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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte VINEET MITTAL, MICHAEL J. KOENIG, RAJEEV D. RAJAN,
and KEVIN T. GREGORY

Appeal 2018-006619
Application 12/607,231
Technology Center 2400

Before BRADLEY W. BAUMEISTER, JEREMY J. CURCURI, and
RUSSELL E. CASS, *Administrative Patent Judges*.

CASS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–61 under 35 U.S.C. §§ 102 or 103, and of claims 15, 17, 18, 45 and 47 under 35 U.S.C. § 112(b). Appeal Br. 8.² Claims 1–61 constitute all of the claims pending in this Application. *Id.* We have jurisdiction under 35 U.S.C. § 6(b).

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant lists QUALCOMM Incorporated as the real party in interest. Appeal Brief filed January 11, 2018 (“Appeal Br.”) 4.

² Rather than repeat the Examiner's positions and Appellant's arguments in their entirety, we refer to the above mentioned Appeal Brief, as well as the following documents for their respective details: the Final Action mailed July 28, 2017 (“Final Act.”); the Examiner's Answer mailed May 15, 2018 (“Ans.”); and the Reply Brief filed June 13, 2018 (“Reply Br.”).

We affirm the rejection under 35 U.S.C. § 112(b) and reverse the rejections under 35 U.S.C. §§ 102 and 103.

BACKGROUND

The present invention relates to a method of obtaining contextually relevant content by a wireless communication device (WCD). Abstr. First, a wireless communications device may obtain a destination device identifying item, such as a telephone number. *Id.*; Spec. ¶ 44. Next, the WCD may transmit the destination device identifying item to a contextual content server. Abstr.

The contextual content server may determine one or more contextually relevant context items by processing the received destination device identifying item and a WCD location value. *Id.* Contextual content items may include, for example, coupons, advertisements, and announcements associated with products, services, individuals, groups, or locations. Spec. ¶ 31.

The contextual content server may then send the contextually relevant content items to the WCD. Abstr. For example, the contextual content server may associate the dialed number and/or the calling number with a florist and provide content items for the dialed florist and other florists in the area. Spec. ¶ 31. The contextually relevant content may be provided to the user at various times, including before a call is made, while a call is being connected, during the time when a call is already connected, or after the call is completed. *Id.* ¶ 52.

Claim 1 is illustrative of the claims at issue:

1. A method of obtaining contextually relevant content by a wireless communications device (WCD), the method comprising:

detecting, by the WCD, initiation of a connection between the WCD and a destination device over a first communication path to establish a voice call with the destination device;

obtaining, by the WCD, a destination device identifying item based on the detected initiation of the connection and the destination device;

transmitting, by the WCD, while establishing the voice call with the destination device, the destination device identifying item to a contextual content server over a second communication path different than the first communication path, wherein the contextual content server determines one or more contextually relevant content items by processing the received destination device identifying item while the WCD is establishing the voice call with the destination device; and

receiving, by the WCD, from the contextual content server over the second communication path while establishing the voice call with the destination device, at least one of the one or more contextually relevant content items.

Appeal Br. 19 (Claims Appendix).

THE SECTION 102 AND 103 REJECTIONS

In the Final Office Action, the Examiner rejects claims 1, 15–18, 32, and 45–48 under 35 U.S.C. § 102(b) as being anticipated by Urban (US 20017/0297587 A1; published Dec. 27, 2007). Final Act. 3–24. The Examiner finds that Urban discloses all of the limitations of claim 1, including for example, (i) “transmitting, by the WCD, while establishing the voice call, the destination device identifying item to a contextual content

server over a second communication path different than the first communication path, in which the contextual content server determines one or more contextually relevant content items by processing the received destination device identifying item while the WCD is establishing the voice call with the destination device” (*id.* at 4–5 (citing Urban ¶¶ 47–48; Figs. 1, 3, and 8); and (ii) “receiving, by the WCD from the contextual context server over the second communication path while establishing the voice call with the destination device, at least one of the one or more contextually relevant content items” (*id.* at 5 (citing Urban ¶¶ 48, 51–52; Figs. 11, 13)). Appellant argues, *inter alia*, that Urban does not disclose the transmitting or receiving limitations of claim 1. Appeal Br. 11, 13–14; Reply Br. 6, 8–9.

