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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte OLAF SCHERMEIER and GOTZ KULLIK

Appeal 2014-002564
Application 11/950,589
Technology Center 3700

Before MICHAEL L. HOELTER, LYNNE H. BROWNE, and ERIC C. JESCHKE, *Administrative Patent Judges*.

BROWNE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Olaf Schermeier and Gotz Kullik (Appellants) appeal under 35 U.S.C. § 134 from the rejection of claims 1, 3–8, 10–19, and 21–23. An oral hearing was held on October 25, 2016. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

CLAIMED SUBJECT MATTER

Claim 1, reproduced below, is illustrative of the claimed subject matter:

> 1. A patient connection device for the artificial respiration of a patient with an anesthesia apparatus or respirator having a machine-side connection element, the patient connection device comprising:
>
> a patient connection element for applying to an air passage of a patient;
>
> one or more sensors located on said patient connection element for internally detecting patient-relevant measured variables, one of said sensors being a body core temperature sensor, an oxygen saturation sensor and/or an electrode;
>
> a memory located on said patient connection element and storing identification information as additional patient-relevant measured variables;
>
> a means for telemetrically transmitting said patient-relevant measured variables from said patient connection element to said machine-side connection element such that said anesthesia apparatus or respirator receives said patient-relevant measured variables, said means being in bidirectional communication with said patient connection element and said machine side connection element.

REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Lang	US 4,224,939	Sept. 30, 1980
Peters	US 4,383,534	May 17, 1983
Rodder	US 5,313,955	May 24, 1994
Cohen	US 5,417,713	May 23, 1995
Russell	US 2003/0135124 A1	July 17, 2003
Gerder	US 2004/0182392 A1	Sept. 23, 2004
Faram	US 2005/0061318 A1	Mar. 24, 2005
Choncholas	US 2008/0091117 A1	Apr. 17, 2008

REJECTIONS

I. Claim 3 stands rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

II. Claim 21 stands rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

III. Claim 3 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.[1]

IV. Claims 1, 3–8, 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Choncholas, Peters, Faram, and Gerder.

V. Claims 11–15, 18, 22, and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Choncholas, Peters, and Gerder.

VI. Claim 16 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Choncholas, Peters, Gerder, Rodder, and Lang.

VII. Claim 17 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Choncholas, Peters, Gerder, and Russell.

VIII. Claim 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Choncholas, Peters, Gerder, and Cohen.

IX. Claim 21 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Choncholas, Peters, Gerder, and Faram.

[1] The rejection of claim 12 under 35 U.S.C. § 112, second paragraph, was withdrawn in the Advisory Action mailed May 30, 2013. *See* Adv. Act. 2.

DISCUSSION

Rejection I

The Examiner determines that claim 3 "contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention." Final Act. 3. This subject matter is identified as the claim limitation requiring "said means changes the identification information" where "said means" refers to "a means for telemetrically transmitting said patient-relevant measured variables from said patient connection element to said machine-side connection element" as set forth in claim 1. *Id.* In support of this determination, the Examiner determines that the structure corresponding to the claimed means is "an inductive or capacitive system for bidirectional communication of data between components." *Id.* The Examiner then applies the factors set forth in *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988) to determine if the Specification provides support for an inductive or capacitive system for bidirectional communication of data between components *changing identification information*. *See id.* at 3–4. In particular, the Examiner finds that the Specification provides no guidance "relating [to] what causes an inductive bidirectional communication interface to change information," no working examples, and "no indication of how the wireless communication between inductive or capacitive elements can be changed to produce the result of changing identification information." *Id.* at 4.

Appellants note that "[p]aragraph 36 of the specification indicates that identification information can be information such as 'information on use,'" and argue that "[i]t is well known how to record and update, information on

how often, and how long a device has been used." Appeal Br. 28. In support of this contention, Appellants argue that:

> As an example, an odometer includes information on the use of a car, and is changed constantly as the car is used. Updating "information on use" can be done with minimal processing capabilities, and is within the ability of the person of ordinary skill in the art who designs respirator/ventilators.

