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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* PABLOS HOLMAN,
RODERICK A. HYDE, MURIEL Y. ISHIKAWA,
JORDIN T. KARE, MAX R. LEVCHIN,
ROYCE A. LEVIEN, RICHARD T. LORD,
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CLARENCE T. TEGREENE, CHARLES WHITMER,
LOWELL L. WOOD JR., and VICTORIA Y.H. WOOD

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Appeal 2020-002354
Application 14/263,828[1]
Technology Center 3600

_____

Before RICHARD M. LEBOVITZ, JEFFREY N. FREDMAN, and
TAWEN CHANG, *Administrative Patent Judges*.

LEBOVITZ, *Administrative Patent Judge*.


DECISION ON APPEAL

The Examiner rejected the claims under 35 U.S.C. § 103 as obvious.

Pursuant to 35 U.S.C. § 134(a), Appellant[2] appeals from the Examiner's

decision to reject the claims. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

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[1] "The '828 Application."
[2] We use the word "Appellant" to refer to "applicant" as defined in 37
C.F.R. § 1.42. Appellant identifies the real party in interest as Elwha LLC,

STATEMENT OF THE CASE

Claims 202, 301, 232, 233, 237–242, 248–251, and 301–327 stand

rejected by the Examiner under 35 U.S.C. § 103 as obvious in view of

Kolawa et al. (US 8,429,026 B1, issued Apr. 23, 2013), Burritobot,[3] Havas

(US 2013/0317921 A1, published Nov. 28, 2013), and Spears (US

2015/0264532 A1, filed Mar. 16, 2015, published Sept. 17, 2015; based on

provisional application No. 61/954,316, filed Mar. 17, 2014). Final Act. 2–3.

There are two independent claims on appeal, claims 202 and 301.

Claim 202 is directed to a method. Claim 301 is directed to a non-transitory

computer-readable medium comprising instructions to the same method

recited in claim 202. Claim 202 is representative and reproduced below,

annotated with bracketed numbers for reference to the specific limitations in

the claim:

> 202. A food generation method for user preference-based food
> item customization, comprising:
>
> [1] receiving a generic food request from a user for one or
> more food items;
>
> [2] obtaining one or more food customization preferences
> of the user related to generation of one or more customized food
> items;
>
> [3] determining that there are at least two automated
> customized food generation machines capable of generating the
> one or more customized food items in full compliance with the
> one or more food customization preferences of the user;

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which is wholly owned by The Invention Science Fund II, LLC. Appeal Br.
3.

[3] Burritobot: A 3-D Printer That Spits Out Burritos (June 19, 2012),
retrieved on 08/26/2015 from
http://www.fastcodesign.com/1670070/burritobot-a-3-d-printer-that-spits
out-burritos.

[4] identifying a current location of the user based, at least in part, on location data from at least one hardware-based sensor of a mobile device of the user;

[5] obtaining past travel data of the user that indicates one or more past travel paths of the user;

[6] selecting an automated customized food generation machine that will generate the one or more customized food items for the user, including at least selecting, responsive to the determining that there are at least two automated customized food generation machines capable of generating the one or more customized food items in full compliance with the one or more food customization preferences of the user, an automated customized food generation machine from the at least two automated customized food generation machines that is along at least one past travel path of the user based, at least in part, on the identifying the current location of the user and based, at least in part, on the obtaining the past travel data of the user;

[7] presenting one or more indicators capable of being perceived by the user that indicate to the user the selected automated customized food generation machine that will generate the one or more customized food items for the user; and

[8] directing automated generation, by the selected automated customized food generation machine, of the one or more customized food items for the user,

[9] wherein at least one of the receiving, obtaining, determining, identifying, selecting, presenting, or directing is at least partially implemented using at least one processing device.

ISSUE

The rejection is based on Kolawa, Burritobot, Havas, and Spears. Appellant argues that the Examiner erred in making the rejection because Spears does not qualify as prior art. Appeal Br. 6–7. Specifically, Appellant argues that claims 202 and 301 are described in parent application 14/199,667 ("the '667 Application") filed March 6, 2014, "11 days" before the Spears disclosure (based on provisional application filed March 17,

2014). Appeal Br. 10. The Examiner finds that limitations 1–3, 5–7, and 9 of claim 202 are described in parent application 14/200,514 ("the '514 Application"), but *not* limitations 4 and 8. Ans. 6–9. The '514 Application is a continuation of the '667 Application and has the same specification. *See* '828 Appl. ¶ 5. The '828 Application claims benefit to the '667 Application and the '514 Application, which is a continuation of the '828 Application.

CLAIM INTERPRETATION

We begin with claim interpretation. During patent examination, claim terms are given "the broadest reasonable meaning . . . in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification." *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

Limitation 4 of claim 202 recites "identifying a current location of the user based, at least in part, on location data from at least one hardware-based sensor of a mobile device of the user." The '828 Application discloses that the mobile device can be, for example, a smartphone, tablet computer, or workstation. '828 Appl. ¶ 73. GPS data is described in the '828 Application as an example of "location data." *Id.* ¶ 74. Thus, we interpret the recited limitation to include identifying the user location using GPS on a conventional cell phone.

Limitation 8 of claim 202 recites "directing automated generation, by the selected automated customized food generation machine, of the one or more customized food items for the user." We interpret this step, based on the plain language of the claim, to mean that the customized food item is

made by the automated customized food generation machine by "automated generation."

Appellant does not direct us to where in the '828 Application the term "automated generation" is defined. However, we do find useful guidance in the Application. The '828 Application describes using 3-D printing technologies and robotics to generate customized food items "on the spot" in accordance with the customized preferences of a user. '828 Appl. ¶¶ 48, 49. The '828 Application also describes an "automated system that is capable of automatically generating one or more customized food items for a particular user in response to the particular user submitting a simple food request and without indicating any user customization preferences." *Id.* ¶ 52. Examples of customized food preferences include the preferences to use "beef ingredients from Kobe Japan and not from Britain" and "sources of ingredients such as beef having been tested to be free of impurities such as certain bacterial agents." *Id.* ¶ 54. The food generation machines are described as being "compliant" when they have sufficient quantities of the preferred ingredients for generating a customized food item. *Id.* ¶ 55. In view of these disclosures, we interpret "automated generation" to mean that the machine automatically generates, without assistance, the customized food item from the preferred ingredients present in the machine.

Claim 202 does not expressly identify what initiates step [8] of "directing automated generation" of the customized food item. Figures 5 and 9 of the '828 Application show operational flow charts, each which recite "directing automated generation of one or more customized food items *in response to the received generic food request* and in accordance, at least in part, with the obtained user preference information." *See also* '828 Appl.

¶¶ 198, 199 (emphasis added). Thus, these figures indicate that the "directing automated generation" of the customized food item can be initiated as a response to the receipt of the generic food request from a user. However, the claim is not limited to this specific way of "directing" the automated generation of the customized food item and, in fact, the claim was amended during prosecution to omit the "in response to" limitation.[4] "[A] particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment." *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004). For these reasons, the broadest reasonable interpretation of "directing automated generation" of the customized food item is that the food generation machine is directed, by some means, to automatically make the customized food.

DISCUSSION

As explained above, the only issue before us in this appeal is whether the Examiner erred in determining that the '667 Application – a priority application upon which the '828 Application is based – does not describe limitations [4] and [8] of claim 202. If the Examiner erred, then we are compelled to reverse the obviousness rejection because Spears, one of the publications cited in the rejection, was published after the priority date of the

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[4] Original claim 1 recited "directing automated generation of one or more customized food items in response to the received generic food request and in accordance, at least in part, with the obtained user preference information." '828 Appl. ¶ 114. The "directing automated generation . . . in response" to the generic food request language was deleted by amendment on April 28, 2014.

'667 Application and therefore would not be prior art to the '828
Application.

Limitation 4

We agree with Appellant that the '667 Application describes
limitation [4] of claim 1 of "identifying a current location of the user based,
at least in part, on location data from at least one hardware-based sensor of a
mobile device of the user." We interpret this limitation to include identifying
the user location using GPS on a conventional cell phone. *See* Claim
Interpretation section *supra*. The '667 Application describes this specific
embodiment:

> There are a number of ways to determine or ascertain the
> presence of the one or more automated customized food
> generation machines 10* within a short walking, mass transit,
> and/or driving distance from the current location of the user 13.
> For example, *such information may be obtained using GPS data
> obtained from a mobile device of the user 13* and the known
> locations of the automated customized food generation machines
> 10*[.]

'667 Appl. ¶ 139 (emphasis added). The location of the user by GPS must be
ascertained in order to determine the presence of food generation machines
close to the user's location. Thus, limitation 4 is described by the '667
Application.

Limitation 8

As explained in more detail below, we also agree with Appellant that
the '667 Application describes limitation 8 of claim 1 of "directing
automated generation, by the selected automated customized food generation
machine, of the one or more customized food items for the user."

The '667 Application describes a food request made by a user and obtaining the user's customized food preferences. '667 Appl. ¶¶ 68, 70.[5] The '667 Application also discloses that the user is navigated to a food generation machine which is capable of generating the customized food item. '667 Appl. ¶ 71.[6]

In addition, the '667 Application has a similar disclosure to the '828 Application about 3-D printing of food "on the spot" with the use of robotics. '667 Appl. ¶ 47; *see also* ¶ 78.[7] The '667 Application also describes an "automated customized food generation machine . . . that is designed to generate customized food items 22 in accordance with customization preferences of users." *Id.* ¶ 52. Furthermore, the '667 Application describes "capable automated customized food generation machines that have the one or more ingredients in the one or more sufficient

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[5] "Turning particularly now to FIG. 2A, which illustrates an exemplary screen 200a that includes indicator 210a that provides information that identifies the customized food being requested (e.g., hamburger) and the customized food preferences (e.g., Beef from Kobe, Japan, source for the beef tested for prions, and so forth) of the user 13." '667 Appl. ¶ 68. "[I]ndicator 210b of FIG. 2B identifies the capable machine that was selected by the user 13 (e.g., 'Preferred Machine – Shell Gas Station – 245 Main Street') and the original user preference information (e.g., name of the food requested-hamburger and customization preferences – beef from Kobe, Japan, source tested for prions, and so forth)." '667 Appl. ¶ 70.

[6] "Indicator 220c further includes route 232 that shows a route that the user 13 may take in order to get to the location of one of the capable automated customized food generation machines 10* from the current location of the user 13." '667 Appl. ¶ 71.

[7] "In various embodiments, the customized food item production system 320 may include one or more ingredient supplies, and components for manufacturing customized food items including, for example, robotic components, 3-D printing components, heating and/or cooling components, molding components, and so forth." '667 Appl. ¶ 78.

quantities to be able to currently generate the at least one customized food item in accordance with the one or more customized food preferences of the user." '667 Appl. ¶ 131.

While these passages do not state what directs the machine to generate the food, the machine clearly does have the *capability* to generate the food automatically, as required by limitation 8, because the user is directed to the "automated customized food generation machine" and the machine has the ingredients to make the customized food. *See also* flow chart depicted in Figure 8C of the '667 Application.[8]

In addition to teaching a machine *capable* of generally customized food automatically, the '667 Application explicitly teaches obtaining the user's customized food preferences "*for use in generating one or more customized food items.*" '667 Appl. ¶ 90 (emphasis added).[9] The '667 Application also describes an exemplary screen on a computing device, such as a phone, that enables a user to request a customized food, such as a hamburger, and then to select a customized food generation machine that has the ingredients to "*currently* generate one or more customized food items" according to the customized food preferences, indicating that the inventors

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[8] "Presenting the one or more indicators that direct the user to the at least one automated customized food generation machine that was identified as having the one or more ingredients in the one or more sufficient quantities to be able to currently generate the at least one customized food item in accordance with the one or more customized food preferences of the user." '667 Appl., Fig 8C.

[9] "[T]he operational flow 500 of FIG. 5 may move to a user preference information acquiring operation 502 for acquiring user preference information of a user that indicates . . . customized food preferences of the user . . . *for use in generating . . . customized food items.*" '667 Appl. ¶ 90 (emphasis added).

contemplated that the food is in fact made. '667 Appl. ¶¶ 68 (emphasis added), 70.[10] Indeed, the '667 Application teaches that the reason to direct a user to such a machine (i.e., a machine that will have the appropriate ingredient supplies in sufficient quantities) is "in order [for the user] *to consume a customized food item* that is in full compliance with the customization preferences of the user or . . . a substituted customized food item that is in partial compliance." *Id.* ¶ 48. In order for the user to consume the customized food item, of course, the food item must first be generated.

While these passages do not specifically disclose what causes the machine to automatically make the requested customized food item, they also do not limit how the request is made to the machine to generate the item, and thus provides written descriptive support for limitation 8 of claim 1 as we have interpreted it according to its broadest reasonable meaning.

The Examiner asserts that the disclosure in the '667 Application only describes directing a user to automated food generation machine and that disclosures "focus[ing] on . . . 'directing automated generation[] by the selected automated customized food generation machine'" were added only in the later-filed application 14/261,729 ("the '729 Application"). Ans. 8.

We agree that the '667 Application does not have the same disclosure of Figures 5 and 9 of the '828 Application that automated generation is *in response to* the generic food request. Likewise, in our review of the '667 Application, including the citations to it provided by Appellant (e.g., Reply

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[10] "FIG. 2B illustrates an exemplary screen 200b that may be displayed upon the user 13 selecting 'option 1' of screen 200a of FIG. 2A. As a result of electing option 1, screen 200b is displayed that shows directions (e.g., instructions) for traveling to the corresponding capable machine." '667 Appl. ¶ 70.

Br. 4–5), we did not find disclosure that describes what *initiates* limitation 8 of "directing automated generation" of the customized food item. However, as discussed in the Claim Interpretation section above, the claims are not limited to an embodiment in which automatic generation is in response to the generic food request.

Ultimately, "[t]o satisfy the written description requirement the disclosure of the prior application must 'convey with reasonable clarity to those skilled in the art that, as of the filing date sought, [the inventor] was in possession *of the invention.*" *PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1306 (Fed. Cir. 2008). Nevertheless, the disclosure need not provide *in haec verba* support. *Id.* Given our claim construction that element 8 does not require any particular means or trigger for "directing automatic generation . . . of the . . . customized food items," we find that the '667 Application would have conveyed with a reasonable clarity to a skilled artisan that its inventors were in possession of a method comprising such a step. One of ordinary skill in the art would have recognized that, when the user is directed to a machine that is able to "currently generate" ('667 Appl. ¶¶ 68, 131) the requested customized food item, the food item would also be generated as required by the claim. As discussed above, the '667 Application teaches that the reason for the user to select a "fully capable machine" ('667 Appl. ¶ 68) on the screen of Figure 2A and to be directed to it by the screen of Figure 2C of the '667 Application is to allow the user to consume a food item in compliance with user preferences. '667 Appl. ¶ 48.

Summary

For the foregoing reasons, we reverse the rejection of claims 202, 301, 232, 233, 237–242, 248–251, and 301–327 under § 103.

CONCLUSION

In summary:

| Claims Rejected | 35 U.S.C. § | Reference(s)/Basis | Affirmed | Reversed |
|---|---|---|---|---|
| 202, 301, 232, 233, 237–242, 248–251, 301–327 | 103 | Kolawa, Burritobot, Havas, Spears | | 202, 301, 232, 233, 237–242, 248–251, 301–327 |

REVERSED