We agree with Appellant that the Examiner has not sufficiently established that Urban discloses the “transmitting” and “receiving” limitations of claim 1. Urban discloses a caller ID messaging device that supplants the incoming calling line identification signal with a Caller ID messaging signal, which is transmitted to a destination device. Urban, Abstr. The Examiner relies on paragraph 48 of Urban, which teaches that the data from a Caller ID message from a calling device may need reformatting based on the configuration of the receiving device:

Regardless of the calling party’s communications device . . . used to communicate the Caller ID Messaging Signal, this information may need to be formatted accordingly for the receiving party’s communications device (including audio, text (e.g., ASCII), video, or other digital formats and combination thereof). Accordingly, the Comm Device Interface 250 of the Caller ID Messaging Device 200, the Caller ID Messaging DataServer 718 (via the Caller ID Messaging Profile), and/or the gateway 770 of the data network 760 has the intelligence for appropriate formatting of the Caller ID Messaging Signal for

transmission to the receiving party's communications device. For example, if the calling party's communications device uses the Wireless Application Protocol (WAP) technique, then the Caller ID Messaging Signal is formatting using the Wireless Mark-up Language (WML) and must be configured for Caller ID standards known in the art.

Urban ¶ 48.

We do not see how this portion of Urban discloses “a contextual content server that determines one or more contextually relevant content items by processing the received destination device identifying item” and sends “at least one or more of the contextually relevant context items” to the WCD, as required by claim 1. On its face, paragraph 48 describes various devices within the network that format the Caller ID Messaging Signal appropriately for the receiving party's communications device. But the Examiner fails to adequately explain why formatting the Caller ID Messaging signal for the destination device, as disclosed in Urban, reasonably corresponds to determining a contextually relevant content item by processing the received destination device identifying item, as recited in claim 1.

Moreover, even if one were to consider the formatted message to be a “contextually relevant content item,” the Examiner fails to sufficiently explain how the cited portion of Urban discloses that this formatted message is sent by a contextual content server to the calling WCD in response to a transmission of a destination device identifying item by the contextual context server. To the contrary, paragraph 48 discloses that the caller ID message is formatted “for transmission to the *receiving party's* communications device.” Urban ¶ 48 (emphasis added).

Furthermore, the Examiner is not consistent in identifying what information in Urban corresponds to the “contextually relevant content item.” Elsewhere in the Final Action, the Examiner identifies the “contextually relevant content items” as the message “Cancel dinner working late” in Figure 11 and the message “House alarm is on” in Figure 13. Final Act. 5; Ans. 81. And, the Examiner fails to establish that either of these message in Figs. 11 and 13 satisfy the relevant limitations of claim 1 relating to the “contextually relevant content items.”

The “Cancel dinner working late” message in Figure 11 is a caller ID message sent by the calling party to the called party and the “House alarm is on” message in Figure 13 is sent by the called party to the calling party in response to the calling party’s caller ID message. Urban ¶¶ 51–52. Neither of these messages is determined by a “contextual content server” by “processing the received destination device identifying item.” And, neither message is sent by a contextual content server to the WCD in response to a transmission of a destination device identifying item by the WCD to the contextual context server. Rather, the message in Figure 11 is sent from the calling party device to the called party device, and the message in Figure 13 is sent from the called party device to the calling party device.

Accordingly, the Examiner has not established that Urban discloses each and every limitation of claim 1. We, therefore, reverse the Examiner’s rejection of claim 1 under Section 102. We also reverse the Section 102 rejection of independent claims 15–18, 32, and 45–48, which include similar limitations as claim 1.

With respect to the remaining rejections of dependent claims 2–14, 19–31, 33–44, and 49–61, the Examiner does not rely on any of the three

additionally cited references to cure the deficiency of the anticipation rejection explained above. Final Act. 25–75. Accordingly, we likewise reverse the Section 103 rejections of these dependent claims.

