that it “maintains” this argument is based on the fact that it unsuccessfully argued this point in its Preliminary Response. Our rules, however, preclude such incorporation by reference of arguments. *See* 37 C.F.R. § 42.6(a)(3) (“Arguments must not be incorporated by reference from one document into another document.”). Accordingly, we do not consider those arguments in this Decision. We find Petitioner’s analysis to be persuasive and we adopt it as the basis for our determination that Ryoichi’s fixed radio station ST discloses the second control device.

Patent Owner also argues that in Ryoichi,  
the vehicle devices/systems are not controlled in response to a  
“third signal” from the “third control device” (personal paging  
unit 9), but rather are controlled in response to a “fourth

signal,” a “fifth signal” and a “sixth signal” from multiple intermediate devices (sensor 10, code converter 11 and control unit S, respectively) which are positioned between the personal paging unit 9 of Ryoichi and the vehicle devices/systems of Ryoichi.

PO Resp. 33. Thus, Patent Owner argues that Ryoichi discloses a system with six devices and seven signals and not the claimed three device/three signal system. *Id.* at 35. Petitioner argues, and we agree, that “[t]he claims of the ’076 patent do not require the first signal to be transmitted directly, excluding all conduits or electrical components between the first control device and the vehicle component.” Reply 16. As discussed above, we are not persuaded that the claims exclude systems with intermediate devices such as Ryoichi’s sensor 10, code converter 11, and control unit S. *See* § II.B. So the question is whether Petitioner has demonstrated that the devices and signals in Ryoichi disclosed the recited devices and signals. We are persuaded that Petitioner has made such a showing.

As noted by Mr. Andrews, “Ryoichi provides for the control of an ‘automobile-mounted device’ in which the telephone unit sends information related to controlling a device to a paging center, which subsequently sends paging signals containing the control information over the paging network. These are received by the paging unit in the vehicle, and are used to control various vehicle components.” Ex. 1002 ¶ 35; *see id.* ¶ 37. We find Mr. Andrews’ analysis of Ryoichi’s disclosures to be reasonable and we adopt it as our own. Thus, we are persuaded that Ryoichi discloses a system where the information sent from the telephone is received by the fixed radio station ST, which responds by sending control information to personal paging unit 9. After receipt of the control information from fixed radio station ST, the

personal paging unit responds by sending a signal to control the specified vehicle system. Therefore, we do not find Patent Owner's argument to be persuasive and we are persuaded by Petitioner's arguments regarding the disclosures of Ryoichi.

Based on our review of the full record, we find persuasive Petitioner's arguments and evidence and we adopt them as the basis for our determination that Ryoichi discloses the limitations of claims 3, 73, and 205. *See* Pet. 42–56. Accordingly, we determine that Petitioner has demonstrated by a preponderance of the evidence the unpatentability of independent claims 3, 73, and 205 over the disclosures of Ryoichi.

*b. Dependent Claims 18, 65, 67, 70, 91, 103, 116, and 119*

Claim 18 depends from claim 3; claims 91, 103, 116, and 119 depend from 73; and claims 65, 67, and 70 depend from claim 205. We have reviewed Petitioner's assertions regarding these claims and we are persuaded that these claims also are anticipated by Ryoichi. *See* Pet. 46–56. For example, claim 18 depends from claim 3 and further recites, in relevant part, an interface device that provides an interface between the first control device and a vehicle system. In its arguments directed to this claim, Petitioner relies upon Ryoichi's disclosure of detector D, which is composed of sensor 10 and code converter 11. Pet. 46 (citing Ex. 1011, 5:32–49; Ex. 1002 ¶ 43). Detector D receives the message from personal radio paging unit 9 and converts it into the format necessary for the control unit. *Id.* at 51–52 (citing Ex. 1011, 5:32–49). As to dependent claims 18, 65, 67, 70, 91, 103, 116, and 119, Patent Owner stands by its arguments directed to the independent claims. PO Resp. 36–37. We disagree with those arguments for the reasons described above.

