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3 UNITED STATES PATENT AND TRADEMARK OFFICE  
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5  
6 BEFORE THE BOARD OF PATENT APPEALS  
7 AND INTERFERENCES  
8

9  
10 *Ex parte* JOHN R. HIND, JAMES M. MATHEWSON, II, and  
11 MARCIA L. PETERS  
12

13  
14 Appeal 2007-2593  
15 Application 09/859,359  
16 Technology Center 3600  
17

18  
19 Decided: October 31, 2007  
20

21  
22 Before HUBERT C. LORIN, LINDA E. HORNER, and ANTON W. FETTING,  
23 *Administrative Patent Judges.*

24 FETTING, *Administrative Patent Judge.*

25 DECISION ON APPEAL

26 STATEMENT OF CASE

27 John R. Hind, James M. Mathewson, II, and Marcia L. Peters (Appellants) seek  
28 review under 35 U.S.C. § 134 of a Final rejection of claims 1, 4-7, 9-16, 18-21, 23-  
29 30, 32-35, 37-46, 48-55, 57-64 and 66-68, the only claims pending in the  
30 application on appeal.

31 We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b) (2002).

32  
33 We AFFIRM.

1 The Appellants invented a way of providing targeted advertising and  
2 personalized customer services to customers using wireless communication  
3 devices such as PDA's or mobile phones carried by the customers. The PDA  
4 stores preference information of the customer identifying the products, brands,  
5 language, stores, etc. preferred by the customer. A communication interface  
6 obtains automatically the preference information from the PDA. Based on the  
7 preference information, a data processor coupled to the communication interface  
8 selects advertisements that will be likely to interest the customer and displays them  
9 on a display device of the customer's PDA. (Specification 3:8-4:2).

10 An understanding of the invention can be derived from a reading of exemplary  
11 claim 1, which is reproduced in the Analysis of the anticipation rejection, *infra*.

12 This appeal arises from the Examiner's Final Rejection, mailed February 8,  
13 2006. The Appellants filed an Appeal Brief in support of the appeal on August 22,  
14 2006. An Examiner's Answer to the Appeal Brief was mailed on  
15 December 1, 2006.

16 PRIOR ART

17 The Examiner relies upon the following prior art:

Sloane US 5,918,211 Jun. 29, 1999

18 REJECTIONS

19 Claims 1, 4-7, 9-11, 15, 16, 18-21, 23-25, 29, 30, 32-35, 37-46, 48-55, 57-64,  
20 and 66-68 stand rejected under 35 U.S.C. § 102(b) as anticipated by Sloane.

21 Claims 12-14 and 26-28 stand rejected under 35 U.S.C. § 103(a) as  
22 unpatentable over Sloane.

1 ISSUES

2 The issues pertinent to this appeal are

- 3 • Whether the Appellants have sustained their burden of showing that the  
4 Examiner erred in rejecting claims 1, 4-7, 9-11, 15, 16, 18-21, 23-25, 29, 30,  
5 32-35, 37-46, 48-55, 57-64, and 66-68 under 35 U.S.C. § 102(b) as  
6 anticipated by Sloane.
- 7 • Whether the Appellants have sustained their burden of showing that the  
8 Examiner erred in rejecting claims 12-14 and 26-28 under 35 U.S.C.  
9 § 103(a) as unpatentable over Sloane.

10 The pertinent issues turn on whether Sloane describes automatically receiving  
11 preference information of the user from the wireless communication device  
12 through the wireless communication.

13 FACTS PERTINENT TO THE ISSUES

14 The following enumerated Findings of Fact (FF) are believed to be supported  
15 by a preponderance of the evidence.

16 *Claim Construction*

- 17 01. The disclosure contains no lexicographic definition of “preference.”
- 18 02. The ordinary and customary meaning of “preference” is the selecting  
19 of someone or something over another or others.<sup>1</sup>

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<sup>1</sup> *American Heritage Dictionary of the English Language* (4<sup>th</sup> ed. 2000).