THE SECTION 112 REJECTION

In the Final Office Action, the Examiner rejected independent claims 15, 17, 18, 45, and 47 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Appellant regards as the invention. Final Act. 2.

Of these independent claims, claims 17 and 47 expressly use “means for” language, while claims 15, 18, and 45 do not. Claim 17 illustrates the claims that expressly use “means for” language:

17. An apparatus, comprising:

means for detecting, by a wireless communications device (WCD), initiation of a connection between the WCD and a destination device over a first communication path to establish a voice call with the destination device;

means for obtaining, by the WCD, a destination device identifying item based on the detected initiation of the connection and the destination device;

means for transmitting, by the WCD, while establishing the voice call with the destination device, the destination device identifying item to a contextual content server over a second communication path different than the first communication path, wherein the contextual content server determines one or more contextually relevant content items by processing the received destination device identifying item while the WCD is establishing the voice call with the destination device; and

means for receiving, by the WCD, from the contextual content server over the second communication path while

establishing the voice call with the destination device, at least one of the one or more contextually relevant content items.

Appeal Br. 23–24 (Claims Appendix).

The remaining claims use a similar format but without the “means for” language. For example, claim 15 recites “at least one processor” comprising “modules” for performing the claimed functions:

15. At least one processor configured to obtain contextually relevant content by a wireless communications device (WCD), the at least one processor comprising:

a first module for detecting, by the WCD, initiation of a connection between the WCD and a destination device over a first communication path to establish a voice call with the destination device;

a second module for obtaining, by the WCD, a destination device identifying item based on the detected initiation of the connection and the destination device;

a third module for transmitting, by the WCD, while establishing the voice call with the destination device, the destination device identifying item to a contextual content server over a second communication path different than the first communication path, wherein the contextual content server determines one or more contextually relevant content items by processing the received destination device identifying item while the WCD is establishing the voice call with the destination device; and

a fourth module for receiving, by the WCD, from the contextual content server over the second communication path while establishing the voice call with the destination device, at least one of the one or more contextually relevant content items.

Appeal Br. 22–23 (Claims Appendix).

Claim 45 uses a similar format, with a “processor” comprising “modules” for performing the claimed functions. *Id.* at 31–32. Claim 18

recites “a communications module coupled to the at least one processor and/or the memory, and operable for” performing essentially the same functions performed by the modules in claim 15, without using the “module for” language. *Id.* at 24.

The Examiner determines that all of claims 15, 17, 18, 45, and 47 include “means-plus-function” limitations subject to § 112, paragraph 6, and that the Specification fails to recite adequate corresponding structure to perform the claimed functions. Final Act. 2–3. Appellant does not dispute that claims 17 and 47 (which use “means for” language) are subject to § 112, paragraph 6, but argues that claims 15, 18, and 45 (which do not use “means for” language) are not. Appeal Br. 16; Reply Br. 15.

I.

We first address whether claims 15, 18, and 45 reasonably can be interpreted as including “means-plus-function” limitations and are, therefore, subject to § 112, paragraph 6. Our reviewing court has held that “the failure to use the word ‘means’ . . . creates a rebuttable presumption . . . that § 112, para. 6 does not apply.” *Williamson v. Citrix Online LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (en banc). *See* MPEP § 2181 (9th ed. Rev. 07.2017 Nov. 2018). However, to determine whether a limitation is subject to § 112, paragraph 6, “the essential inquiry is not merely the presence or absence of the word ‘means’ but whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.” *Id.* Thus, “[w]hen a claim term lacks the word ‘means,’ the presumption can be overcome and § 112, paragraph 6 will apply if . . . the claim term fails to ‘recite sufficiently definite structure’ or else recites ‘function without reciting sufficient structure for performing that

function.” *Id.* (quoting *Watts v. SL Sys., Inc.*, 232 F.3d 877, 880 (Fed. Cir. 2000)).

In *Williamson*, the claim limitation in question recited a “distributed learning control module” for performing various functions. *Id.* at 1344. The court observed that this limitation “is in a format consistent with traditional means-plus-function claim limitations” but “replaces the term ‘means’ with the term ‘module’” before reciting the functions performed by the module. *Id.* at 1351. The court determined that the term “module” is “a well-known nonce word” and is “simply a generic description for software or hardware that performs a specified function.” *Id.* Such nonce words “that reflect nothing more than verbal constructs may be used in a claim in a manner that is tantamount to using the word ‘means’ because they typically do not connote sufficiently definite structure.” *Id.* (quotations omitted). Thus, the court concluded that the “distributed learning control module” limitation “fails to recite sufficiently definite structure and that the presumption against means-plus-function claiming is overcome.” *Id.* at 1351.

Turning to the present claims, claims 15 and 45, like the claims in *Williamson*, use the words “module for” instead of “means for.” So while the absence of the term “means for” initially creates a rebuttable presumption that § 112, paragraph 6, does not apply to these limitations, each of the “module for” limitations are in a format consistent with traditional means-plus function claim limitations. As in *Williamson*, then, we determine that the use of the term “module” is a nonce word that acts as a generic description for hardware or software that performs the specified function. Thus, we conclude that the “module for” limitations in claims 15 and 45 fail to recite sufficiently definite structure and that this failure

overcomes the presumption that the claims are not means-plus-function claims.

As to claim 18, this claim recites “a communications *module* coupled to the at least one processor and/or the memory, and operable for” performing the claimed functions. Because the word, “means” is not used, there is a rebuttable presumption that § 112, paragraph 6 does not apply. As discussed above, however, “module” is a nonce word that fails to recite sufficiently definite structure. We also determine that the term “communications” before the word “module,” as well as the statement in the claim that the module is “coupled to at least one processor and/or the memory,” does not provide sufficiently definite structure for performing the “detecting,” “obtaining,” “transmitting” and “receiving” functions performed by this module. We, therefore, conclude that this failure to recite sufficiently definite structure also overcomes the presumption that these limitations are not means-plus-function claims.

Appellant argues that § 112, paragraph 6 does not apply to claims 15, and 45 because they “include[] **at least one processor** with various modules performing the recited functions.” Appeal Br. 16; Reply Br. 15. We disagree.

Again, *Williamson* is instructive. In *Williamson*, the claims at issue recited that the “distributed learning control module” was part of “distributed learning server . . . coupled to the presenter computer system and the audience member computer system via the network,” but, nonetheless, the court found that § 112, paragraph 6, applied. *Williamson*, 792 F.3d at 1344.

The “processor” in the present claims does not provide any more definite structure than the “distributed learning server” in *Williamson*. Both simply recite generic computer hardware rather than sufficiently definite structure tied to the claimed functions. As such, we conclude that the “processor” in the claim is a generic element and there is no structure in the claim that provides sufficient description of how the processor performs the various functions recited.

II.

Next, we turn to the question of whether Appellant’s Specification discloses sufficient structure that corresponds to the claimed functions, which is required for a means-plus-function claim to be definite under 35 U.S.C. § 112, paragraph 2. *Id.* at 1351.

Construing a means-plus-function claim is a two-step process. “The court must first identify the claimed function,” and then, “the court must determine what structure, if any, disclosed in the specification corresponds to the claimed function.” *Id.* “Structure disclosed in the specification qualifies as ‘corresponding structure’ if the intrinsic evidence clearly links or associates that structure to the function recited in the claim.” *Id.* at 1352. Additionally, “[e]ven if the specification discloses corresponding structure, the disclosure must be of ‘adequate’ corresponding structure to achieve the claimed function.” *Id.* Where a function “must be implemented in a special purpose computer—a general purpose computer programmed to perform particular functions pursuant to instructions from program software,” the specification must “disclose an algorithm for performing the claimed function.” *Id.*

Here, we conclude that the claimed functions must be implemented using a special purpose computer, i.e., a general purpose computer programmed to perform the particular functions set forth in the claim pursuant to instructions from program software. For example, in claim 15, the claimed processor must be programmed pursuant to instructions from program software to carry out the functions performed by the “third module for transmitting” and the “fourth module for receiving.” The same is true for the comparable functions performed in claims 17, 18, 45, and 47. Therefore, the Specification must disclose an algorithm for performing these claimed functions to satisfy the definiteness requirement.

Appellant argues that sufficient corresponding structure is contained in paragraphs 37 to 42 and 69 to 71 of the Specification, but Appellant fails to identify algorithms in the Specification that are linked or associated to the claimed functions. Appeal Br. 16–17; Reply Br. 15. For example, Appellant does not show where or how the Specification “clearly links or associates” particular algorithms to the “transmitting” and “receiving” functions in claim 15, or the comparable limitations in claims 17, 18, 45, and 47. Our review of the Specification has not revealed such algorithms either. The same is true for the remaining claim elements.

Paragraphs 37 to 42, cited by Appellant, describe the steps set forth in the flow chart of Figure 2, but these descriptions merely repeat the functions set forth in the claim without setting forth an algorithm or additional detail for performing those functions. Spec. ¶¶ 37–42. Paragraphs 69 to 71 describe the block diagram of Figure 8, but this figure merely includes boxes with text reciting means for performing the claimed functions, again without any algorithm for performing those functions. Spec. ¶¶ 69–71.

Appellant further cites paragraphs 43, 58, and 62. But Appellant again does not identify a particular algorithm or explain how such an algorithm, even if present, was linked or associated to the claimed functions.

Appellant also argues that:

Structural support for the claims is provided additionally at least in paragraph [0080], which discloses that “various illustrative logics, logical blocks, modules, and circuits described in connection with the aspects disclosed herein may be implemented or performed with a general purpose processor, a digital signal processor (DPS), an application specific integrated circuit (ASIC), a field programmable gate array (FPGA) or other programmable logic device, discrete gate or transistor logic, discrete hardware components, or any combinations thereof designed to perform the function described herein.”

Appeal Br. 17.

This disclosure, however, merely describes structures that can be used to implement the claimed “processor,” but it does not set forth algorithms for performing the claimed functions. Nor does the disclosure clearly link or associate such algorithms with the claimed functions.

Consequently, we do not find error either in the Examiner’s determination that claims 15, 17, 18, 45, and 47 are “means-plus-function” claims, or in the determination that these claims are indefinite under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which Appellant regards as the invention.³

³ Upon further prosecution, the Examiner may wish to consider whether any of the dependent claims based on claims 15, 18, 18, 45 or 47 are also indefinite.

CONCLUSION

We reverse the Examiner’s rejection of claims 1, 15–18, 32, and 45–48 under 35 U.S.C. § 102(b) and the Examiner’s rejection of claims 2–14, 19–31, 33–44, and 49–61 under 35 U.S.C. § 103.

We affirm the Examiner’s rejection of claims 15, 17, 18, 45 and 47 under 35 U.S.C. § 112, second paragraph.

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
15, 17, 18, 45,47	112	Indefiniteness	15, 17, 18, 45, 47	
1, 15–18, 32, 45–48	102	Urban		1, 15–18, 32, 45–48
2–4, 6, 9, 10, 13, 14, 19–21, 23, 26, 27, 30, 31, 33–35, 37, 43, 44, 49–51, 53, 59–61		Urban, Milic-Frayling		2–4, 6, 9, 10, 13, 14, 19–21, 23, 26, 27, 30, 31, 33–35, 37, 43, 44, 49–51, 53, 59–61
5, 7, 8, 22, 24, 25, 36, 38–40, 52, 54–56	103	Urban, Milic-Frayling, Bates		5, 7, 8, 22, 24, 25, 36, 38–40, 52, 54–56
11, 12, 28, 29	103	Urban, Bates		11, 12, 28, 29
41, 42, 57, 58	103	Urban, Milic-Frayling, Blegan		41, 42, 57, 58
Overall Outcome			15, 17, 18, 45, 47	1–14, 16, 19–44, 46, 48–61

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TIME PERIOD FOR RESPONSE

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

AFFIRMED IN PART