Based on our review of the full record, we find persuasive Petitioner's arguments and evidence and we adopt them as the basis for our determination that Ryoichi discloses the limitations of claims 18, 65, 67, 70, 91, 103, 116, and 119. *See* Pet. 46–56. Accordingly, we determine that Petitioner has demonstrated by a preponderance of the evidence the unpatentability of claims 18, 65, 67, 70, 91, 103, 116, and 119 over the disclosures of Ryoichi.

3. *Analysis of Asserted Grounds of Obviousness over Ryoichi*

Petitioner asserts that claims 94 and 110 of the '076 patent are unpatentable under 35 U.S.C. § 103 as obvious over Ryoichi and claims 68, 96, and 120 are unpatentable over the combined teachings of Ryoichi and Neely. Pet. 56–59. Petitioner relies on claim charts showing how these references allegedly teach the claimed subject matter. *Id.* at 57, 58–59. Petitioner further relies on a declaration from Scott Andrews. Ex. 1002.

a. *Ryoichi and one of Spaur, Behr, or Kubler*

(1) *Overview of Spaur*

Spaur teaches wirelessly linking with a vehicle using an Internet communications link to control a vehicle component. Ex. 1020, 2:42–48, 3:13–20, 7:40–47, 12:51–54.

(2) *Overview of Behr*

Behr teaches an electronic navigation system providing route guidance, tracking information, and other information from a base unit to a remote unit over wireless, wireline, or optical devices, including cellular or Internet Protocol networks. Ex. 1021, Abstract, 1:19–26, 9:38–42.

*(3) Overview of Kubler*

Kubler teaches a communication system using wired and wireless networks, including the Internet, to communicate between stationary and roaming devices, such as a vehicle-mounted computer terminal. Ex. 1022, Abstract, 8:25–29.

*(4) Analysis*

Claims 94 and 110 depend from claim 73 and each further recites, in relevant part, the usage of the apparatus of the independent claims over the Internet and World Wide Web. For example, claim 94 further recites “wherein the apparatus is utilized on or over at least one of the Internet and the World Wide Web.” The Petition contains an assertion that claims 94 and 110 would have been obvious over Ryoichi. See Pet. 56–57. Mr. Andrews asserts that “[t]he use of the Internet or World Wide Web in vehicle control systems was well-known at the time of the ’076 patent as evidenced, for example, by Spaur, Behr, and Kubler.” Ex. 1002 ¶ 47. As noted in the Institution Decision, we exercised our discretion to recognize Petitioner’s implicit argument that these claims would have been obvious over the teachings of Ryoichi and the knowledge of one of ordinary skill in the art as evidenced by Spaur, Behr, and Kubler. Dec. 23; See *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1297, 1301 (Fed. Cir. 2015), *aff’d sub nom*, *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131 (2016); *SightSound Techs., LLC v. Apple Inc.*, 809 F.3d 1307, 1313 (Fed. Cir. 2015), *cert. denied*, No. 16-483, 2017 WL 160459 (U.S. Jan. 17, 2017).

Patent Owner argues that one of ordinary skill in the art would not have modified Ryoichi to use the Internet because “conventional wisdom at the time of the effective filing date of the ’076 Patent was that the Internet

was not secure and there were also many impediments on the use of the Internet.” PO Resp. 37. In support of this position, Patent Owner cites a Morgan Stanley “Internet Report” from 1996 which noted concerns about security and potential limits to Internet access. *Id.* at 26 (citing Ex. 2007, 24).

Petitioner responds by asserting that Patent Owner “admitted that, in March of 1996, a person of ordinary skill in the art as would have appreciated the Internet as an improved transmission system.” Reply 10 (citing Pet. 35–36). Specifically, Petitioner is directing us to Patent Owner’s Response to an Office Action in the reexamination of the ’363 patent. As mentioned above, the ’363 and ’076 patents are related patents that share common ancestors. *See* § II.B. There, Patent Owner asserted that one of ordinary skill in the art “would appreciate the infrastructure of the Internet and its improved signal transmission capabilities, as compared to the [RF] system used in Kniffin, as being a superior system for transmitting a signal or message from one location to another.” Ex. 1024, 11. Petitioner also asserts that the cited Morgan Stanley Internet Report does not represent the conventional wisdom of one of ordinary skill in the art because it was prepared to help investors ascertain risks and rewards related to the Internet and Patent Owner does not show that one of ordinary skill would have looked to such a document. Reply. 12 (citing Ex. 2007, 4).