Id. However, Appellants do not explain how updating of information can be accomplished by an inductive or capacitive system for bidirectional communication of data between components, nor do Appellants provide evidence that such a system can accomplish such updating or changing of information. Appellants merely assert that updating is well known. Such assertions are no more than attorney argument, which cannot take the place of evidence. *In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974). Moreover, as noted by the Examiner, the Specification "does not incorporate [in an inductive or capacitive system for bidirectional communication] any inherent, express, or implicit processing systems involved with the inductive or capacitive transmission of information, merely transmitter, let alone structure for causing changes in the identification information." Ans. 3.

In the Reply Brief, Appellants further assert that "[i]f a processor is needed to perform a function, then there are plenty [of] persons who have experience with processors and [who] could implement the function. Incorporating a processor into the means of claim 3 for changing the identification information would be as easy as providing a sensor." Reply Br. 3. However, Appellants do not present evidence or convincing arguments that such a modification would not require undo experimentation and do not comment on the factors weighing against a finding of enablement discussed *supra*. Rather, Appellants merely reference a general statement

from the New York Times pertaining to the number of processors in a vehicle. *See id.* at 2–3.

Thus, weighing the evidence cited by the Examiner against the assertions made by Appellants, the preponderance of the evidence supports the Examiner's determination that one skilled in the relevant art would not know how to make and use the invention. Accordingly, we sustain the Examiner's decision rejecting claim 3 as failing to comply with the enablement requirement.

Rejection II

The Examiner determines that claim 21 "contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor . . . at the time the application was filed, had possession of the claimed invention." Final Act. 5. The Examiner identifies the limitation requiring "'transmitting both the patient sensor data from said sensors and from said memory to said respirator connection portion' . . . [as] new matter." *Id.*; *see also* Appeal Br. 10. In support of this determination, the Examiner explains that "the transmitter is only disclosed for transmitting patient sensor data from a plurality of sensors." Final Act. 5. The Examiner notes that the Specification "does not mention transmitting data from the memory to the respirator, and only mentions storing data in a memory as an optional embodiment, [with] no mention of transmitting the stored data." *Id.* The Examiner further notes that "the original disclosure clarifies a difference [between] sensor data and patient sensor data." *Id.*

Noting that "[p]aragraph 36 states that the data memory is connected to the second antenna 16 by second electric line 12" and that "[p]aragraph 36

also states that the sensor data optionally contains information on the measured patient data during a time period during which the antenna connection was interrupted (data logger function)," Appellants contend that:

> A person of ordinary skill in the art would understand that when the antenna connection is interrupted, the measured patient data is contained in the sensor data, and that once the antenna connection was reestablished, the measured patient data would be moved from the sensor data in the memory to the antenna, and then to the respirator/ventilator. . . . Therefore, the transfer of data from the memory to the respirator/ventilator via line 12 and the antenna is clearly possible by the original disclosure.

Appeal Br. 29–30. In the Reply Brief Appellants further contend that "[s]ince the function of claim 21, is a function that first comes to a person's mind for operating a data logger, Applicant clearly had possession." Reply Br. 3.

Paragraph 36 states:

> Figure 3 shows a sectional view of a detail through the electrically non-conductive, preferably inductive antenna connection between the tube connector 22 and the connection element 13, which is designed as a Y-piece here. The antenna connection is established by means of the first antenna 15 in the Y-piece and the second antenna 16 in the tube connector 22. The data memory and energy storage means 14 is located in the tube and is connected to the second antenna 16 and to the sensors by means of the second electric line 12. The electric lines 7 and 12 are preferably integrated in the wall of the expiration branch or of the tube. Sensor data containing identification information, such as static specific data on the patient connection 2 itself, for example, geometric or physical characteristics, information on use, manufacturer data, manufacturing and shelf life data, etc., as well as variable information, for example, patient data, respiration parameters and information on the preparation performed in case of multiple usability of the patient connection 2, may be stored in the data memory and energy storage means 14. The sensor data optionally contain information *on the*

> *measured patient data during a time period during which the antenna connection was interrupted* (data logger function). The energy storage means is also used especially for the temporary operation of the sensors 9, 10, 11 when the line connection to the respirator 3 is interrupted, for example, when the patient 1 shall be connected to another respirator 3. An additional energy storage means in the form of a miniaturized battery or a capacitor with very high capacity may optionally be provided.

