

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VOLKSWAGEN GROUP OF AMERICA, INC.,
Petitioner,

v.

JOAO CONTROL & MONITORING SYSTEMS, LLC,
Patent Owner.

Case IPR2015-01612
Patent 7,397,363 B2

Before STACEY G. WHITE, JASON CHUNG, and
BETH Z. SHAW, *Administrative Patent Judges*.

SHAW, *Administrative Patent Judge*.

DECISION
Final Written Decision
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

Petitioner, Volkswagen Group of America, Inc., filed a Petition requesting *inter partes* review of claims 21, 24, 27, 29, 30, 31, 33, 68, 69, 72, 74, 77, and 80 (“the challenged claims”) of U.S. Patent No. 7,397,363 B2 (“the ’363 patent”). Paper 2 (“Pet.”). Patent Owner, Joao Control &

Monitoring Systems, LLC, filed a Preliminary Response pursuant to 35 U.S.C. § 313. Paper 6 (“Prelim. Resp.”). Based on our review of these submissions, we declined to institute review of claims 21, 24, 27, 29, 30, 31, and 33, and we instituted *inter partes* review of claims 68, 69, 72, 74, 77, and 80. Paper 7 (“Dec.”). Specifically, we authorized this *inter partes* review to proceed as to the following grounds: (1) claims 68, 69, 74, 77, and 80 under 35 U.S.C. § 102(e) as anticipated by Spaur¹; and (2) claim 72 under 35 U.S.C. § 103(a) as obvious over Spaur.

Patent Owner filed a Patent Owner’s Response (Paper 13, “PO Resp.”), and Petitioner filed a Reply (Paper 18, “Reply”). An oral hearing was not held for this case because neither party requested a hearing and we determined an oral hearing was not necessary. Paper 19.

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 68, 69, 72, 74, 77, and 80 of the ’363 patent are unpatentable.

A. Related Matters

Petitioner and Patent Owner indicate that the ’363 patent or related patents have been asserted in a significant number of related cases. See Pet. 1–2; Paper 5.

¹ U.S. Patent No. 5,732,074, filed Jan. 16, 1996.

B. The '363 Patent

The '363 patent is directed to controlling a vehicle or premises. Ex. 1001, Abs. The '363 patent describes a first control device which generates a first signal and is associated with a web site and located remote from a premises or vehicle. *Id.* The first control device generates the first signal in response to a second signal that is transmitted via the Internet from a second control device located remote from the first device and remote from the premises or vehicle. *Id.* The first device determines whether an action associated with the second signal is allowed, and if so, transmits the first signal to a third device located at the premises. *Id.* The third device generates a third signal for activating, de-activating, disabling, re-enabling, or controlling an operation of a system, device, or component of the premises or vehicle. *See id.*

C. Illustrative Claims

Claims 68 and 72 are illustrative of the challenged claims and are reproduced below:

68. An apparatus, comprising:

a first processing device, wherein the first processing device at least one of monitors and detects an event regarding 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 processing device is located at the vehicle, and further wherein the event is a detection of a state of disrepair of the at least one of a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, and a vehicle appliance, wherein the first processing device at least one of generates a first signal and transmits a first signal to a

second processing device, wherein the first signal contains information regarding the event, and further wherein the second processing device is located at a location which is remote from the vehicle, wherein the second processing device automatically receives the first signal, and further wherein the second processing device at least one of generates a second signal and transmits a second signal to a communication device, wherein the second signal is transmitted to the communication device via, on, or over, at least one of the Internet and the World Wide Web, wherein the communication device is located remote from the second processing device, and wherein the communication device automatically receives the second signal, and further wherein the communication device provides information regarding the event.

72. The apparatus of claim 68, wherein the communication device is at least one of a wireless device, a cellular telephone, and a personal digital assistant.

II. ANALYSIS

A. Claim Construction

In the Decision to Institute, we noted that the '363 patent was due to expire no later than May 6, 2016. Dec. 7. The parties have not disputed the calculation of the '363 patent's expiration date. Based on our review of the record, we discern no reason to modify that calculation and thus, we find the '363 patent to be expired. For claims of an expired patent, the Board's claim interpretation is similar to that of a district court. *See In re Rambus, Inc.*, 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 v. AWH Corp.*, 415 F. 3d 1303, 1312–17 (Fed. Cir. 2005)).