We are persuaded by Petitioner’s arguments. Patent Owner’s statements during reexamination of the ’363 patent as to the knowledge of one of ordinary skill are more directly related to the issues at hand than an investment report. We agree with Petitioner’s analysis of Ryoichi and the teachings of Spaur, Behr, or Kubler. Thus, we find that one of ordinary skill

in the art would have been motivated to improve Ryoichi's system with the known methods of transmitting information over the Internet. *See Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1326–27 (Fed. Cir. 2008).

Based on our review of the full record, we find persuasive Petitioner's arguments and evidence and we adopt them as the basis for our determination that Ryoichi and the knowledge of one of ordinary skill in the art as evidenced by Spaur, Behr, and Kubler discloses the limitations of claims 94 and 100. *See* Pet. 56–57. Accordingly, we determine that Petitioner has demonstrated by a preponderance of the evidence the unpatentability of claims 94 and 110 over the teachings of Ryoichi and the knowledge of one of ordinary skill in the art as evidenced by Spaur, Behr, and Kubler.

*b. Ryoichi and Neely*

Claim 68 depends from claim 205, and claims 96 and 120 depend from claim 73. Petitioner's arguments in regards to claims 68, 96, and 120 rely upon the combined teachings of Ryoichi and Neely. Pet. 57–59. Patent Owner stands on the arguments proffered in relation to the independent claims and does not make additional arguments directed to dependent claims 68, 96, and 120. PO Resp. 38. We disagree with those arguments for the reasons described above.

Based on our review of the full record, we find persuasive Petitioner's arguments and evidence and we adopt them as the basis for our determination that Ryoichi and Neely teach the limitations of claims 68, 96, and 120. *See* Pet. 57–59. Accordingly, we determine that Petitioner has

demonstrated by a preponderance of the evidence the unpatentability of claims 68, 96, and 120 over the teachings of Ryoichi and Neely.

#### IV. CONCLUSION

Based on the arguments in the Petition, as well as the evidence of record, we determine that Petitioner has not demonstrated by a preponderance of the evidence that claims 3, 18, 65, 67, 68, 70, 73, 91, 94, 96, 103, 110, 116, 119, 120, and 205 of the '076 patent are anticipated or would have been obvious over Kniffin alone or as combined with the other cited references. We determine that Petitioner has demonstrated that claims 3, 18, 65, 67, 70, 73, 91, 103, 116, 119, and 205 are anticipated by Ryoichi; claims 94 and 110 would have been obvious over Ryoichi and the knowledge of one of ordinary skill in the art as evidenced by one of Spaur, Behr, or Kubler; and claims 68, 96, and 10 would have been obvious over Ryoichi and Neely.

#### V. ORDER

For the reasons given, it is

ORDERED that claims 3, 18, 65, 67, 68, 70, 73, 91, 94, 96, 103, 110, 116, 119, 120, and 205 of the '076 patent are held unpatentable;

FURTHER ORDERED that, because this is a final written decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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VOLKSWAGEN GROUP OF AMERICA, INC.,  
Petitioner,

v.

JOAO CONTROL & MONITORING SYSTEMS, LLC,  
Patent Owner.

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Case IPR2015-01610  
Patent 6,542,076 B1

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Before DAVID C. MCKONE, STACEY G. WHITE, and JASON J.  
CHUNG, *Administrative Patent Judges*.

CHUNG, *Administrative Patent Judge*, CONCURRING

Although I agree with my esteemed colleagues' finding in the ("Majority Decision") that claims 3, 18, 65, 67, 68, 70, 73, 91, 94, 96, 103, 110, 116, 119, 120, and 205 of the '076 patent are unpatentable as anticipated by or obvious over Ryoichi, I write separately to note my disagreement with the Majority Decision that Kniffin fails to disclose the limitations of independent claims 3, 73, and 205. I address the Majority Decision and Patent Owner's arguments in its Patent Owner Response.

