Paper No. 29

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RODNEY C. HEMMINGER and MARK L. MUNDAY

Appeal No. 2000-2244
Application No. 08/660,709

ON BRIEF

Before JERRY SMITH, GROSS, and BARRY, *Administrative Patent Judges*.
BARRY, *Administrative Patent Judge*.

DECISION ON APPEAL

A patent examiner rejected claims 23-31. The appellants appeal therefrom under 35 U.S.C. § 134(a). We affirm-in-part.

BACKGROUND

The appellants' invention concerns utility meters. An electromechanical utility meter uses a rotating disk to generate an output; an electronic meter generates an output electronically. (Spec. at 1.) An electromechanical meter is tested with a piece of test equipment that reflects light off a metered disk to detect a painted spot as the disk

rotates. Because electronic meters contain no such rotating disks, explain the appellants, such a testing technique cannot be used therewith. (*Id.* at 2.)

The appellants' invention electronically displays metered electrical energy. More specifically, a first processor receives voltage and current signals and determines electrical energy. The processor generates an energy signal representing the determination. A second processor, connected to the first, receives the energy signal and generates a display signal representing electrical energy. A display receives the display signal and displays a representation of the electrical energy.

A further understanding of the invention can be achieved by reading the following claim:

> 23. An apparatus for electronically displaying metered electrical energy, said metered electrical energy being determined from voltage and current signals representative of voltage and current characteristics, said apparatus comprising:
>
> a first processor, connected to receive said voltage and current signals, for metering multiple types of electrical energy from said voltage and current signals and for generating energy signals representative of said multiple types of electrical energy;
>
> a second processor, connected to said first processor, for receiving said energy signals and for multiplexing said energy signals into a pulsed output signal representative of a magnitude of said energy signals; and
>
> a first converter, connected to said second processor, for converting said pulsed output signal to light.

Claims 23-31 stand rejected under 35 U.S.C. § 103(a) as obvious over Schlumberger Indus. Elec. Div. ("Schlumberger"), *Quantum® Electronic Meter Field Reference Manual For Q101, Q111, Q121, Q200, Q210, Q220 and Q230 Electronic Meters*, chs. 5-6 (circa 1990[1]) in view of U.S. Patent No. 4,298,839 ("Johnston").

OPINION

At the outset, we recall that claims that are not argued separately stand or fall together. *In re Kaslow*, 707 F.2d 1366, 1376, 217 USPQ 1089, 1096 (Fed. Cir. 1983) (citing *In re Burckel*, 592 F.2d 1175, 201 USPQ 67 (CCPA 1979)). When the patentability of a dependent claim is not argued separately, in particular, the claim stands or falls with the claim from which it depends. *In re King*, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986) (citing *In re Sernaker*, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983); *In re Burckel*, 592 F.2d 1175, 1178-79, 201 USPQ 67, 70 (CCPA 1979)). Furthermore, "[m]erely pointing out differences in what the claims cover is not an argument as to why the claims are separately patentable." 37 C.F.R. § 1.192(c)(7)(2002).

[1]The examiner asserts that "[t]he date of the reference titled 'Quantum Electronic Meter. . .' is taken to be 1990 because it refers to the Model Q200 and Product Bulletin 10255, also submitted, refers to Model Q200. Product Bulletin 10255 has a date of 1990 or prior to 1990." (Final Rejection at 2.)

Here, although the appellants allege, "none of the references of record disclose, teach or suggest outputting a pulsed output signal, generated by a second processor, over an optical port in response to energy signals generated by a first processor," (Appeal Br. at 9), they fail to specify to which, if any, claim the allegation applies. We find no recitation of "an optical port" in claims 23-31. Accordingly, the allegation is not an argument why claims are separately patentable.

The appellants also allege, "[n]or do the references teach that the energy signals may be further representative of the rate at which each of the *multiple* types of electrical energy are metered." (*Id.*) They fail to specify, however, to which claim the allegation applies. As best we can discern, it applies to claim 29, which specifies "the rate at which each of said multiple types of electrical energy are metered." Therefore, claims 24-28 stand or fall with representative claim 23, and claims 30 and 31 stand or falls with representative claim 29. With this representation in mind, we address the following groups of claims:

- claims 23-28
- claims 29-31.