We are mindful that “limitations are not to be read into the claims from the specification.” *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993). Nevertheless, claims are not interpreted in a vacuum but are part of and read in light of the specification. *United States v. Adams*, 383 U.S. 39, 49 (1966) (“[I]t is fundamental that claims are to be construed in the light of the specifications and both are to be read with a view to ascertaining the invention.”). In that regard, the terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the Specification. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). The construction that stays true to the claim language and most naturally aligns with the inventor’s description is likely the correct interpretation. *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998).

In the Institution Decision, we determined the terms “processing device,” “remote,” and “located at” did not require express construction, and we did not expressly construe any other claim terms. Dec. 8.

In its Response, Patent Owner proposes constructions for “processing device,” “first signal,” and “second signal.” PO Resp. 8–9. We determine that it is not necessary to construe “first signal” and “second signal” to resolve the controversy here. We construe “processing device,” as discussed in more detail below. To the extent it is necessary for us to construe any additional claim terms in this decision, we do so below in the context of analyzing whether the prior art renders the claims unpatentable.

“processing device”

Patent Owner argues that “processing device” means “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.” PO Resp. 8. Patent Owner argues that this definition comes from the prosecution history of the ’363 patent (Ex. 1007) and is consistent with the Specification. *Id.* Petitioner does not dispute this construction. See Reply 2–4. We agree that this explicit definition for “processing device” was provided in the prosecution of the application that issued as the ’363 patent. See Ex. 1007. We have reviewed the definition and we find it to be instructive to understanding the proper scope of “processing device.” See *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). Thus, we adopt the Patent Owner’s construction of “processing device” to mean “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” for the purposes of this decision.

B. Anticipation of Claims 68, 69, 74, 77, and 80 by Spaur

Petitioner asserts that claims 68, 69, 74, 77, and 80 are anticipated by Spaur. Pet. 47–58. As support, Petitioner provides detailed explanations as to how the combination of prior art meets each claim limitation. *Id.* Petitioner also relies upon the Declaration of Mr. Scott Andrews (Ex. 1006).

1. Spaur (Ex. 1004)

Spaur describes an apparatus for communication of information “between a vehicle and one or more remote stations using an established

network, such as the Internet.” Ex. 1004, 1:7–8, 5:40–6:22, Fig. 1. Figure 1 is reproduced below.

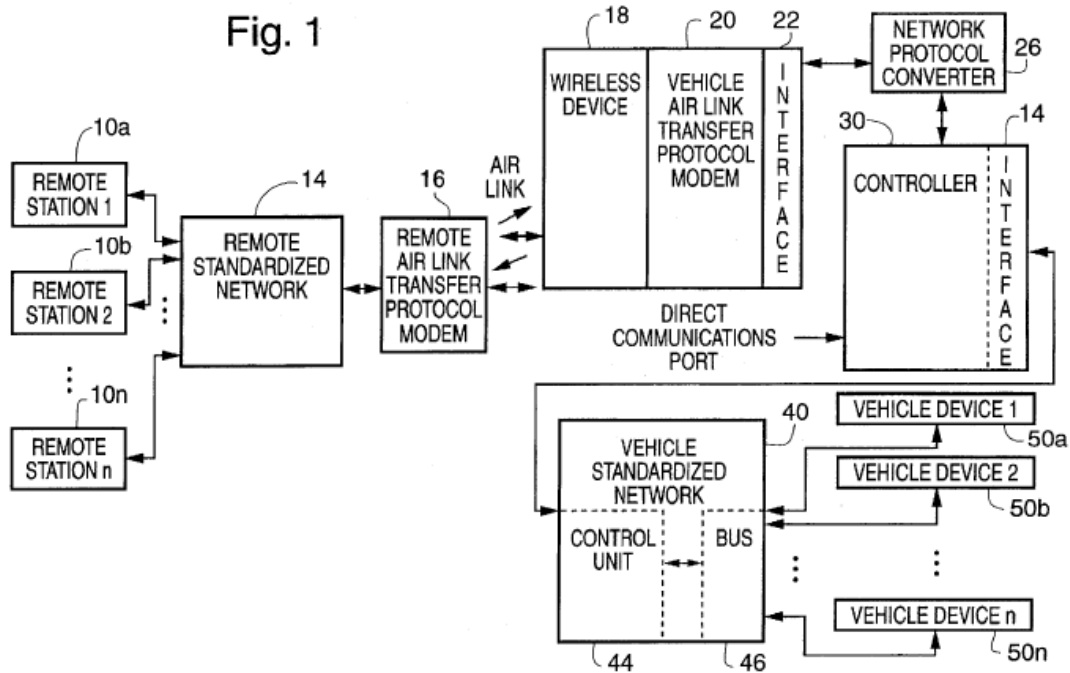


Figure 1 illustrates an apparatus for bi-directional communication between one or more remote stations 10a–n and a vehicle. Ex. 1004, 5:40–43. At the remote site, there is “[a]n internet or world wide web browser . . . available to the computer terminal” and “[t]he computer terminal supplies the browser with an IP (Internet protocol) address” which is “associated with a particular vehicle.” *Id.* at 2:25–34.

