UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN C. GOODWIN III

Appeal 2007-4248
Application 09/726,820
Technology Center 3600

Decided: February 25, 2008

Before: JENNIFER D. BAHR, ANTON W. FETTING and STEVEN D.A. McCARTHY, *Administrative Patent Judges*.

McCARTHY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellant appeals under 35 U.S.C. § 134 (2002) from the final rejection of claims 1-25. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

The Appellant's application relates to a system which provides a customer with a path to a product selected by the customer. Claim 1 is representative of the Appellant's claims and reads as follows:

> 1. A system for directing a customer by the location of a product that may interest the customer when the customer requests the system to provide directions to a customer selected product, comprising:
>
> a data receiver for receiving customer identification data and customer product selection data;
>
> a customer interest data generator for generating customer interest data; and
>
> a customer path generator for generating a customer path to a location corresponding to said customer product selection data that includes at least one location corresponding to said customer interest data.

Claims 1-11 stand rejected under 35 U.S.C. § 102(e) (2002) as being anticipated by Burke (U.S. Patent 6,604,681) or Powell (U.S. Patent 5,887,271). Claims 12-23 stand rejected under section 102(e) as being anticipated by Burke. Claims 24 and 25 stand rejected under 35 U.S.C. § 103(a) (2002) as being unpatentable over Burke in view of DeJaeger (U.S. Patent 6,456,981).

We affirm the rejection of claims 1-11 under section 102(e) as being anticipated by Burke. We reverse the rejection of claims 1-11 under section 102(e) as being anticipated by Powell. We reverse the rejections of claims 12-20. We affirm the rejections of claims 21-25.

ISSUE

The issue in this appeal is whether the Appellant has shown that the Examiner erred in rejecting claims 1-23 under section 102(e) and claims 24 and 25 under section 103(a). In addressing this issue, we consider:

(1) whether Burke or Powell discloses a system including a "customer path generator for generating a customer path to a location corresponding to said customer product selection data that includes at least one location corresponding to said customer interest data;"

(2) whether Burke discloses a method including the step of "generating a customer path to a location corresponding to said customer product selection data that includes a location corresponding to said customer interest data so that said customer following said generated path comes into the vicinity of a product in which the customer may have an interest to purchase on the way to the customer selected product;" and

(3) whether Burke discloses, or the art of record suggests, a method including the step of "generating a customer path to a location in said store based on both (i) said customer identification data, and (ii) said customer product selection data."

FINDINGS OF FACT

The record supports the following findings of fact ("FF") by a preponderance of the evidence.

1. Burke discloses a system for locating a customer in a retail store and communicating to the customer the location where a product is displayed within the store. (Burke, col. 10, ll. 29-32). A preferred system includes a processor; a hand-held scanning and communication device in

two-way contact with the processor; and a database. (Burke, col. 8, ll. 1-5). The database includes two types of planogram files, that is, files containing entries representing geometric information. One file contains information regarding the layout of aisles within the retail store. The other file contains information regarding the locations where products are shelved in the store. (Burke, col. 10, ll. 36-43).

2. This system locates a product by comparing a product code associated with the product to the entries in the database. When a customer wishes to know the location of a product in the retail store, the customer enters the product code into the hand-held device. The processor retrieves from the database geometric data indicating the location where the product is shelved and communicates the location to the customer through the hand-held device "as text, sound, maps, etc." (Burke, col. 11, ll. 10-21).

3. Burke teaches that "if the consumer's location is known by the system, . . . the system of the present invention is capable of providing the customer with directions to the product to be located." (Burke, col. 11, ll. 24-32; *accord*, col. 7, ll. 1-4 and col. 12, ll. 8-18). More specifically, Burke recites a method for aiding a shopper which includes the steps of entering first and second product identifiers through the hand-held device. The processor retrieves "first geometric data" indicating where the product associated with the first product identifier is shelved and "second geometric data" indicating where the product associated with the second product identifier is shelved. The processor then calculates "the geometric path between the first geometric data and the second geometric data." Having calculated this geometric path, Burke's system communicates the path to the shopper through the hand-held device. (Burke, col. 13, l. 15 – col. 14, l. 8).