1        *Sloane*

2            03. Sloane is directed toward providing consumers with discount and  
3            other promotional information at the point-of-purchase. Upon entering a  
4            retail establishment, the consumer swipes an identification card at the  
5            central scanner station and once the consumer is identified, retrieves a  
6            portable bar code scanner from a central scanner station. The portable  
7            bar code scanner is a self-powered device that is capable of wireless  
8            transmission and receiving of data and is in communication with the  
9            retailer's computer/controller via the wireless medium at all times  
10           (Sloane 2:53 – 3:4).

11           04. As the consumer is shopping through the store and browsing products,  
12           the consumer can scan the UPC bar codes (or scan a shelf label having  
13           the product UPC bar code) for the products they are interested in  
14           purchasing and place them in their shopping cart. As the consumer scans  
15           the product bar code, either on the product or the shelf, the portable bar  
16           code scanner will identify the product and price, will maintain a running  
17           total for purchases, and will alert the consumer when a scanned product  
18           is currently being offered with some kind of promotion (e.g., buy 2 and  
19           receive 50¢ off). The consumer will then be given the option to accept or  
20           reject the product and/or promotion. The portable scanner will also alert  
21           the consumer of a product promotion for a competitive product or a  
22           related product to the consumer scanned product. The consumer will  
23           then have the option to reject the scanned product and then find the  
24           promoted competitive or related product. These promotion messages  
25           sent to the consumer as a result of scanning a product can possibly

1 influence and alter the consumer's purchase decisions at the point-of-  
2 purchase (Sloane 3:12-31).

3 05. In another embodiment of the invention, when the consumer retries  
4 the portable bar code scanner, the consumer will scan their frequent  
5 shopper card bar code in order to identify them to the retailer's  
6 computer/controller. This will facilitate the consumer taking advantage  
7 of any discounts, credits, reward or product promotions contained and  
8 stored in their electronic frequent shopper account. Through the portable  
9 bar code scanner, the consumer can be alerted as to the available  
10 discounts, credits, rewards or promotions. In the alternative, the portable  
11 bar code scanner can alert the consumer as to the presence of the  
12 electronic discounts, credits, rewards or promotion in their frequent  
13 shopper account when the consumer scans the actual product that is the  
14 subject of that promotion (Sloane 3:32-46).

15 06. When the consumer has finished shopping, they return the portable  
16 bar code scanner to the scanner center. When the consumer places the  
17 portable bar code scanner back into the scanner center, the information  
18 stored in the scanner is transferred to the scanner center, or the store's  
19 computer is alerted that the selection of products has been completed,  
20 and an itemized store receipt is printed. The consumer then takes the  
21 receipt to a payment counter where the goods are paid for. Either the  
22 portable bar code scanner, or the store computer can maintain the  
23 purchase totals, savings totals or other purchase related information for  
24 printing upon completion of the consumer's shopping (Sloane 3:47-59).

1           07. Generally, when a consumer uses the portable bar code scanner, it will  
2           be releasably mounted to their shopping cart so that the consumer's  
3           hands are free (Sloane 4:8-10).

4           08. After Sloane's portable bar code scanner has sent the product code  
5           information to the computer/controller, the computer/controller sends the  
6           product description and price information on the scanned product to the  
7           portable bar code scanner. Based on the received promotional product  
8           information, if the scanned item is a designated sale item, the scanner  
9           offers the consumer the discount or promotion. In addition to the  
10          discount or promotion offered, the system can also send additional  
11          promotional messages to the consumer based on the product bar code  
12          information received (Sloane 7:65-8:12).

13          09. Sloane's Figs. 8a-8c show examples of additional messages that could  
14          be sent to the consumer. In the first example, the bar code scanner can  
15          tell the consumer that a competitive product, or other products in the  
16          same product category as the scanned label or product, are being offered  
17          at a discount, or with another consumer promotion. The consumer then  
18          finds the promoted product being offered, scans its shelf label or the  
19          product itself with scanner, and the scanner then displays the discount  
20          (Sloane 8:13-29).