2. Independent Claim 68

Petitioner asserts that claim 68 is anticipated by Spaur. Pet. 47–58. As support, Petitioner provides detailed explanations as to how the combination of prior art meets each claim limitation. *Id.* For the following

reasons, we agree with and adopt Petitioner's contentions regarding Spaur's disclosure of each of these limitations.

Petitioner directs our attention to Spaur, which describes a program memory that stores executable programs used to obtain data "associated with the vehicle devices." Pet. 48 (citing Ex. 1004, 3:30–39, 8:49–53). Spaur describes "monitoring of vehicle locations and status," and "vehicle parameter monitoring for maintaining the vehicle such as checking engine conditions including possibility of overheating and operating mileage (odometer reading)." *Id.* at 48–49 (citing Ex. 1004, 9:3–12). Spaur describes vehicle devices with sensors, such as "vehicle condition sensors, vehicle cargo sensors, airbag sensor and general alarm sensors related to unlocking the vehicle or unwanted intrusion into the vehicle." *Id.* at 49 (citing 9:62–10:9). The data may then be transmitted to a remote station for analysis. *Id.* (citing Ex. 1004, 4:24–29; Ex. 1006 ¶¶ 33, 35). Spaur describes that data is transmitted from controller 30 via cellular phone 80 to the CDPD network modem, and then transmitted over Internet 68 to computer terminal 60. *Id.* at 49 (citing Ex. 1004, 7:13–47, 4:14–16, 4:26–29, Figs. 1, 2; Ex. 1006 ¶¶ 34–35).

Patent Owner argues that the "second processing device" of claim 68 is not taught by the CDPD network modem of Spaur. PO Resp. 10. In particular, Patent Owner argues that CDPD network modem 76 of Spaur "is merely a component of a communication system or communication network" and not a "processing device." *Id.*

We agree with Petitioner's characterization of Spaur's teachings and we are not persuaded by Patent Owner's argument. Patent Owner does not direct us to any persuasive evidence that the "second processing device" of

claim 68 is not encompassed by Spaur's teaching of a CDPD network modem. Pursuant to our construction discussed above, the term "processing device" means "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." See § II.A. This is the definition Patent Owner proposed and that Patent Owner provided during prosecution. We are unpersuaded as to why Spaur's CDPD network modem 76 is necessarily different from "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."

Patent Owner also argues that Spaur fails to disclose a "second processing device" that receives a "first signal" from a "first processing device" and that "at least one of generates a second signal and transmits a second signal to a communication device." PO Resp. 10–11. In particular, Patent Owner argues that the first signal must be sent directly by the first device to the second device, and therefore, the "phone interface 84 of Spaur must be the component that corresponds to the claimed second processing device because it receives a signal from the claimed first processing device." *Id.* at 12.

Petitioner points out that Patent Owner's argument requires an interpretation of claim 68 in which the second processing device can only receive a signal transmitted *directly* from the first processing device, and the communication device can only receive a signal transmitted *directly* from the second processing device, with no devices in between. Reply 7 (emphasis added). We agree with Petitioner and decline to import into the claims the limitations as proposed by Patent Owner. Rather, claim 68 recites

“wherein the first processing device *at least one of* generates a first signal and transmits a first signal to a second processing device.” Ex. 1001, 119:48–50 (emphasis added). Thus, we agree with Petitioner that there is no requirement in claim 68 that the first signal is sent *directly* to the second processing device by the first processing device. The claim is drafted broadly to include a first processing device that generates a first signal without necessarily transmitting the first signal directly to the second processing device. Stated differently, claim 68 is broad enough that the first signal can be transmitted to the second processing device via intervening devices in between the first processing device and the second processing device.

Relatedly, Patent Owner argues that claim 68 “requires that the ‘communication device’ receives a ‘second signal’ from the second processing device.” PO Response 12. Yet, claim 68 recites “wherein the second processing device *at least one of* generates a second signal and transmits a second signal to a communication device.” Ex. 1001, 119:55–57 (emphasis added). We agree with Petitioner that there is no requirement in claim 68 that the second signal is sent directly to the communication device by the second processing device. The claim is drafted broadly to include a second processing device that generates a second signal without necessarily transmitting the second signal directly to the communication device. Moreover, as Petitioner notes, during prosecution of the ’363 patent, Patent Owner submitted a definition of “at least one of” to mean “only one item from the list, or any combination of items in the list.” Ex. 1007, 2–3. Thus, we do not find Patent Owner’s argument to be persuasive, and we are persuaded by Petitioner’s arguments regarding the disclosures of Spaur.