*A. Kniffin Discloses an "A to B to C" System/Method of Independent Claims 3, 73, and 205*

I respectfully disagree with the Majority Decision as to its holding regarding Kniffin. Patent Owner's arguments (*see* PO Resp. 12–25) that Kniffin fails to disclose an "A to B to C" is flawed because Kniffin discloses access control device 64 (in-vehicle control device), clearinghouse 18 or 66 (middle device, located remote from the vehicle), and telephone 22 and communications link 16 (originating device, located remote from the other control device and remote from the vehicle). Pet. 12–13 (citing Ex. 1010, Figs. 1, 4).

I disagree with Patent Owner's arguments (*see* PO Resp. 12–25) that Kniffin's access control device 64 does not generate the claimed "first signal" (as recited in claims 3 and 73 and similarly recited in claim 205) for instructing lock mechanism 32 to unlock the doors in response to a signal from Kniffin's clearinghouse 66, because Kniffin's lock mechanism unlocks the door in response to two conditions being fulfilled: (1) the schedule of stops stored in memory 68 of access control device 64; and (2) a signal from identification device 70 corresponds to the stop in the schedule of stops. Pet. 29, 33, 35, 37–39 (citing Ex. 1010, 8:25–33).

The broadness of claims 3, 73, and 205 and the corresponding specification of the '076 patent do not preclude the interpretation that the claimed “wherein the first control device at least one of generates the first signal and transmits the first signal in response to a second signal” (as recited in claims 3 and 73, and similarly recited in claim 205) is responsive to two conditions being fulfilled. *See* Ex. 1001, 4:44–46 (“[t]he CPU, upon receiving an appropriate signal from the receiver, and upon the completion of a data processing routine, may issue a suitable signal”). That is, the specification of the '076 patent discloses two conditions being fulfilled before the CPU may issue a suitable signal, which are: (1) upon receiving an appropriate signal from the receiver; and (2) upon the completion of a data processing routine. *Id.*

Mr. Andrews’s cross-examination supports Petitioner’s arguments that Kniffin’s lock mechanism unlocks the door in response to two conditions being met: (1) the schedule of stops stored in memory 68 of access control device 64; and (2) a signal from identification device 70 corresponds to the stop in the schedule of stops. PO Resp. 20–23 (quoting Ex. 2006, 145:15–24, 151:9–24). Patent Owner did not proffer opinions of its own expert on any issues and relied on Petitioner’s expert, Mr. Andrews. *See generally* PO Resp.

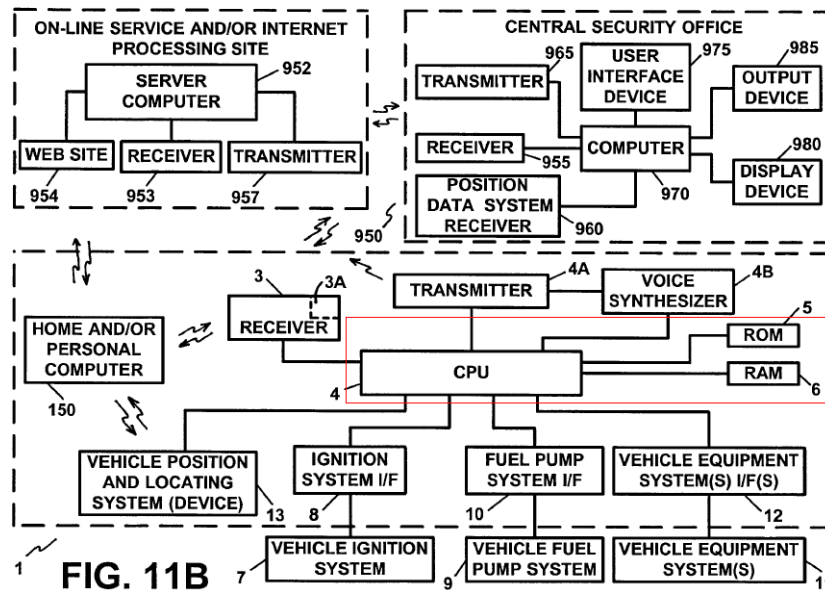
For simplicity, because the specification of the '076 patent discloses similar functionality (i.e., in response to two conditions being fulfilled) compared to both Kniffin’s disclosure and Mr. Andrews’s cross-examination, these excerpts are reproduced in the chart below.