The directions may be displayed on a map. (Burke, col. 12, l. 13; *see also* Br. 6).

4. Powell discloses a system for locating products in one or more retail stores. (Powell, col. 1, ll. 7-9). The system includes a computer network which distributes electronic coupons to customers' homes and customer cards having electronic storage media for storing the electronic coupons. (Powell, col. 3, l. 64 – col. 4, l. 10 and col. 8, ll. 36-62). The system additionally includes one or more stores housing display kiosks. (Powell, col. 4, ll. 11-20).

5. When a customer inserts a card into a display kiosk, the kiosk retrieves map image data (Powell, col. 16, ll. 2-13 and 44-54), product location text (Powell, col. 16, ll. 19-28; col. 16, l. 64 – col. 17, l. 4) and product location data (Powell, col. 16, ll. 29-39 and col. 17, ll. 5-11) corresponding to a first coupon stored on the card. The kiosk displays a map indicating the customer's location; a cursor (illustrated in the drawings as a rectangular box) at the map position corresponding to the location where the product identified in the first coupon is shelved; and text identifying where the product is shelved. (Powell, col. 16, ll. 44-54; col. 16, l. 64 – col. 17, l. 23; and Fig. 26). The kiosk repeats this process for each coupon stored on the card. (Powell, col. 11, ll. 1-31 and col. 15, ll. 35-67).

6. DeJaeger teaches a system for displaying customized advertisements and survey questions to customers in a retail store. The system includes a server and a number of electronic retail terminals which may either be consumer information terminals or point of sale terminals. (DeJaeger, col. 3, ll. 34-50). The system generates a user profile for each customer from records of purchases and product inquiries received by the

system along with the customer's responses to survey questions. (DeJaeger, col. 6, ll. 10-64 and col. 15, l. 65 – col. 16, l. 4).

7. When the customer requests product information from a customer information terminal, the customer activates the terminal using a card which identifies the customer. The terminal retrieves the user profile corresponding to the customer. (DeJaeger, col. 11, l. 54 – col. 12, l. 14). The server uses the customer's user profile to select advertising messages and survey questions to present to the user. (DeJaeger, col. 18, l. 34 - col. 20, l. 36). The customer information terminal presents the advertising messages and survey questions to the user while the customer enters a product query into the terminal. (DeJaeger, col. 20, l. 36 – col. 22, l. 64). The number of survey questions presented to the user may depend on the usage of the customer information terminals, with fewer questions presented during periods of high usage so as to increase the throughput through the terminals. (DeJaeger, col. 22, ll. 30-42).

PRINCIPLES OF LAW

"To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently." *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997). In determining whether limitations recited in the claim are disclosed by the reference, the language of the claim is to be given its "broadest reasonable interpretation consistent with the specification," construing the claim language and specification as they would be understood by one of ordinary skill in the art. *In re American Acad. Of Science Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (quoting *In re Bond*, 910 F.2d 831, 833 (Fed. Cir. 1990)).

A claim is unpatentable for obviousness under section 103(a) if "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." In *Graham v. John Deere Co.*, 383 U.S. 1 (1966), the Supreme Court set out factors to be considered in determining whether claimed subject matter would have been obvious:

> Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined.

Id., 383 U.S. at 17.

ANALYSIS

A. The Subject Matter of Claims 1-11 Was Anticipated by Burke

The Appellant argues claims 1-11 as a group. (Br. 4). Since claims 2-11 depend from independent claim 1, claim 1 will be treated as representative of the group. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2007).

Claim 1 recites a system including a customer path generator. Giving claim 1 its broadest reasonable interpretation consistent with the specification, the phrase "customer path generator" includes structure and software capable of "generating a customer path to a location corresponding to said customer product selection data that includes at least one location corresponding to said customer interest data." The Appellant contends that

"Burke does not teach, suggest or disclose generating a path to a customer product selection wherein the generated path includes at least *one location corresponding to customer interest data*." (Br. 5 [emphasis in original]). We agree with the Examiner that Burke discloses a system including a customer path generator as recited in claim 1.