Spec. ¶ 36 (emphasis added).

Thus, the Specification does describe including the patient sensor data in with the sensor data in the event that the antenna connection is interrupted. However, transmission of the patient sensor data along with the sensor data after antenna connection is restored is not described. Although such transmission may be possible, this is not the test for compliance with the written description requirement. Rather, "the test for [written description] sufficiency is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). In this case, Appellants merely establish that the inventors could have had possession of the claimed subject matter as of the filing date, not that they did have possession at that time. *See* Appeal Br. 29–30. Moreover, claim 21 does not recite a data logger, thus, Appellants' arguments pertaining to a data logger are unconvincing.

For these reasons, we sustain the Examiner's decision rejecting claim 21 as failing to comply with the written description requirement.

Rejection III

The Examiner determines that claim 3 is indefinite because "[i]t is unclear what structure in the inductance/capacitance system is capable of

changing identification information when it is merely used for bidirectional communication." Final Act. 6. This is essentially the same determination discussed *supra*, in the rejection of claim 3 as failing to comply with the enablement requirement. *See id.*

The second paragraph of § 112 states, "[t]he specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." Claim 3 clearly states "wherein [the] means changes the identification information." Appeal Br. 32. The Examiner does not determine that this limitation is unclear. Rather, the Examiner determines that this limitation is not enabled. Such determinations are properly addressed under the first paragraph of § 112, not the second.

For this reason, we do not sustain the Examiner's decision rejecting claim 3 as indefinite.

Rejection IV

Claims 1, 5, 6, and 8

Appellants do not provide separate arguments for claims 5, 6, and 8, which depend from claim 1. *See generally*, Appeal Br. Accordingly, claims 5, 6, and 8, stand or fall with claim 1.

The Examiner finds that the combined teachings of Choncholas, Peters, Faram, and Gerder disclose or suggest all of the limitations of claim 1. *See* Final Act. 7–11. In particular, the Examiner finds that

> Gerder teaches a connection of a sensor to a respirator/ventilator without cable connections, and uses a single line extending along a breathing gas tube and is designed to transmit signals of a sensor to a respirator, where the single line has contactless interface between signal line and sensor (see abstract and Figures 1 and 2), that more than one sensor may be

> located on sensor means (see Figure 1 reference 9 and 10), that the contactless interface uses inductive technology (see [0013]), the signal transmission between the respirator and the sensor means advantageously takes place bidirectionally via a data BUS system.

*Id.*at 10. Based on this finding, the Examiner determines that "it is thus possible to transmit the data of different sensors within the sensor means via a single data line, a two-wire line is preferably suitable for use as the data line, however, more than two lines may also be led helically along the tube." *Id.* (citing Choncholas ¶ 11). In addition, the Examiner finds that

> Peters teaches a vital signs monitoring apparatus (see title), which has an endotracheal tube having detection devices for temperature, ECG, heart sounds, and breathing sound detections (see abstract), that ECG measurements are made through the usage of Mylar strips (*electrode*) conductively connected to a chassis 36 for processing signals, and where the chassis contains a display of the sensed data.

Id. at 9 (citing Peters 4:29–35).

Appellants argue that "[t]he rejection states, and relies only, on the fact that the problem-solved in Gerder is many cables to <u>different</u> processing units, and instead Gerder only solves the problem of multiple cables to a <u>single</u> respirator/ventilator." Appeal Br. 15.[2] However, as noted by Appellants, "[i]n the Advisory Action, the Examiner further states that a rationale for combining is that it reduces patient connections from sensors to the evaluating device. This now appears to be a new ground of rejection." *Id.*

[2] Appellants incorporate the arguments pertaining to claim 22 (which are also referred to in arguing the rejection of claim 11) in arguing the rejection of claim 1. Appeal Br. 22. Accordingly, we refer to these arguments.

We understand Appellants to consider the Final Rejection to be premature, in that the Final Rejection was modified by the Advisory Action. *See id.*

> "Any question as to prematureness of a final rejection should be raised, if at all, while the application is still pending before the primary examiner. This is purely a question of practice, wholly distinct from the tenability of the rejection. It may therefore not be advanced as a ground for appeal, or made the basis of complaint before the Patent Trial and Appeal Board. It is reviewable by petition under 37 CFR 1.181.