21          10. Sloane's Fig. 8b shows another example of a different promotion  
22          message that tells the consumer that a discount is being offered if a  
23          certain quantity of the scanned item is purchased. The consumer can  
24          then choose to purchase the additional products, and the scanner will

1 automatically subtract the discount from the items when the proper  
2 number of them have been scanned (Sloane 8:30-39).

3 11. Sloane's Fig. 8c shows another example of a promotion message that  
4 tells the consumer that a discount is being offered on a complimentary or  
5 related product elsewhere in the store. If the consumer locates and scans  
6 the related product required for the promotion, the system automatically  
7 subtracts the discount from the price of the item and records the  
8 purchase at the discounted price (Sloane 8:40-49).

## 9 PRINCIPLES OF LAW

### 10 *Claim Construction*

11 During examination of a patent application, pending claims are given  
12 their broadest reasonable construction consistent with the specification. *In*  
13 *re Prater*, 415 F.2d 1393, 1404-05 (CCPA 1969); *In re Am. Acad. of Sci.*  
14 *Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

15 Limitations appearing in the specification but not recited in the claim are not  
16 read into the claim. *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369 (Fed.  
17 Cir. 2003) (claims must be interpreted "in view of the specification" without  
18 importing limitations from the specification into the claims unnecessarily)

19 Although a patent applicant is entitled to be his or her own lexicographer of  
20 patent claim terms, in *ex parte* prosecution it must be within limits. *In re Corr*,  
21 347 F.2d 578, 580 (CCPA 1965). The applicant must do so by placing such  
22 definitions in the Specification with sufficient clarity to provide a person of  
23 ordinary skill in the art with clear and precise notice of the meaning that is to be  
24 construed. *See also In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994) (although

1 an inventor is free to define the specific terms used to describe the invention, this  
2 must be done with reasonable clarity, deliberateness, and precision; where an  
3 inventor chooses to give terms uncommon meanings, the inventor must set out any  
4 uncommon definition in some manner within the patent disclosure so as to give  
5 one of ordinary skill in the art notice of the change).

6 *Anticipation*

7 "A claim is anticipated only if each and every element as set forth in the claim  
8 is found, either expressly or inherently described, in a single prior art reference."  
9 *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir.  
10 1987). "When a claim covers several structures or compositions, either generically  
11 or as alternatives, the claim is deemed anticipated if any of the structures or  
12 compositions within the scope of the claim is known in the prior art." *Brown v.*  
13 *3M*, 265 F.3d 1349, 1351 (Fed. Cir. 2001). "The identical invention must be  
14 shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki*  
15 *Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989). The elements must be arranged  
16 as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of  
17 terminology is not required. *In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990).

18 *Obviousness*

19 A claimed invention is unpatentable if the differences between it and the  
20 prior art are "such that the subject matter as a whole would have been obvious at  
21 the time the invention was made to a person having ordinary skill in the art."  
22 35 U.S.C. § 103(a) (2000); *KSR Int'l v. Teleflex Inc.*, 127 S.Ct. 1727, 1734 (2007);  
23 *Graham v. John Deere Co.*, 383 U.S. 1, 13-14 (1966).

24 In *Graham*, the Court held that that the obviousness analysis is bottomed on  
25 several basic factual inquiries: "[1] the scope and content of the prior art are to be

1 determined; [(2)] differences between the prior art and the claims at issue are to be  
2 ascertained; and [(3)] the level of ordinary skill in the pertinent art resolved.” 383  
3 U.S. at 17. *See also KSR*, 127 S.Ct. at 1734. “The combination of familiar  
4 elements according to known methods is likely to be obvious when it does no more  
5 than yield predictable results.” *KSR*, at 1739.

6 “When a work is available in one field of endeavor, design incentives and  
7 other market forces can prompt variations of it, either in the same field or in a  
8 different one. If a person of ordinary skill in the art can implement a predictable  
9 variation, § 103 likely bars its patentability.” *Id.* at 1740.