We agree with the Examiner (Ans. 7) that the phrase "generating a customer path" as used in claim 1 is broad enough to encompass "generat[ing] a map data file depicting said generated customer path." (*Compare* claim 1 *with* claim 3; *see also* Specification 10, ll. 15-16). If a customer makes a shopping list available through the hand-held device, Burke's system includes a processor capable of generating directions from the location of a customer to the location where a product selected on the customer's shopping list is shelved. These directions may be displayed on a map. (FF 1 and 3). In other words, Burke's system is capable of generating a customer path to a location corresponding to said customer product selection data.

Burke's system permits a seller to enter information regarding special prices on products into a database accessible by the processor which generates the customer path. (Burke, col. 9, ll. 29-32). If the customer makes a shopping list available through the hand-held device, Burke's system is capable of comparing the list "to special deals, such as coupons and rebates and alert[ing] the shopper by the communicating means of the hand-held device of such special deals. Alternatively, even if the shopper has not requested a product subject to a special deal, the shopper could be informed of such a special deal." (Burke, col. 11, ll. 58-64). One of ordinary skill in the art would have understood this passage to imply that

each such "special deal" would relate to one or more products and that the products to which such special deals relate could include products selected on the customer's shopping list.

The Appellant further argues that "the Burke device does not generate customer interest data." (Br. 5). We agree with the Examiner (Ans. 6) that the phrase "customer interest data" when given its broadest reasonable interpretation includes products in which a customer may have an interest in purchasing. (*Compare* claim 1 *with* claims 6-8; *see also* Specification 13, ll. 6-11). Burke's system includes structure (such as a programmed processor) capable of generating data, namely, information concerning special deals, relating to products in which a customer may have an interest to purchase, namely, products selected by the customer. While Burke's description does not elaborate on the information specifics provided to the customer concerning such special deals, Burke is clear that information of potential interest to a customer is presented to the customer (Burke, col. 11, ll. 53-64). Therefore, we agree with the Examiner's finding that the products to which such special deals relate constitute "customer interest data." (Ans. 7).

We agree with the Examiner that "when special deals are identified, by comparing the shopping list, it is clear that a map or path to the product selected is provided and the customer is alerted of the special deals (customer interest data)." (*Id.*; *see also* FF 2-3 and Burke, col. 12, ll. 8-13). Where the special deal generated by Burke's system relates to a product selected on the customer's shopping list to which Burke's system is providing directions, then the location corresponding to the selected product also corresponds to the customer interest data, that is, to the product to which the special deal relates. In these circumstances, Burke's system

generates a customer path to a location corresponding to the customer product selection data that includes (as its terminal point) at least one location corresponding to the customer interest data.

Therefore, Burke discloses a system including a customer path generator capable of performing the functions recited in claim 1. On the record before us, the Appellant has not shown that the Examiner erred in rejecting claim 1 under section 102(e) as anticipated by Burke. Since claims 2-11 depend from claim 1, the Appellant has not shown that the Examiner erred in rejecting those claims as anticipated by Burke. *In re King*, 801 F.2d 1324, 1325 (Fed. Cir. 1986).

B. The Subject Matter of Claims 1-11 Was Not Anticipated by Powell

We agree with the Appellant (Br. 7-8) that Powell does not disclose a system including a customer path generator capable of "generating a customer path to a location corresponding to said customer product selection data . . . ." Powell describes providing a customer with a map showing both the location of the customer and a location where a product selected by the customer is shelved. (FF 5). Apparently relying on this description, the Examiner found that "Powell teaches [a] path generated to the location of [the] selected product, by providing a map and indicating the location of the product (see at least fig. 26 and col. 15 lines 4-34, col. 16 lines 14-40, col. 17 lines 5-27)." (Ans. 8). We conclude that a map showing the locations of a customer and of a selected product cannot fall within the scope of the phrase "customer path to a location corresponding to said customer product selection data . . ." as used in claim 1 unless the map also shows a route connecting the locations.