MPEP § 706.07(c) (citing MPEP § 1002.02(c)). Accordingly, Appellants' argument is untimely and improper. For purposes of the instant Appeal, we consider the Examiner's rejection as modified, to the extent that it is modified, by the Advisory Action.

In response to the Advisory Action, Appellants argue that "[i]n Gerder, patient connections from sensors to an evaluating device are only disclosed for an evaluating device which produces breathing gases, and only for sensors that measure the breathing gas." Appeal Br. 15. Appellants are correct; however, this is not indicative of error. Nonobviousness cannot be established by attacking the references individually when the rejection is predicated upon a combination of prior art disclosures. *See In re Merck & Co.*, 800 F.2d 1091, 1097, (Fed. Cir. 1986). As discussed *supra*, the rejection relies upon the combined teachings of Choncholas, Peters, Faram, and Gerder. Specifically, the rejection relies upon Peters' teaching of other sensors. *See* Final Act. 9. Appellants do not explain why the combined teachings of Gerder and Peters do not render the claim limitations at issue obvious. Thus, Appellants do not apprise us of error.

Appellants further argue that "[t]he mere fact that the result of a modification is beneficial, does not automatically make the modification obvious. Instead there must be some reason that a person of ordinary skill would be led to make the modification that causes the beneficial results." Appeal Br. 16. However, Appellants do not address the reasoning articulated by the Examiner. The Examiner determines that it would have been obvious "to modify the device taught by Choncholas (modified with the teaching[s] of Peters and Faram) to utilize inductance bidirectional communication between patient connection unit sensors and a ventilator with processing unit in order to reduce the number of cables used in a respirator device." Final Act. 11 (citing Gerder ¶¶ 3, 8). The Examiner explains that Gerder describes a cable connection that must be led separately to the evaluating device from the breathing gas tubes as a problem in the art. *See* Ans. 8 (citing Gerder ¶ 3). The Examiner further explains that Gerder solves this problem, by combining the cable connection. *See id.* at 9 (citing Gerder ¶ 8). Appellants do not explain why this reasoning is flawed. Thus, Appellants do not apprise us of error.

In addition, Appellants contend that "Peters actually teaches away from sending non-respirator/ventilator data to a respirator/ventilator." Appeal Br. 16. However, Appellants do not identify where Peters "criticize[s], discredit[s], or otherwise discourage[s]" the use of other alternatives. *See In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004). We will not read into a reference a teaching away from a proposed combination when no such language exists. *See Dystar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1364 (Fed. Cir. 2006). Thus, Appellants' argument is unconvincing.

Next, Appellants take issue with the Examiner's use of the word "comparable" in determining that Peters' component for processing information is equivalent to Choncholas' central processing unit (CPU). *See* Appeal Br. 17. However, as noted by Appellants, the Examiner explains that these processing units are "comparable" (i.e. equivalent) because they are both related to processing physiological data. *Id.* Rather than explain why Peters' and Choncholas' processors are not equivalents, Appellants again take issue with the Examiner's word choice. Such arguments do not apprise us of error.

Appellants further argue that the rejection is based on impermissible hindsight because the "feature of non-respiration data being sent over cable that extends along a breathing tube to a respirator/ventilator is only present in the present application." *Id.* at 18. Appellants' argument is not responsive to the rejection, which relies upon the combined teachings of the prior art to meet the limitation at issue. Moreover, Appellants do not identify any knowledge relied upon by the Examiner that was gleaned only from Appellant's disclosure and that was not otherwise within the level of ordinary skill at the time of the invention, thereby obviating Appellant's assertion of hindsight. *See In re McLaughlin*, 443 F.2d 1392, 1395 (CCPA 1971). Thus, Appellants do not apprise us of error.

Finally, Appellants argue that "there is no disclosure in Faram that RFID tag 43 stores information that is <u>additional patient-relevant</u> measured variables." Appeal Br. 22–23.

The Examiner finds that "Faram teaches a breathing treatment apparatus (see title) that is adapted with a nebulizer attached to a mouth piece (see [0077] and Figure 6), where an RFID (Radio Frequency

Identification) transceiver 42, connected to source gas 1, can recognize *identification information* transmitted from RFID tag 43." Final Act. 9 (emphasis added). The Examiner explains that "there is nothing in the claim precluding the disclosed identification information taught by Faram from being the claimed identification information being the termed 'additional patient sensor data.'" Ans. 27.