Claims 23-28

Rather than reiterate the positions of the examiner or appellants *in toto*, we address the three points of contention therebetween. First, "[t]he Examiner points to

column 5, line 65 to column 7, column 23, of Johnston where it is indicated that kilowatt hours and kilowatt demand are stored in RAM and selectively read out on an eight digit display or impulse signal." (Examiner's Answer at 4-5.) The appellants argue, "[t]here is no provision whatsoever disclosed or suggested by Johnston `839 to transmit the pulsed outputs 26 and 27 (i.e., energy signals or test signals) from converter 24 over the first converter. . . ." (Appeal Br. at 7.)

"Analysis begins with a key legal question -- *what* is the invention *claimed*?" *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987). In answering the question, "the Board must give claims their broadest reasonable construction. . . ." *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1668 (Fed. Cir. 2000). "Moreover, limitations are not to be read into the claims from the specification." *In re Van Geuns*, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993) (citing *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)).

Claim 23 specifies in pertinent part the following limitations: "metering multiple types of electrical energy from said voltage and current signals and for generating energy signals representative of said multiple types of electrical energy; . . . receiving said energy signals and . . . multiplexing said energy signals into a pulsed output signal representative of a magnitude of said energy signals. . . ." Giving the representative

claim its broadest, reasonable construction, the limitations require "outputting a pulsed signal representative of **multiple** types of energy." (Appeal Br. at 6.)

Having determined what subject matter is being claimed, the next inquiry is whether the subject matter is obvious. The question of obviousness is "based on underlying factual determinations including . . . what th[e] prior art teaches explicitly and inherently. . . ." *In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697(Fed. Cir. 2001) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966); *In re Dembiczak*, 175 F.3d 994, 998, 50 USPQ 1614, 1616 (Fed. Cir. 1999); *In re Napier*, 55 F.3d 610, 613, 34 USPQ2d 1782, 1784 (Fed. Cir. 1995)). "'A *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art.'" *In re Bell*, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)).

Here, Johnston generally "relates to an external data communication arrangement for a programmable AC electric energy meter having a sealed enclosure and more particularly to such an arrangement including a transparent communications window portion of the enclosure for receiving and transmitting coded radiations into and from a radiation sensitive external data interface." Col. 1, ll. 8-14. We find that the

coded radiations transmitted from the electric meter are a pulsed signal representing multiple types of energy. Specifically, the reference initially captures data representing multiple types of energy. More specifically, "circuit 16 totalizes and stores in the data RAM memory 34 the values of the electric energy parameters to be measured including **kilowatt hours** and **kilowatt demand** for the predetermined high rate, mid rate and low rate periods during each day." Col. 6, ll. 22-27 (emphasis added). "Claims are not interpreted in a vacuum, but are part of and are read in light of the specification." *Slimfold Mfg. Co. v. Kinkead Indus., Inc.*, 810 F.2d 1113, 1116, 1 USPQ2d 1563, 1566 (Fed. Cir. 1987) (citing *Hybritech Inc. v. Monoclonal Anti-bodies, Inc.*, 802 F.2d 1367, 1385, 231 USPQ 81, 94-95 (Fed. Cir. 1986); *In re Mattison*, 509 F.2d 563, 565, 184 USPQ 484, 486 (CCPA 1975)). Here, the appellants' specification exemplifies the claimed "multiple types of energy" as "each transition on conductors 42-48. . . ." (Spec. at 6.) Watthour delivered ("Whr Del") and watthour received ("Whr Rec") are among these transitions, (*Id.* at 5-6; Fig. 1), and, hence, are multiple types of energy. Reading "multiple types of energy" in light of the specification, we find that the reference's kilowatt hours and kilowatt demand are multiple types of energy.

We further find that Johnston outputs a pulsed signal representing the kilowatt hours and kilowatt demand. Specifically, "[t]he stored read-write memory data is . . . read out in pulse signal by means of the present invention. . . ." Col. 6, ll. 33-35.

Second, the examiner asserts, "[t]he apparatus of Johnston, in the Examiner's view, is a time division multiplex apparatus that sequentially generates two signals representative of two different parameters and outputs the data on a single LED, namely LED 86." (Examiner's Answer at 5.) He adds, “LED 86 sequentially outputs kilowatt hours and kilowatt demand.” (*Id.*) The appellants “fail to understand what the Quantum meter is multiplexing.” (Appeal Br. at 8.)