10 “For the same reason, if a technique has been used to improve one device,  
11 and a person of ordinary skill in the art would recognize that it would improve  
12 similar devices in the same way, using the technique is obvious unless its actual  
13 application is beyond his or her skill.” *Id.*

14 “Under the correct analysis, any need or problem known in the field of  
15 endeavor at the time of invention and addressed by the patent can provide a reason  
16 for combining the elements in the manner claimed.” *Id.* at 1742.

#### 17 *Automation of a Known Process*

18 It is generally obvious to automate a known manual procedure or mechanical  
19 device. Our reviewing court stated in *Leapfrog Enterprises Inc. v. Fisher-Price*  
20 *Inc.*, 485 F.3d 1157 (Fed. Cir. 2007) that one of ordinary skill in the art would have  
21 found it obvious to combine an old electromechanical device with electronic  
22 circuitry “to update it using modern electronic components in order to gain the  
23 commonly understood benefits of such adaptation, such as decreased size,  
24 increased reliability, simplified operation, and reduced cost. . . . The combination

1 is thus the adaptation of an old idea or invention . . . using newer technology that is  
2 commonly available and understood in the art.” *Id.* at 1162.

3 ANALYSIS

4 *Claims 1, 4-7, 9-11, 15, 16, 18-21, 23-25, 29, 30, 32-35, 37-46, 48-55, 57-64, and*  
5 *66-68 rejected under 35 U.S.C. § 102(b) as anticipated by Sloane.*

6 The Appellants argue these claims as a group.

7 Accordingly, we select claim 1 as representative of the group.  
8 37 C.F.R. § 41.37(c)(1)(vii) (2006).

9 Claim 1 is reproduced below [bracketed matter, including citations to where  
10 the Examiner found the recited limitations in Sloane, and some paragraphing  
11 added].

12 1. A method for providing personalized customer services to a user  
13 using a wireless communication device associated with the user, the  
14 method comprising the steps of:

15 [1] establishing wireless communication with the wireless  
16 communication device [(col. 2 lines 67 to col. 3 lines 4 and Figures 12  
17 and 13)] which is attached to a shopping cart associated with the user  
18 [(col. 4 lines 8-10, col. 9 lines 21-26, and Figure 12)];

19 [2] automatically receiving preference information of the user from  
20 the wireless communication device through the wireless  
21 communication [(col. 3 lines 5-47 and 56-59 and col. 4 lines 27-31)];  
22 and

23 [3] providing,

24 based on the preference information,

25 a personalized customer service

26 in response to a request of a particular customer service from  
27 the user [(col. 3 lines 5-67, col. 4 lines 27-31, col. 6 lines 21-39,  
28 and col. 8 lines 13-49)].

1 The Examiner found that Sloane anticipated claim 1 as shown *supra*.

2 The Appellants contend that the feature of providing preference information  
3 from the wireless device attached to a shopping cart through a pre-established  
4 wireless communication means patentably defines the present invention over  
5 Sloane (Br. 8:Last full ¶).

6 The Appellants contend that Sloane stores preference information at a  
7 centralized rather than local location (Br. 9). The Appellants' evidence for this is a  
8 recitation from Sloane in which purchase histories are maintained on a central  
9 location and never received from Sloane's wireless device The Appellants  
10 contend that the only information received from the wireless device is a random  
11 number that does not constitute preference information (Br. 10:Top 2 ¶'s).

12 *Issue*

13 Thus the issue before us is whether Sloane describes element [2], *viz.*  
14 automatically receiving preference information of the user from the wireless  
15 communication device through the wireless communication.

16 *Examiner's Response*

17 The Examiner responded by finding that Sloane describes element [2] by  
18 receiving preference information such as current purchases and providing  
19 discounts automatically for the items being purchased in conjunction with the  
20 retailer computer/controller. The Examiner found that even if the wireless device  
21 contacts the retailer computer/controller to receive this information first, it is doing  
22 this automatically in that no action is required by the user to physically go to a  
23 retailer computer to type in commands to send in the information from the retailer  
24 computer to the wireless device (Answer 11:Bottom ¶ - 12:lines 1-2).

1 As to the Appellants' argument that no information other than the identification  
2 number of the user and barcodes of the scanned items is received from the wireless  
3 device, the Examiner found that Sloane, in col. 3 lines 60-67, describes that the  
4 wireless device provides information such as discounts, credits, rewards, total  
5 purchases, and year-to-date savings (Answer 12:First full ¶).

6 As to the Appellants' argument that in Sloane, purchase histories are  
7 maintained on a centralized computer and are never received from a wireless  
8 device attached to a shopping cart associated with a user, the Examiner found that  
9 while the Appellant is correct that purchase histories can be maintained on a  
10 centralized computer, Sloane also teaches that the purchase histories can be  
11 received from a wireless device attached to the shopping cart associated with a user  
12 in conjunction with the retailer computer/controller per col. 3 lines 60-67 (Answer  
13 12:Second full ¶).

#### 14 *Findings*

15 We first construe the term "preference." There is no lexicographic definition  
16 in the Specification, but the usual and customary meaning is the selecting of  
17 someone or something over another or others (FF 01-02). Thus preference  
18 information is information associated with a selection of something over another.

19 As the Examiner found, Sloane describes the consumer scanning product bar  
20 codes and transmitting those codes to the system (FF 04). Since the customer  
21 selected such products to scan over others, such products represent preferences and  
22 the transmitted bar codes are preference information. Thus, Sloane describes  
23 automatically receiving preference information of the user from the wireless  
24 communication device through the wireless communication. Sloane also describes  
25 the use of this information in several embodiments (FF 04-11). Thus, the

1 Appellants' arguments with respect to purchase histories are moot because Sloane  
2 describes other preference information such as bar codes that meet limitation [2].  
3 The Appellants' argument that only identification numbers are transmitted is in  
4 error because Sloane describes other data such as bar code information being  
5 transmitted.

6 The Appellants have not sustained their burden of showing that the Examiner  
7 erred in rejecting claims 1, 4-7, 9-11, 15, 16, 18-21, 23-25, 29, 30, 32-35, 37-46,  
8 48-55, 57-64, and 66-68 under 35 U.S.C. § 102(b) as anticipated by Sloane.

9 *Claims 12-14 and 26-28 rejected under 35 U.S.C. § 103(a) as unpatentable over*  
10 *Sloane.*

11 The Appellants do not separately argue these claims, but rely on the arguments  
12 made in support of claim 1 above. Thus, these claims stand or fall with claim 1.  
13 The Appellants have not sustained their burden of showing that the Examiner erred  
14 in rejecting claims 12-14 and 26-28 under 35 U.S.C. § 103(a) as unpatentable over  
15 Sloane.

16 **CONCLUSIONS OF LAW**

17 The Appellants have not sustained their burden of showing that the Examiner  
18 erred in rejecting claims 1, 4-7, 9-11, 15, 16, 18-21, 23-25, 29, 30, 32-35, 37-46,  
19 48-55, 57-64, and 66-68 under 35 U.S.C. § 102(b) as anticipated by, or claims 12-  
20 14 and 26-28 under 35 U.S.C. § 103(a) as unpatentable over, the prior art.

21 On this record, the Appellants are not entitled to a patent containing claims 1,  
22 4-7, 9-16, 18-21, 23-30, 32-35, 37-46, 48-55, 57-64 and 66-68.

1 DECISION

2 To summarize, our decision is as follows:

- 3 • The rejection of claims 1, 4-7, 9-11, 15, 16, 18-21, 23-25, 29, 30, 32-35, 37-  
4 46, 48-55, 57-64, and 66-68 under 35 U.S.C. § 102(b) as anticipated by  
5 Sloane is sustained.
- 6 • The rejection of claims 12-14 and 26-28 under 35 U.S.C. § 103(a) as  
7 unpatentable over Sloane is sustained.

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

10 AFFIRMED

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13  
14 vsh

15  
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