Appellants baldly assert that "[t]he rejection is interpreting non-patient-relevant measured variables as patient-relevant measured variables." Reply Br. 10. However, Appellants do not explain why the identification information transmitted from Faram's RFID tag is not additional patient-relevant measured variables. *See id.* at 10–11. Thus, Appellants do not apprise us of error.

In the Reply Brief, Appellants further argue that "the prior art has no instructions to send non-respiration data to a respirator, or even along a majority of a length of a breathing tube, and therefore it is not obvious." Reply Br. 6. In support of this contention, Appellants note that

> Gerder only discloses sending respiration data over wire on a breathing tube to a respirator. Peter discloses separating any non-respiration data from a breathing tube very soon after the breathing tube exits the patient. Peter further discloses that this non-respiration data is not sent to a respirator, but instead sent to a different control unit. None of the prior art recognizes that a benefit could occur if respiration data and non-respiration data was sent along a breathing tube and into a respirator.

Id. As discussed *supra*, nonobviousness cannot be established by attacking the references individually. Although the Appellants' observations are correct, they are not responsive to the rejection as articulated by the Examiner and are not indicative of error because the rejection relies upon

Gerder's teaching of sending data over a wire and Choncholas' teaching of sending the data to the respirator. *See* Final Act. 7–11.

For these reasons, we sustain the Examiner's decision rejecting claim 1, and claims 5, 6, and 8, which depend therefrom, as unpatentable over Choncholas, Peters, Faram, and Gerder.

Claim 3

The Examiner finds that the limitations of claim 3 "are fully met by Choncholas modified with the teaching[s] of Peters, Faram, and Gerder, where Gerder teaches [that] the means changes the identification information (see entire document, where Gerder transmits variable patient data, i.e. respiration parameters measured across the inductive interface to the ventilator)." Final Act. 11.

Appellants argue that "Applicant finds no indication that Gerder changes identification information. Gerder does describe transmitting variable patient data, but this variable patient data is not identification information, and especially not changed identification information." Appeal Br. 23.

Responding to this argument, the Examiner explains that "the means structures taught by Gerder (see Figure 1) indeed match those structures taught by [Appellants] (see Instant Application Figure 3) and thus the structure is capable of transmitting changing identification information programmed for allowing compatible gas sources." Ans. 27. The Examiner further explains that "Faram which taught the identification information is programmed for a particular source gas in order to allow for compatibility check for a gas source, such that the programming of the RFID is capable of being completed via the telemetric means connection." *Id.* at 27–28.

However, the Examiner never explains why it would have been obvious to use Gerder's structures to change identification information as required by claim 3. Thus, the Examiner fails to set forth a prima facie case of obviousness.

For this reason, we do not sustain the Examiner's decision rejecting claim 3 as unpatentable over Choncholas, Peters, Faram, and Gerder.

Claim 4

Claim 4 depends from claim 1. The Examiner finds that

> Gerder teaches said means wirelessly transmits energy from said machine side connection element into said patient connection element such that said one or more sensors are powered via said wireless energy transmission (see [0013] where the contactless interface is advantageously designed as an inductive interface, that can transmit energy from the respirator to the sensor means so that no separate energy supply needs to be provided).

Final Act. 11. Based on this finding, the Examiner determines that it would have been obvious "to modify the device taught by Choncholas modified with the teachings of Peters to utilize inductance bidirectional communication between patient connection unit sensors and a ventilator with processing unit in order to reduce the number of cables used in a respirator device." *Id.* at 11–12 (citing Gerder ¶¶ 3, 8).

Appellants argue that Gerder does not disclose means "used for non-breathing gas sensors." Appeal Br. 21.[3]

Appellants' argument is not responsive to the rejection as articulated by the Examiner, which relies upon Peters' teachings, in combination with Choncholas, Faram, and Gerder, to meet the limitation at issue. Further, as

[3] Appellants rely upon the arguments pertaining to claim 18, in arguing claim 4. Appeal Br. 23. Accordingly, we refer to this argument.

discussed *supra*, nonobviousness cannot be established by attacking the references separately when the rejection is based on a combination of prior art disclosures. Thus, Appellants do not apprise us of error.