We agree with the Appellant (Br. 8) that the Examiner's interpretation of the phrase "customer path" is unreasonably broad. The common meaning of the word "path" is synonymous with that of the word "route." *E.g.*, MERRIAM-WEBSTER ONLINE DICTIONARY, http://www.merriam-webster.com/dictionary/path (last visited February 11, 2008) (def. 3a). The use of the word "path" in the specification is consistent with these definitions. (*E.g.*, Specification 10, ll. 6-10 [using the word "route" interchangeably with the word "path"]). The common meaning is not broad enough to encompass a map showing the customer's location and a location where a product is shelved without showing a route between the two locations.

The Examiner has pointed to no other element of Powell's system capable of generating a customer path to a location corresponding to said customer product selection data . . . ." On the record before us, we are unable to find that Powell describes a system including a customer path generator capable of performing the function recited in claim 1. The Appellant has shown that the Examiner erred in rejecting claim 1 under section 102(e) over Powell. Since claims 2-11 depend from claim 1, the Appellant has shown that the Examiner also erred in rejecting those claims under section 102(e) over Powell.

C. The Subject Matter of Claims 12-20 Was Not Anticipated by Burke

The Appellant argues claims 12-20 as a group. (Br. 4). Since claims 13-20 depend from independent claim 12, claim 12 will be treated as representative of the group.

With specific reference to claims 12-20, the Appellant contends that:

> since . . . Burke does not teach generating a path to a selected product wherein the path includes going by way of a location corresponding to customer interest data, it is axiomatic that Burke cannot teach generating a path to a location corresponding to selected product identification data that includes a location corresponding to customer interest data so that the customer following the generated path must come into the vicinity of a product in which the customer may have an interest to purchase on the way to the customer selected product as recited in claims 12.

(Br. 9). Repeating the arguments made in support of the rejection of claims 1-11 under section 102(e) over Burke (Ans. 9), the Examiner finds that special deals generated by Burke's system in response to the entry of a customer's shopping list are included in the customer path because, "when special deals are identified, by comparing the shopping list, it is clear that a map or path to the product selected is provided and the customer is alerted of the special deals (customer interest data)" (Ans. 7). While we agree with the Examiner's finding, we do not agree that this finding suffices to prove that Burke anticipates the subject matter of claims 12-20.

Claim 12 recites a method including the step of "generating a customer path . . . so that said customer following said generated path comes into the vicinity of a product in which the customer may have an interest to purchase *on the way* to the customer selected product." [Emphasis added.] The common meaning of the phrase "on the way" implies that the customer is in the process of moving along the path. *E.g.*, THE FREE ONLINE DICTIONARY, http://www.thefreedictionary.com/by+the+way (last visited

February 12, 2008) ("on the way"); WEBSTER'S THIRD NEW INT'L DICTIONARY at 2588 (G.&C. Merriam Co. 1971) ("on the way").

Burke discloses generating a customer path to a location corresponding to a selected product that includes (as its terminal point) at least one location corresponding to customer interest data in the form of a special deal relating to the selected product. A generated path which *terminates* in the vicinity of a product in which the customer may have an interest to purchase does not bring the customer into the vicinity of that product *on the way* to a customer selected product. Merely alerting a customer of a special deal while providing a map or text providing directions to a selected product does not imply that the directions will cause the customer to come into the vicinity of a location corresponding to customer interest data such as the special deal on the way to the selected product.

On the record before us, the Appellant has shown that the Examiner erred in rejecting claim 12 under 35 U.S.C. § 102(e). Since claims 13-20 depend from claim 12, the Appellant has shown that the Examiner also erred in rejecting those claims under section 102(e).

D. The Subject Matter of Claims 21-23 Was Anticipated by Burke

The Appellant argues claims 21-23 as a group. (Br. 4). Since claims 22 and 23 depend from independent claim 21, claim 21 will be treated as representative of the group.

Claim 21 recites a method including the step of "generating a customer path to a location in said store based on both (i) said customer identification data, and (ii) said customer product selection data." The Examiner found that Burke describes this step at column 11, lines 24-64.

(Ans. 4). The Appellant contends that "[s]ince Burke does not teach generating a particular path to take based on customer identification data, it is axiomatic that Burke cannot teach generating a customer path based on customer identification data and customer product selection data." (Br. 10). We disagree.

The Examiner finds that Burke describes the step of receiving customer identification data and customer product selection data at column 9, lines 3-18. (Office Action, March 30, 2004 at 2). This passage of Burke discloses that, "after the consumer enters the store, the consumer uses a store-issued identification card to obtain a hand-held device from a dispenser rack." (Burke, col. 9, ll. 3-5). Burke further discloses that the connection between the hand-held device and the processor which generates the customer path may be wireless. (Burke, col. 8, ll. 8-12). In order for a wireless connection to be formed, there must be a unique signal which identifies each hand-held device for routing communications associated with that device. This unique signal is data which identifies not only each hand-held device but also, by one-to-one relationship, the customer carrying that device.

Given its broadest reasonable interpretation, the clause "generating a customer path to a location in said store based on both (i) said customer identification data, and (ii) said customer product selection data" is met if the customer identification data serves as a starting point for generating the

customer path.[1] Burke describes generating directions to a selected product using the location of the customer and the location of the selected product. (FF 3). Burke also describes determining the location of the customer by questioning the customer through the hand-held device. (Burke, col. 11, ll. 39-40). In order to ask a question of a customer through a hand-held device wirelessly connected to the processor, the processor must use the unique signal identifying the device (and the customer) to route the question to the hand-held device. Hence, the processor uses the signal associated with the hand-held device (that is, the customer identification data) as a starting point for determining the location of the customer and for generating the customer path.

On the record before us, we agree with the Examiner that Burke describes the step of "generating a customer path to a location in said store based on both (i) said customer identification data, and (ii) said customer product selection data" as recited in claim 21. The Appellant has not shown that the Examiner erred in rejecting claim 21 under section 102(e) as anticipated by Burke. Since claims 22 and 23 depend from claim 21, the Appellant has not shown that the Examiner erred in rejecting those claims, either.

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[1] The phrase "based on" implies service as a "basis." WEBSTER'S THIRD NEW INT'L DICTIONARY at 180 (G.&C. Merriam Co. 1971) ("base," entry 2, def. 2). A "basis" is defined as a starting point. ENCARTA DICTIONARY, http://www.encart.com/dictionary_/basis.html (last visited January 14, 2008) (def. 2).

E. The Subject Matter of Claims 24 and 25 Would Have Been Obvious from Burke in View of DeJaeger

The Appellant argues claims 24 and 25 separately. (Br. 4). Nevertheless, the Appellant's arguments regarding both claims 24 and 25 are based on the same premise. With respect to each of these two claims, the Appellant contends that "Burke does not teach the limitation of base claim 21" and that "DeJaeger does not teach or suggest generating a customer path to a location in a store based on both customer identification data and customer product selection data." (Br. 11-12). Since we agree with the Examiner that Burke does teach the step of "generating a customer path to a location in said store based on both (i) said customer identification data, and (ii) said customer product selection data" as that clause is used in claim 21 and its dependent claims, we conclude that the Appellant has not shown that the Examiner erred in rejecting claims 24 and 25.

CONCLUSIONS OF LAW

On the record before us, the Appellant has not shown that the Examiner erred in rejecting claims 1-11 under section 102(e) as anticipated by Burke but has shown that the Examiner erred in rejecting those claims under section 102(e) over Powell. The Appellant has shown that the Examiner erred in rejecting claims 12-20 under section 102(e) as anticipated by Burke. The Appellant has not shown that the Examiner erred in rejecting claims 21-23 under section 102(e) as being anticipated by Burke or claims 24 and 25 under section 103(a) as being unpatentable over Burke in view of DeJaeger.

DECISION

The Examiner's rejection of claims 1-11 under section 102(e) over Burke is affirmed. The rejection of claims 1-11 over Powell is reversed. The rejection of claims 12-20 is reversed. The rejection of claims 21-25 is affirmed.

AFFIRMED-IN-PART

vsh

PAUL W. MARTIN
NCR CORPORATION LAW DEPARTMENT
1700 S. PATTERSON BLVD.
DAYTON, OHIO 45479-0001