| '076 patent (Ex. 1001)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Kniffin (Ex. 1010)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Mr. Andrews<br>cross-examination<br>(Ex. 2006)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>“The CPU, <i>upon receiving an appropriate signal from the receiver, and upon the completion of a data processing routine</i>, may issue a suitable signal.”<br/> Ex. 1001, 4:44–46 (emphasis added).</p> <p>“The vehicle equipment system or systems . . . may include, but is not limited to . . . a power door lock <i>or other locking system</i> or device, a hood locking system.”<br/> Ex. 1001, 4:67–5:6 (emphases added).</p> <p>“Each of the vehicle equipment systems, if utilized in conjunction with the apparatus, <i>may be activated, de-activated.</i>” Ex. 1001, 5:15–17 (emphasis added).</p> <p>“The CPU 4 also has associated therewith a read only memory device (ROM) 5 and a random access memory device (RAM) 6 for storing</p> | <p>“After suitable verification checks, the clearinghouse transmits to the targeted truck access control device 64 the authorized schedule of stops, which data is received and stored in a memory 68. When the truck arrives at its first delivery stop, the truck access control device 64 senses this fact by detecting an identification device 70 maintained at that location. The identification device may be a proximity card mounted at the loading dock, or may be an electronic key carried by a manager employed at the first delivery stop. <i>If the detected identification device corresponds to the first expected stop that had earlier been programmed, the truck access control device unlocks, permitting access to the truck’s contents.</i>” Ex. 1010, 8:21–33 (emphasis added).</p> | <p>“Q: Okay. We’re at the second stop. What happens?<br/> A: Okay. So we arrive at the second stop. The sensor 36 detects that we are at the second stop, it tells the CPU. The CPU has a conditional statement in its code that says, if you are at this stop or, you know, you’re allowed to open at these particular stops, and <i>it’s going to compare the stop you’re at to the second that you are allowed to open at, and if they match, if one of them matches, you will open the lock.</i>”<br/> Ex. 2006, 145:15–24) (emphasis added).</p> <p>“Q: Okay. Let’s move forward. Then that the sensor is triggered, the CPU has</p> |

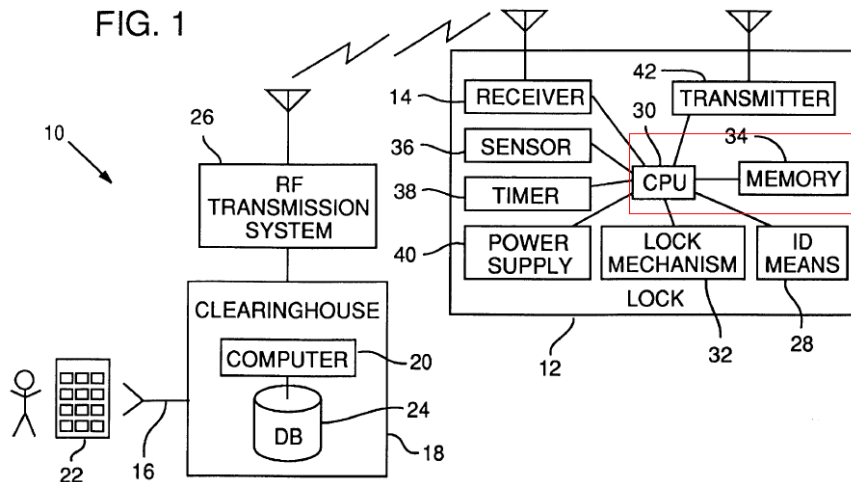
|                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><i>data.” Ex. 1001, 23:56–58 (emphasis added).</i></p> | <p>become<br/>instantaneously<br/>aware of whether<br/>it’s at the right<br/>place. What<br/>happens then,<br/>assuming that it’s<br/>at the right place?<br/>What happens?<br/><i>A: Assuming that it<br/>is at the right place<br/>so that the<br/>information that<br/>has been provided<br/>by the sensor<br/>matches a location<br/>that has been<br/>provided from the<br/>clearinghouse, the<br/>CPU then activates<br/>the lock mechanism<br/>and opens the lock<br/>or locks.</i><br/>Q: Okay. So the<br/>CPU sends another<br/>signal at that point<br/>to the lock<br/>mechanism 32;<br/>correct?<br/>A: That’s correct.<br/>Q: And the door –<br/>assuming all the<br/>conditions are met,<br/>the door unlocks?<br/>A: Unlocks.”<br/>Ex. 2006, 151:9–24<br/>(emphasis added).</p> |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

The italicized text from the chart above indicates that the specification of the '076 patent discloses activating or de-activating a locking system in response to two conditions happening: (1) upon receiving an appropriate signal from the receiver; and (2) upon the completion of a data processing routine. Ex. 1001, 4:44–46, 4:67–5:6, 5:15–17. Similarly, the italicized portions of Kniffin in the chart above discusses a lock mechanism that unlocks the door in response to two conditions being met: (1) the schedule of stops stored in memory 68 of access control device 64; and (2) a signal from identification device 70 corresponds to the stop in the schedule of stops. Ex. 1010, 8:25–33. The italicized portions of Mr. Andrews's cross-examination in the chart above buttresses Petitioner's arguments that the door unlocks in response to two conditions being completed: (1) the schedule of stops stored in memory 68 of access control device 64; and (2) a signal from identification device 70 corresponds to the stop in the schedule of stops. Ex. 2006, 145:15–24, 151:9–24.

Moreover, I also note the similarity between Figure 11B of the '076 patent and Kniffin's Figure 1. *Compare* Ex. 1001, Fig. 11B *with* Ex. 1010, Fig. 1. That is, both CPU 4 of Figure 11B of the '076 patent and CPU 30 of Kniffin's Figure 1 retrieve data from a memory. *Compare* Ex. 1001, Fig. 11B *with* Ex. 1010, Fig. 1. Also, both CPU 4 of Figure 11B of the '076 patent and CPU 30 of Kniffin's Figure 1 receive a signal from receiver 3A and receiver 14, respectively. *Compare* Ex. 1001, Fig. 11B *with* Ex. 1010, Fig. 1. Both figures are reproduced below.



Annotated Figure 11B of the '076 patent is illustrated above, which is a block diagram of claims 3, 73, and 205. Ex. 2002, 6–7. Kniffin's Figure 1 is similar to Figure 11B of the '076 patent and Kniffin's Figure 1 is reproduced below.



Annotated Figure 1 of Kniffin is a block diagram of the user interacting with lock 12. As illustrated above, Figure 11B of the '076 patent and Kniffin's Figure 1 both illustrate a CPU connected to a receiver and memory, which are annotated by the red boxes. Compare Ex. 1001, Fig. 11B with Ex. 1010, Fig. 1 (annotations added). Patent Owner acknowledges

that Figure 11B of the '076 patent provides an example embodiment of the instituted independent claims. Ex. 2002, 6–7. The '076 patent discloses “CPU 4 also has associated therewith a read only memory device (ROM) 5 and a random access memory device (RAM) 6 for storing data.” Ex. 1001, 23:56–58 (emphasis added). Similarly, Kniffin discloses that a clearinghouse transmits an authorized schedule of stops to truck access control device 68, which data are stored in a memory. Ex. 1010, 8:21–24.

Patent Owner’s argument (*see* PO Resp. 17–19) that Kniffin’s lock mechanism is controlled by access control device 64 in response to a signal from identification device 70 rather than a signal from clearinghouse 66, therefore, is flawed because Kniffin discloses unlocking the lock in response to both: (1) schedule data received by access control device 64 from clearinghouse 66 and the data are stored in memory; *and* (2) a signal from identification device 70 that corresponds to a stop in the schedule of stops. Pet. 24, 26, 30–31 (quoting Ex. 1010, 8:21–33); *see also* Ex. 2006, 145:15–24, 151:9–24. Patent Owner even acknowledges (and, therefore, has notice) that Kniffin discloses unlocking the lock in response to both schedule data received by access control device 64 from clearinghouse 66 *and* a signal from identification device 70 that corresponds to a stop in the schedule of stops. PO Resp. 19–23 (quoting Ex. 1010, 8:25–33; Ex. 2006, 145:15–24, 151:9–24).

I disagree with the Majority Decision that “Petitioner has not satisfied its burden in relation to its assertion of unpatentability” regarding Kniffin (Majority Decision 15) because Petitioner quoted column 8, lines 25–33 of Kniffin in the claim charts in the same row of the claim chart as the disputed limitation “wherein the first control device at least one of generates the first

signal and transmits the first signal in response to a second signal” (as recited in claims 3 and 73, and similarly recited in claim 205). Pet. 29, 33, 35, 37–39 (citing Ex. 1010, 8:25–33). In my view, the Majority essentially is punishing Petitioner for not explaining the copied and pasted text of column 8, lines 25–33. Kniffin’s column 8, lines 25–33, however, does not need explaining because it is quite clear from reading it that it discloses the disputed limitation. From reading column 8, lines 25–33 of Kniffin, which Petitioner quoted in the claim charts of its Petition (Pet. 24, 26, 30–31), it is quite clear that Kniffin’s access control device 64 (i.e., what Petitioner is asserting to be the “first control device” of claims 3 and 73) unlocks the lock in response to two conditions being fulfilled as explained *supra* in the comparison chart.

Furthermore, Patent Owner recognized the significance of column 8, lines 25–33 of Kniffin by copying it into its Patent Owner Response. PO Resp. 19 (quoting Ex. 1010, 8:25–33). In my view, the citation of these portions of Kniffin by Petitioner constitutes adequate explanation of how Kniffin unlocks the door (e.g., activates a vehicle component) in response to two conditions being fulfilled: (1) *the schedule of stops stored in memory 68 of access control device 64*; and (2) a signal from identification device 70 corresponds to the stop in the schedule of stops. Pet. 24, 26, 30–31 (quoting Ex. 1010, 8:25–33).

I also disagree with the Majority’s analysis that “Petitioner then makes the bare assertion that ‘Kniffin’s truck access control device 64 (the in-vehicle control device), located in the vehicle, is responsive to signals from clearinghouse 66 (the middle device), located remote from the vehicle 62’” (Majority Decision 13) because, as stated *supra*, Petitioner’s quotation

of column 8, lines 25–33 of Kniffin in its claim charts is a sufficient assertion.

The Majority Decision also states:

Petitioner, however, does not explain why storing a schedule in memory or reprogramming a device discloses the recited device responsive to a second signal. *Nor does Petitioner explain the import or impact of the signal sent from identification device 70.*

Majority Decision 13 (emphasis added). Although I agree with the Majority’s analysis that “Petitioner, however, does not explain why storing a schedule in memory or reprogramming a device discloses the recited device responsive to a second signal,” I disagree with the Majority’s statement “[n]or does Petitioner explain the import or impact of the signal sent from identification device 70.” I disagree because as stated *supra*, Petitioner’s quotation of column 8, lines 25–33 of Kniffin in its claim charts along with Mr. Andrews’s cross examination explains the import or impact of the signal sent from identification device 70.

Furthermore, Petitioner’s use of the open-ended phrase “e.g.,” (rather than a more limiting term such as “i.e.,” or the like) indicates that Petitioner did not limit itself to the argument of “e.g., storing an authorized schedule of deliveries in a memory” in Kniffin discloses the claimed “activating . . . a vehicle component.” Pet. 12–13. Instead, Petitioner presented the additional theory that Kniffin’s unlocking of a lock discloses activating (or deactivating) a vehicle component (see Pet. 24, 26, 31 (quoting Ex. 1010, 8:46–48, 3:64–4:3)). Moreover, Petitioner’s Reply still argues that “[w]hile Kniffin describ[ing] controlling the in-vehicle lock mechanism, Kniffin also describes storing data in an in-vehicle memory, in response to data received

by the access control device from a clearinghouse” (emphasis added). Reply 6; *see also id.* at 7.

Put another way, the open-ended nature of Petitioner’s phrase “e.g., storing an authorized schedule of deliveries in a memory” (rather than the more limited phrase “i.e.” or the like) in conjunction with the theory that Kniffin’s unlocking of a lock discloses activating (or deactivating) a vehicle component (*see* Pet. 24, 26, 31 (quoting Ex. 1010, 8:46–48, 3:64–4:3)), means that Petitioner was not limiting itself to one theory of unpatentability. Rather, I interpret the Petition as putting forth two different arguments, which are: (1) Kniffin’s unlocking a lock discloses activating (or deactivating) a vehicle component (*see* Pet. 24, 26, 31 (quoting Ex. 1010, 8:46–48, 3:64–4:3)); and (2) Kniffin’s storing of a schedule of stops in a memory discloses activating (or deactivating) a memory (vehicle component) (*see* Pet. 12–13). As stated *supra*, Petitioner’s two arguments are reiterated in the Reply. *See* Reply 6–7. Although I disagree with Petitioner’s second theory, I agree with Petitioner’s first theory (i.e., Kniffin’s unlocking of a lock discloses activating (or deactivating) a vehicle component). Petitioner’s theory that Kniffin’s unlocking of a lock discloses activating (or deactivating) a vehicle component was filed in the Petition and reiterated in the Reply (*see* Pet. 24, 26, 31 (quoting Ex. 1010, 8:46–48, 3:64–4:3); Reply 6–7).

I also disagree with the Majority’s analysis that:

[t]he specification of the ’076 patent describes the “operational steps and/or sequence of operation of the apparatus and method of the present invention.” Ex. 1001, 38:62–64. In order “to prevent an unauthorized access” the system compares [1] the received program command with [2] “data which may be stored in apparatus program memory.” *Id.* at 39:23–24. Kniffin’s

stored schedule of stops appears to be similar to the stored data described in the '076 patent. *The control device of the '076 patent, however, is not responsive to the stored data, but rather it responds to the program code. See id. at 39:35–49.* Thus, we are not persuaded that Kniffin's disclosure of storing the schedule is sufficient to disclose the disputed limitation. Therefore, we are not persuaded that Petitioner has demonstrated that Kniffin discloses a first control device that is responsive to a second control signal.

Majority Decision 14–15 (emphases added). The Majority is overlooking the nuance that the control device of the '076 patent is responsive to both: (1) stored data; and (2) received program command. Ex. 1001, 39:23–24. Similarly, Kniffin also discloses unlocking the lock in response to both: (1) schedule data received by access control device 64 from clearinghouse 66 and the data are stored in memory; *and* (2) a signal from identification device 70 that corresponds to a stop in the schedule of stops. Pet. 24, 26, 30–31 (quoting Ex. 1010, 8:25–33).

*B. Remaining Limitations*

I have reviewed the arguments and evidence presented in the Petition, Patent Owner Response, Petitioner Reply, Mr. Andrews's Declaration, and Mr. Andrews's cross-examination regarding the remaining limitations of the instituted claims pertaining to the alleged grounds of unpatentability that involve Kniffin. I find persuasive Petitioner's arguments and evidence, and would adopt them as the basis for a determination that the evidence discloses or teaches the remaining limitations of the instituted claims pertaining to the alleged grounds of unpatentability that involve Kniffin. Pet. 13–42.

*C. Conclusion*

I would conclude that Petitioner has shown by a preponderance of the evidence that claims 3, 18, 65, 67, 68, 70, 73, 91, 103, 116, 119, 120, and 205 of the '076 patent are anticipated under 35 U.S.C. § 102(a) by Kniffin; claims 94 and 110 are unpatentable under 35 U.S.C. § 103(a) in view of Kniffin and at least one of Spaur, Behr, or Kubler; claim 96 is unpatentable under 35 U.S.C. § 103(a) in view of Kniffin and Neely; claims 3, 18, 65, 67, 70, 73, 91, 103, 116, 119, and 205 are anticipated by Ryoichi; claims 94 and 110 would have been obvious over Ryoichi and the knowledge of one of ordinary skill in the art as evidenced by one of Spaur, Behr, or Kubler; and claims 68, 96, and 10 would have been obvious over Ryoichi and Neely. Accordingly, I respectfully concur.

IPR2015-01610  
Patent 6,542,076 B1

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