We sustain the Examiner's decision rejecting claim 4 as unpatentable over Choncholas, Peters, Faram, and Gerder.

Claim 7

Claim 7 depends from claim 1. The Examiner finds that "Choncholas teaches said patient connection element comprises at least one Y-piece, a breathing tube or breathing system (see Figure 1 where a Y-connection 34 is included)" and "Gerder teaches said means transmits said patient relevant measured variables along said patient connection element from said one or more sensor to the anesthesia apparatus or the respirator." Final Act. 12. Based in these findings, the Examiner determines that it would have been obvious "to modify the device taught by Choncholas modified with the teachings of Peters to utilize inductance bidirectional communication between patient connection unit sensors and a ventilator with processing unit in order to reduce the number of cables used in a respirator device." *Id.* at 13 (citing Gerder ¶¶ 3, 8).

Appellants argue that "the prior art of Peters and Choncholas lead away from transmitting patient-relevant measured variables along a Y piece. This is especially true with Choncholas, which shows that any transmitting of data is done separately from, and spaced from, a Y piece." Appeal Br. 24.

As an initial matter, we note that claim 7 does not require a Y-piece. Rather, claim 7 requires "at least one Y-piece, a breathing tube *or* a breathing system." Appeal Br. 23 (emphasis added). Furthermore, Appellants' argument is unconvincing because "teaching away" requires that

the reference "criticize, discredit, or otherwise discourage" the use of other alternatives. *See In re Fulton*, 391 F.3d at 1201. Appellants do not identify where either Choncholas or Peters criticize, discredit, or otherwise discourage use of a Y-piece. We will not read into a reference a teaching away from a proposed combination when no such language exists. *See Dystar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d at 1364. Thus, Appellants' argument is unconvincing.

We sustain the Examiner's decision rejecting claim 7 as unpatentable over Choncholas, Peters, Faram, and Gerder.

Claim 10

Claim 10 depends from claim 1. The Examiner finds that

> Peters teaches said one or more sensors include one or more electrodes provided on said patient connection element, said one or more electrodes being an electrocardiogram (ECG) electrode or an electroimpedance tomography (EIT) electrode (see abstract an endotracheal tube having detection devices for temperature, ECG, heart sounds, and breathing sound detections.

Final Act. 13 (citing Peters 4:29–35). The Examiner further finds that

> ECG measurements are made through the usage of Mylar strips (*electrodes*) conductively connected to a chassis 36 for processing signals, and where the chassis contains a display of the sensed data (the chassis component for processing information in Peters is obviously comparable to the structures of CPUs present in the ventilator and ventilator display of Choncholas)).

Id. at 13–14. Based on these findings, the Examiner determines that it would have been obvious "to combine prior art elements according to known methods to yield predictable results of measuring ECG of a patient on an endotracheal tube in order to monitor numerous vital signs of a patient (see both Peters and Choncholas display multiple measurements)." *Id.* at 14.

Appellants contend that "Peters does not disclose that data from such electrode is to be sent to a respirator."[4] Appeal Br. 21. Appellants' argument is not responsive to the rejection as articulated by the Examiner, as the rejection relies upon Choncholas to meet the limitation at issue. *See* Final Act. 14. Further, as discussed *supra*, nonobviousness cannot be established by attacking the references separately. Accordingly, Appellants' arguments are not convincing.

We sustain the Examiner's decision rejecting claim 10 as unpatentable over Choncholas, Peters, Faram, and Gerder.

Rejection V

Claims 11 and 22

As noted *supra*, Appellants' arguments for the patentability of claims 11 and 22 were incorporated in the arguments for the patentability of claim 1. These arguments are addressed above and are not convincing for the reasons discussed in detail. Accordingly, we sustain the Examiner's decision rejecting claims 11 and 22 for the same reasons.