Claim 23 also specifies in pertinent part the following limitations: "multiplexing said energy signals into a pulsed output. . . ." The term “multiplexing” refers to sharing a data link. William Stallings, *Data and Computer Communications* 165 (2d ed. 1988) (copy attached). Giving the independent claim its broadest, reasonable construction, the limitations require outputting the multiple types of energy over the same data link.

“Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references.” *In re Merck & Co.*, 800 F.2d 1091, 1097, 231 USPQ 375, 380 (Fed. Cir. 1986) (citing *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981)). “‘Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.’” *Cable Elec. Prods., Inc. v. Genmark, Inc.*, 770 F.2d 1015,

1025, 226 USPQ 881, 886-87 (Fed. Cir. 1985) (quoting *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981)).

Here, the rejection is based on a combination of references that includes Johnston. We find that Johnston multiplexes its multiple types of energy, i.e., its kilowatt hours and kilowatt demand. As mentioned regarding the first contention, the reference's "stored read-write memory data is . . . read out in pulse signal by means of the present invention. . . ." Col 6., ll. 33-35. Furthermore, Johnston transmits its "DATA OUT pulses 105," col. 7, l. 46, using a single "radiation emitter[] 86," *id.* at ll. 47-48, "to produce the corresponding electromagnetic light radiation[] 72. . . ." *Id.* at ll. 48-49. Because the reference outputs its two types of energy, i.e., kilowatt hours and kilowatt demand, via a shared emitter and pulse stream, we find that it necessarily multiplexes the two types of energy.

Third, the examiner asserts, "[iIt would have been obvious to one of ordinary skill in the art at the time the invention was made to have adapted the apparatus of the 'Quantum Electronic Meter. . .' reference to read watthour and var test signals using a single optical port and switching means in accord with the teaching of Johnson `839 because one skilled in the art would realize that such would reduce the number of optical ports necessary." (Final Rejection at 2-3.) The appellants argue, "[n]or would

there be any motivation to combine the references, as asserted by the Examiner." (Appeal Br. at 7.)

As explained regarding the first two points of contention, we have found that teachings from Johnston itself would have suggested the claimed subject matter to a person of ordinary skill in the art. Because the teachings of Schlumberger are merely cumulative to those of Johnston, we decline to address the motivation to combine the two references. Therefore, we affirm the rejection of claim 23 and of claims 24-28, which fall therewith.

Claims 29-31

As mentioned at the outset of our opinion, the appellants argue, "[n]or do the references teach that the energy signals may be further representative of the rate at which each of the **multiple** types of electrical energy are metered." (Appeal Br. at 9.)

"The review authorized by 35 U.S.C. Section 134 is not a process whereby the examiner . . . invite[s] the [B]oard [of Patent Appeals and Interferences] to examine the application and resolve patentability in the first instance." *Ex parte Braeken*, 54 USPQ2d 1110, 1112 (Bd.Pat.App. & Int. 1999). To the contrary, "[i]n rejecting claims under 35 U.S.C. Section 103, the examiner bears the initial burden of presenting a

prima facie case of obviousness." *In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993)(citing *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992)).

Here, although the examiner includes claims 29-31 in his statement of the rejection, (Final Rejection at 2), he fails to address the specific limitations thereof. "We decline to substitute speculation as to the rejection[s] for the greater certainty which should come from the [examiner] in a more definite [explanation] of the grounds of rejections." *Ex parte Gambogi*, 62 USPQ2d 1209, 1212 (Bd.Pat.App. & Int. 2001). Therefore, we reverse the rejection of claims 29-31.

CONCLUSION

In summary, the rejection of claims 23-28 under § 103(a) is affirmed, while the rejection of claims 29-31 under § 103(a) is reversed. "Any arguments or authorities not included in the brief will be refused consideration by the Board of Patent Appeals and Interferences. . . ." 37 C.F.R. § 1.192(a)(2002). Accordingly, our affirmance is based only on the arguments made in the brief. Any arguments or authorities not included therein are neither before us nor at issue but are considered waived. No time for taking any action connected with this appeal may be extended under 37 C.F.R. § 1.136(a) (2002).

AFFIRMED-IN-PART

JERRY SMITH Administrative Patent Judge	)
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