Accordingly, Petitioner has shown sufficiently that Spaur discloses all the limitations of claim 68. We agree with and adopt Petitioner's contentions with respect to these claims. Pet. 47–58. For the foregoing reasons, we conclude that Petitioner has shown by a preponderance of the evidence that claim 68 is anticipated by Spaur.

3. *Dependent Claims 69, 74, 77, and 80*

Claims 69, 74, 77, and 80 depend from claim 68. We have reviewed Petitioner's arguments and supporting evidence with respect to these claims (Pet. 47–58), and we determine that Petitioner has demonstrated by a preponderance of the evidence that Spaur anticipates these claims, as set forth in the Petition. As to dependent claims 77 and 80, Patent Owner stands by its arguments with respect to claim 68. PO Resp. 1–19. We disagree with those arguments for the reasons described above. Patent Owner puts forth additional arguments with respect to dependent claims 69 and 74. *Id.* at 18–19.

Claim 69 recites: “[t]he apparatus of claim 68, wherein the apparatus utilizes at least one of an intelligent agent, a software agent, and a mobile agent, *or* the apparatus is programmed for at least one of automatic activation and automatic operation.” Ex. 1001, 119:66–120:2 (emphasis added).

With respect to claim 69, Patent Owner argues that Spaur does not disclose an intelligent agent, a software agent, or a mobile agent. PO Resp. 17–18. In particular, Patent Owner argues that Mr. Andrews “could not provide a definitive explanation as to when software rises to the level of being an ‘agent.’” *Id.* at 18.

Petitioner argues that Spaur describes the use of software executable programs to obtain data or other information associated with vehicle devices. Reply 10 (citing Ex. 1001, 3:30–39, 3:66–4:5.). Additionally, Petitioner argues that Spaur describes web server 102 being programmed to provide a notification when a particular event occurs, such as when a vehicle reaches a location, or when a sensor measures a particular value. *Id.* (citing Ex. 1001, 12:18–30; Ex. 1006 ¶ 36). Petitioner argues that Spaur therefore discloses the additional limitations of claim 69.

We agree with Petitioner that claim 69 does not require an intelligent agent, software agent, or mobile agent, because claim 69 recites that the apparatus may, in the alternative (“or”), be programmed for automatic activation or automatic operation. Patent Owner does not address this aspect of claim 69 or Spaur’s disclosure of software programming for obtaining data or providing notifications. Ex. 1001, 3:30–39, 3:66–4:5, 12:18–30; Ex. 1006 ¶ 36.

With respect to claim 74, Patent Owner argues that Spaur does not contain the word “diagnostic.” PO Resp. 19. However, as Petitioner argues, Spaur discloses program memory stores executable programs used to obtain data “associated with the vehicle devices.” Pet. 11 (citing Ex. 1001, 3:30–36, 8:49–53). Exemplary applications include “monitoring of vehicle locations and status,” and “vehicle parameter monitoring for maintaining the vehicle such as checking engine conditions including possibility of overheating and operating mileage (odometer reading).” Ex. 1001, 9:3–12. The data may then be transmitted to a remote station for analysis. *Id.* at 4:24–29. We agree with Petitioner that Spaur does not need to use the word “diagnostic” to describe a diagnostic signal.

Based on our review of the full record, Petitioner has shown sufficiently that Spaur discloses all the limitations of dependent claims 69, 74, 77, and 80. *See* Pet. 47–58. We agree with and adopt Petitioner’s contentions with respect to these claims. *Id.* Based on these contentions, we conclude that Petitioner has shown by a preponderance of the evidence that claims 69, 74, 77, and 80 are anticipated by Spaur.

C. Obviousness of Dependent Claim 72 over Spaur

Claim 72 requires that “the communication device is at least one of a wireless device, a cellular telephone, and a personal digital assistant.” Ex. 1001, 120:17–20. Petitioner argues that while Spaur does not explicitly describe the computer terminal 60 as a wireless device, Spaur describes a “wireless device” contained in the vehicle for transmitting and receiving information over an air link (Ex. 1004, 6:3–5), and further describes that such devices may be among vehicle devices 50 (*id.* at 10:1–9). Spaur also describes a personal digital assistant as included in vehicle devices 50. Ex. 1001, 10:1–9. Therefore, according to Petitioner, using a wireless device, a cellular telephone, or a personal digital assistant as the communication device in the system described by Spaur would have been well within the understanding of a person of ordinary skill in the art at the time the alleged invention of claim 72 was made, and it would have been obvious to do so because it would allow the user to operate the system from a mobile device. Pet. 59–60 (citing Ex. 1006 ¶ 40).

Patent Owner argues that in addition to the reasons discussed above with respect to claim 68, it would not have been obvious to use a wireless device, a cellular telephone, or a personal digital assistant in connection with

the Internet or the World Wide Web at the time of the invention of claim 72 of the '363 Patent. PO Resp. 20. In particular, Patent Owner argues that Petitioner's expert, Mr. Andrews, could not support his position during cross examination because he stated "that cellular telephones were not typically used with the Internet in 1996." *Id.* (citing Ex. 2004, 44:14–46:4). Patent Owner also argues that "at the time of the effective filing date of the Challenged Claims of the '363 Patent, a cellular phone and associated digital cellular service for wirelessly connecting to the Internet was 'too expensive to be a mass market product.'" *Id.* (citing Ex. 2005). Patent Owner further argues that Mr. Andrews acknowledged that the cell phone at the vehicle of Spaur merely was used to receive and transmit information and provided no interface with a person. *Id.* at 21 (citing Ex. 2004, 45:7).

Petitioner responds that as a preliminary matter, Patent Owner does not address the arguments in the Petition about the obviousness of claim 72. Reply 13. In particular, the Petition stated that: (1) Spaur describes a "wireless device" contained in the vehicle for transmitting and receiving information over an air link (Ex. 1004, 6:3–5), (2) Spaur describes that such devices may be among vehicle devices 50 (*id.* at 10:1–9), and (3) using a wireless device, a cellular telephone, or a personal digital assistant as the communication device in the system described by Spaur would have been within the understanding of a person of ordinary skill in the art at the time the alleged invention of claim 72 was made, and it would have been obvious to do so because it would allow the user to operate the system from a mobile device. Pet. 59–60 (citing Ex. 1006 ¶ 40). We agree with Petitioner that Patent Owner does not dispute the first two statements. Rather, we interpret Patent Owner's arguments as directed to the third statement.

Petitioner argues that Mr. Andrews testified in his declaration that wireless devices, cellular telephones, and personal digital assistants were well-known as of the filing of the '363 patent, and that the use of a mobile device in Spaur's system would have been obvious. *Id.* (citing Ex. 1006 ¶ 40). During his cross examination, Mr. Andrews testified that people "could certainly contact using a cellular telephone contact, an Internet gateway, and obtain information from devices on the Internet via an Internet gateway." Ex. 2004, 45:16–19. Thus, Petitioner argues, Patent Owner has no basis for its statement that Mr. Andrews could not support this position during cross-examination. We agree with Petitioner and are not persuaded that Mr. Andrews's testimony is unsupported based on his statements during cross examination.

Petitioner also points out that while Patent Owner refers to a quotation from a New York Times article about the expense of a pocket cellular phone (Ex. 2005), Patent Owner does not include the next sentence of the article, which states: "[b]ut there are 35 million people who are willing to carry a cellular phone, so this is no longer a technology question." Ex. 2005. Thus, we are not persuaded by Patent Owner's argument based on this article that it would not have been obvious to one skilled in the art to use a cellular phone with Spaur's system.

Petitioner has shown sufficiently that Spaur teaches all the limitations of dependent claim 72. *See* Pet. 59–60. We agree with and adopt Petitioner's contentions with respect to claim 72, and Petitioner's reasoning for why it would have been obvious to use a wireless device, a cellular telephone, or a personal digital assistant as the communication device in the system described by Spaur. *Id.* Based on these contentions, we conclude

that Petitioner has shown by a preponderance of the evidence that the subject matter of claim 72 would have been obvious in view of Spaur.

III. CONCLUSION

Based on the evidence and arguments, Petitioner has demonstrated by a preponderance of the evidence that: (1) claims 68, 69, 74, 77, and 80 are unpatentable under 35 U.S.C. § 102(e) as anticipated by Spaur; and (2) claim 72 is unpatentable under 35 U.S.C. § 103(a) as obvious over Spaur.

IV. ORDER

Accordingly, it is

ORDERED that claims 68, 69, 72, 74, 77, and 80 have been shown to be unpatentable; and

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.

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