Claim 12

The Examiner finds that the limitations of claim 12 are disclosed or suggested by the combined teachings of Choncholas, Peters, and Gerder. *See* Final Act. 17–18. In particular, the Examiner determines that it would have been obvious "to combine prior art elements according to known methods to yield predictable results of measuring body core temperature of a patient on an endotracheal tube in order to monitor numerous vital signs of a

[4] Appellants rely upon the argument for claim 15 in arguing the rejection of claim 10. *See* Appeal Br. 24. Accordingly, we refer to this argument.

patient (see both Peters and Choncholas display multiple measurements)." *See id.* at 18.

Appellants argue that "Peters teaches that the data from such a sensor is not to go to a respirator, but instead to a separate chassis 36, which is clearly separate from the respiratory control system 18." Appeal Br. 20. Again, Appellants' argument is not responsive to the rejection and attacks the references separately instead of addressing the combined teachings of the references. Accordingly, Appellants do not apprise us of error.

In the Reply Brief, Appellants contest the Examiner's word choice in explaining the reasons for the proposed modification. *See* Reply Br. 7–8. However, Appellants do not explain why the Examiner's reasoning is flawed. Accordingly, Appellants do not apprise us of error.

We sustain the Examiner's decision rejecting claim 12 as unpatentable over Choncholas, Peters, and Gerder.

Claims 13 and 14

The Examiner finds that the limitations of claim 13 are disclosed or suggested by the combined teachings of Choncholas, Peters, and Gerder. Final Act. 18–19. In particular, the Examiner determines that it would have been obvious "to modify the device taught by Choncholas (modified with the teaching of Peters) to utilize inductance bidirectional communication between patient connection unit sensors and a ventilator with processing unit in order to reduce the number of cables used in a respirator device." *Id.* (citing Gerder ¶¶ 3, 8).

Appellants argue that "Gerder does not disclose that [the] features of the means should be used to convey information from nonbreathing gas sensors, especially those as disclosed in Peters." Appeal Br. 20. However, a

determination of obviousness does not require the claimed invention to be expressly suggested by any one or all of the references. *See, e.g., In re Keller*, 642 F.2d 413, 425 (CCPA 1981). Rather, as noted by the Supreme Court in *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007), an obviousness analysis "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." 550 U.S. at 418. Thus, Appellants do not apprise us of error.

We sustain the Examiner's decision rejecting claim 13 as unpatentable over Choncholas, Peters, and Gerder. Appellants rely upon the same argument in contesting claim 14. *See* Appeal Br. 20–21. Accordingly, we sustain the Examiner's rejection of claim 14 as unpatentable over Choncholas, Peters, and Gerder, for the same reason.

Claim 15

Appellants' arguments for the patentability of claim 15 are discussed *supra*, as Appellants relied upon the arguments for claim 15 in contesting the rejection of claim 10. For the reasons discussed above, Appellants' arguments are unconvincing.

In the Reply Brief, Appellants again criticize the Examiner's word choice in explaining the reasons for the proposed modification. *See* Reply Br. 8–9. As discussed *supra*, such arguments do not apprise us of error. Furthermore, the remainder of Appellants' arguments are new arguments raised in the Reply Brief for the first time. It does not appear that these arguments respond to an argument in the Answer. Accordingly, lacking a showing of good cause, we do not consider these arguments. 37 C.F.R. § 41.41 (b)(2).

We sustain the Examiner's decision rejecting claim 15 as unpatentable over Choncholas, Peters, and Gerder.

Claim 18

The rejection of claim 18 relies upon the combined teachings of Choncholas, Peters, and Gerder. *See* Final Act. 21. In particular, the Examiner determines that it would have been obvious "to modify the device taught by Choncholas (modified with the teaching of Peters) to utilize inductance bidirectional communication between [a] patient connection unit sensors and a ventilator with [a] processing unit in order to reduce the number of cables used in a respirator device." *Id.* (citing Gerder ¶¶ 3, 8).

Appellants argue that "Gerder does not disclose that this feature is to be used for non-breathing gas sensors." Appeal Br. 21. Appellants' argument is not responsive to the rejection as articulated by the Examiner and attacks the references separately. As discussed *supra*, such arguments are unconvincing.

We sustain the Examiner's decision rejecting claim 18 as unpatentable over Choncholas, Peters, and Gerder.

Claim 23

The Examiner finds that "Gerder teaches a wire [that] is adjacent said one of said inspiration and expiration branches for a majority of a length of said inspiration and expiration branches." Final Act. 26. The Examiner refers to the rejection of claim 22 "for further explanation on location of the wire in branch breathing tubes." *Id.* In the rejection of claim 22, the Examiner determines that it would have been obvious "to modify the device taught by Choncholas to utilize inductance bidirectional communication between patient connection unit sensors and a ventilator with processing unit

in order to reduce the number of cables used in a respirator device." *Id.* at 25 (citing Gerder ¶¶ 3, 8).

Appellants argue that "Gerder only discloses a wire that carries measurements of the breathing gas." Appeal Br. 19. This argument is not responsive to the rejection as articulated by the Examiner and attacks the references separately. Accordingly, it is not convincing.

We sustain the Examiner's decision rejecting claim 23.

Rejection VI

The Examiner determines that the combined teachings of Choncholas, Peters, Gerder, Rodder, and Lang disclose or suggest all of the limitations of claim 16. Final Act. 26–27. Appellants argue that "Peters and Choncholas lead away from transmitting patient-relevant measured variables along a Y piece, and this is especially true with regard to Choncholas which shows that any transmitting of data is done separately from, and spaced from, a Y piece." Appeal Br. 25.

Appellants do not identify where either Choncholas or Peters "criticize, discredit, or otherwise discourage" transmitting patient-relevant measured variables along a Y-piece. *Id.* As discussed *supra*, we will not read into a reference a teaching away when no such language exists. Thus, Appellants' argument is unconvincing.

In the Reply Brief, Appellants again criticize the Examiner's word choice. *See* Reply Br. 11–12. As discussed *supra*, such arguments do not apprise us of error.

We sustain the Examiner's decision rejecting claim 16 as unpatentable over Choncholas, Peters, Gerder, Rodder, and Lang.

Rejection VII

The Examiner determines that the combined teachings of Choncholas, Peters, Gerder, and Russell disclose or suggest all of the limitations of claim 17. Final Act. 28–29; *see also* Reply Br. 12. Appellants argue that "Russell relates to a noninvasive measuring of blood parameters. There is no indication that the storing of this data in Russell would be useful in a memory in a device that is invasive, and is related to artificial respiration of a patient." Appeal Br. 25.

Appellants' argument is not responsive to the rejection as articulated by the Examiner and attacks the reference separately. As discussed *supra*, such arguments do not apprise us of error.

We sustain the Examiner's decision rejecting claim 17 as unpatentable over Choncholas, Peters, Gerder, and Russell.

Rejection VIII

The Examiner finds that the combined teachings of Choncholas, Peters, Gerder, and Cohen disclose or suggest all of the limitations of claim 19. Final Act. 29–30. Appellants argue that "[t]he modification proposed by the rejection would cause Cohen to not operate properly." Appeal Br. 26; *see also* Reply Br. 12–13.

Appellants' argument is not responsive to the rejection as articulated by the Examiner, which does not propose modification of Cohen. Rather, the rejection proposes modification of Choncholas in view of the teachings of Peters, Gerder, and Cohen. *See* Final Act. 30. Accordingly, Appellants do not apprise us of error.

We sustain the Examiner's decision rejecting claim 19 as unpatentable over the combined teachings of Choncholas, Peters, Gerder, and Cohen.

Rejection IX

The Examiner finds that the combined teachings of Choncholas, Peters, Gerder, and Faram disclose or suggest all of the limitations of claim 21. Final Act. 30–31. Appellants present essentially the same argument regarding the information on Faram's RFID tag, as presented to contest the rejection of claim 1. *See* Appeal Br. 27. This argument is unconvincing for the reasons discussed *supra*.

We sustain the Examiner's decision rejection claim 21 as unpatentable over Choncholas, Peters, Gerder, and Faram.

DECISION

The Examiner's rejections of claims 3 and 21 under 35 U.S.C. § 112, first paragraph are affirmed.

The Examiner's rejection of claim 3 under 35 U.S.C. § 112, second paragraph is reversed.

The Examiner's rejections of claims 1, 4–8, 10–19, and 21–23 under 35 U.S.C. § 103(a) are affirmed.

The Examiner's rejection of claim 3 under 35 U.S.C. § 103(a) is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED