

1 UNITED STATES PATENT AND TRADEMARK OFFICE

2
3
4 BEFORE THE BOARD OF PATENT APPEALS
5 AND INTERFERENCES
6

7
8 *Ex parte* PARUL A. MITTAL and VIVEK JAIN
9

10
11 Appeal 2008-2650
12 Application 09/863,921
13 Technology Center 3600
14

15
16 Decided: October 30, 2008
17

18
19 Before JENNIFER D. BAHR, ANTON W. FETTING, and
20 STEVEN D.A. McCARTHY, *Administrative Patent Judges*.
21 FETTING, *Administrative Patent Judge*.

22 DECISION ON APPEAL

23 STATEMENT OF CASE

24 Parul A. Mittal and Vivek Jain (Appellants) seek review under
25 35 U.S.C. § 134 of a final rejection of claims 1 and 3-48, the only claims
26 pending in the application on appeal.

1 We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b)
2 (2002).

3
4 We AFFIRM.

5 The Appellants invented a personalisation of promotional offers using
6 the dynamic personalisation and online distribution of electronic coupons for
7 discounts on products and services (Specification 1:5-7).

8

9 An understanding of the invention can be derived from a reading of
10 exemplary claim 1, which is reproduced below [bracketed matter and some
11 paragraphing added].

12 1. A method of conducting a promotional offer over a computer
13 network, the method comprising:

14 [1] defining the structure of said promotional offer having a
15 plurality of associated parameters,

16 one or more of which are unspecified or variable;

17 [2] targeting one or more of a plurality of customers as
18 recipients of the promotional offer;

19 and

20 [3] distributing a record of the promotional offer to the
21 customers over said computer network;

22 [4] wherein one or more of the unspecified or variable
23 parameters associated with the offer are individually assigned

24 for one or more of the targeted customers to whom the
25 record of the offer is distributed,

26 [5] wherein said unspecified or variable parameters are defined
27 when the promotional offer is accepted by respective
28 customers, and

1 [6] wherein said record of the promotional offer comprises a
2 declinable value
3 once said unspecified or variable parameters are defined.

4 This appeal arises from the Examiner's Final Rejection, mailed July 13,
5 2005. The Appellants filed an Appeal Brief in support of the appeal on
6 November 29, 2005.¹ An Examiner's Answer to the Appeal Brief was
7 mailed on August 28, 2007.

8 PRIOR ART

9 The Examiner relies upon the following prior art:

DeLapa	US 6,076,068	Jan. 13, 2000
Walker	US 6,327,573 B1	Dec. 4, 2001
Lerat	US 2002/0010627 A1	Jun. 24, 2002

10 REJECTIONS

11 Claims 1, 3-6, 16-32, and 42-48 stand rejected under 35 U.S.C. § 103(a)
12 as unpatentable over Lerat and DeLapa.

13 Claims 7-15 and 33-41 stand rejected under 35 U.S.C. § 103(a) as
14 unpatentable over Lerat, DeLapa, and Walker.

15 ISSUES

16 The issues pertinent to this appeal are

¹ A Supplemental Brief, containing the required Summary of Claimed Subject Matter, was filed on June 1, 2007. References to the Brief in this Decision are to the November 29, 2005 Appeal Brief, unless otherwise noted.

1 0055). Such information would be contained in data items known
2 as parameters, since a parameter is the name for data that is passed
3 to a functional block of software. In particular, the value of a
4 discount is a required parameter (Lerat ¶ 0168).

5 05. Lerat's coupons have beginning and ending times for
6 redemption (Lerat ¶'s 0062-63).

7 06. Lerat's coupons can diminish in value based on the available
8 time to live of the coupon (Lerat ¶ 0069).

9 07. Lerat's coupons may be dynamically created at download
10 (Lerat ¶ 0087).

11 08. A user is targeted for Lerat's coupon by web banner ads.
12 Coupons may be downloaded by clicking on such banners (Lerat ¶
13 0129-130).

14 09. Some of Lerat's coupons' parameters have default values. For
15 example, yeas or no parameters default to yes. One of these
16 controls whether the value is cumulative with other discounts, thus
17 making the value variable (Lerat ¶'s 0174-175).

18 *DeLapa*

19 10. DeLapa is directed to generating coupons to provide discounts
20 for purchases and, in particular, to delivery techniques for
21 delivering coupons assigned to a particular household. DeLapa is
22 particularly adapted for delivering targeted coupons to a
23 household. Targeted coupons are coupons which are assigned to a

1 household on the basis of attributes of that household (DeLapa
2 1:14-21)

3 11. DeLapa generates coupons to provide discounts for purchases
4 which are capable of increasing profit margins of the participating
5 retail establishment. DeLapa not only generates and dispenses
6 targeted coupons, which are assigned to particular households on
7 the basis of at least one attribute of that household. It also has the
8 capability of enhancing a dialog between a retail establishment
9 and its customers (DeLapa 3:18-27).

10 *Walker*

11 12. Walker is directed to a frequent shopper reward system that
12 tracks performance data of members or account holders linked to a
13 single frequent shopper account (Walker 2:14-18).

14 *Facts Related To The Level Of Skill In The Art*

15 13. Neither the Examiner nor the Appellants have addressed the
16 level of ordinary skill in the pertinent arts of programming and
17 system design, promotional campaigns, financial transaction
18 systems, marketing promotion systems design, data
19 communications, and promotional coupon campaigns. We will
20 therefore consider the cited prior art as representative of the level
21 of ordinary skill in the art. *See Okajima v. Bourdeau*, 261 F.3d
22 1350, 1355 (Fed. Cir. 2001) (“[T]he absence of specific findings
23 on the level of skill in the art does not give rise to reversible error
24 ‘where the prior art itself reflects an appropriate level and a need

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

6 *Obviousness*

7 A claimed invention is unpatentable if the differences between it and
8 the prior art are “such that the subject matter as a whole would have been
9 obvious at the time the invention was made to a person having ordinary skill
10 in the art.” 35 U.S.C. § 103(a) (2000); *KSR Int’l Co. v. Teleflex Inc.*, 127
11 S.Ct. 1727, 1729-30 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 13-14
12 (1966).

13 In *Graham*, the Court held that that the obviousness analysis is
14 bottomed on several basic factual inquiries: “[1] the scope and content of
15 the prior art are to be determined; [(2)] differences between the prior art and
16 the claims at issue are to be ascertained; and [(3)] the level of ordinary skill
17 in the pertinent art resolved.” 383 U.S. at 17. *See also KSR Int’l v. Teleflex*
18 *Inc.*, 127 S.Ct. at 1734. “The combination of familiar elements according to
19 known methods is likely to be obvious when it does no more than yield
20 predictable results.” *KSR*, at 1739.

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

1 have been obvious to a person of ordinary skill in the art to have so
2 combined Lerat and DeLapa (Answer 3-4).

3 The Appellants contend that Lerat does not describe the unspecified or
4 variable parameters in limitations [1] and [4]-[6] (Br. 15:Bottom full ¶);
5 defining the parameters when the offer is accepted in limitation [4] (Br.
6 14:Bottom ¶ - 15:Top ¶); and a declinable value once the parameters are
7 defined in limitation [6] (Br. 14:Bottom ¶). The Appellants also argue that
8 there is no reason to combine the references (Br. 16:Bottom ¶). The
9 Examiner responds that Lerat's offer value that is based on the time to live is
10 both variable and declinable (Answer 5-6) and is defined when the offer is
11 downloaded to the customer's computer, such download implying
12 acceptance by the customer (Answer 4:First full sentence).

13 The Appellants contend that neither reference describes the unspecified
14 or variable offer parameters as recited in the claims. The Appellants argue
15 that Lerat's coupon characteristics that vary over time make the value
16 variable, not its parameters, and that the Appellants' parameters may be
17 personalized (Br. 15:Bottom ¶). We disagree with the Appellants.

18 Lerat's coupons are digitally signed files that contain information about
19 the discount type, nature, and rules. Such information would be contained in
20 data items known as parameters, since a parameter is the name for data that
21 is passed to a functional block of software. Further, the value of a discount
22 is a required parameter (FF 04). This parameter, the value, may be based on
23 the available time to live of the coupon (FF 06). Thus, Lerat describes a
24 variable parameter, such variability based on remaining time for a coupon.
25 As to the Appellants' argument regarding personalization of the parameter,

1 we find no limitation in the claim to such personalization other than the
2 assignment to a customer in limitation [4]. Lerat describes such assignment
3 during download (FF 08).

4 The Appellants next contend that Lerat does not describe defining the
5 parameter when the offer is accepted. The Examiner responds that an offer
6 is accepted when its file is downloaded to a computer (Answer 6). By this
7 we take the Examiner to mean that downloading inherently causes a user's
8 computer, and therefore the user, to accept what is downloaded, and because
9 downloading creates a new file on the user's computer, all contents of the
10 file are defined at that point on the user's computer.

11 We agree with the Examiner. Lerat's customer downloads coupons by
12 clicking on a banner, thus accepting the offer for a coupon that the banner
13 describes (FF 08). Claim 1 does not limit the manner in which an offer is
14 accepted. We find that accepting the contents of a file containing an offer
15 onto one's computer is an acceptance of that offer.

16 As to the Appellants' argument that Lerat fails to describe a declinable
17 value once the parameters are defined in limitation, we find that Lerat
18 describes coupons that can diminish in value based on the available time to
19 live of the coupon (FF 06). This declinable value is defined by the
20 parameters that are created at download, and thus those parameters define
21 the nature of the decline in value once the parameters are defined. Claim 1
22 does not limit the manner in which value is declinable, so it is immaterial
23 whether the decline itself actually begins at the time of download, only that
24 the parameters define a value that is declinable according to some basis once
25 the parameters are defined.

1 As to the motivation to combine the references, as both references are
2 directed to promotional coupons (FF 01 & 10), DeLapa's description of
3 ways to increase profit margins and enhance the dialog with customers (FF
4 11) provides incentive for one of ordinary skill to adopt its targeting
5 methods.

6 *Claims 3-6, 15, 16, 19-21, 28-32, 42, and 44-48*

7 The Appellants argue claims 3, 5, 6, 15², 19-21, 28, 29, 31, 32, and 44-
8 47 as a group. Accordingly, we select claim 3 as representative of the group.
9 Claim 3 further requires that one or more of the unspecified or variable
10 parameters be assigned default values. The Examiner found that the starting
11 value of any parameter is the default value (Answer 4). The Appellants
12 contend that neither reference describes the unspecified or variable offer
13 parameters as recited in the claims. The Appellants argue that Lerat's
14 coupon characteristics that vary over time make the value variable, not its
15 parameters (Br. 18). The Appellants do not argue the claim 3 limitation of
16 default values.

17 We found that Lerat's coupon value was a parameter that may be
18 variable *supra*. Thus, the Appellants' argument here similarly fails to
19 overcome the burden of showing error on the Examiner's part.

20

² The Appellants present a separate argument that claim 15 was rejected under the wrong set of art, based purely on claim 15's dependence from claim 7 (Br. 19). The Examiner corrected this obvious clerical error in the rejections as presented in the Answer (see Answer 7). Accordingly, we need not treat this issue further.

Claims 4 and 30

1
2 The Appellants argue claims 4 and 30 as a group. Accordingly, we
3 select claim 4 as representative of the group. Claim 4 further requires that
4 the assigned default values from claim 3 may be changed a predetermined
5 number of times. The Examiner implicitly found that changes to declining
6 values daily or at other periods were known to those of ordinary skill and
7 concluded that it would have been obvious to a person of ordinary skill in
8 the art to have used changes at predetermined intervals. With defined start
9 and end dates as in Lerat, would have resulted in a predetermined number of
10 changes (Answer 4). The Appellants contend that the Examiner provides no
11 proof that such a feature is plausible with Lerat, even in the form of official
12 notice (Br. 19).

13 We disagree with the Appellants. The Examiner made a finding of fact
14 that one of ordinary skill knew of changes at fixed time periods, irrespective
15 of whether the Examiner used the phrase “official notice.” The Appellants
16 offer no reason to doubt that those of ordinary skill knew of such
17 programming practices and their applicability to systems such as in Lerat.

18 We further find that, as a matter of computer programming constraints,
19 once a start and end date are established for a promotion as in Lerat (FF 05),
20 the number of iterations in any decline in value that occurs at regular
21 intervals will be predetermined by those dates. Lerat’s description of
22 declining the value based on time to live (FF 06) implies such regularity in
23 the decline.

24 The programming constraints we refer to are those in which digital
25 computers are constrained to use discrete values and time periods that limit

1 the precision of such amounts. The use of discrete values and time periods
2 necessarily constrains any series of operations to be performed with such
3 discrete values and time periods. Thus any regular change from one limit to
4 another, such as from a beginning value and date to an ending value and
5 date, must occur over a series of operations whose number is predetermined
6 by the program and the constraints on the precision of values and time
7 periods.

8 Finally, we find that claim 4 requires only the capacity for, not the actual
9 performance of, changing values a predetermined number of times. Any
10 reduction in value over a predetermined range has such a capacity because
11 once the change increments are known, the number of changes are implied.

12 *Claims 16 and 42*

13 The Appellants argue claims 16 and 42 as a group. Accordingly, we
14 select claim 16 as representative of the group. Claim 16 further requires that
15 the customers can decline to redeem the offer. The Examiner found that
16 because Lerat does not require redemption, customers must necessarily have
17 the ability to decline redemption (Answer 4). The Appellants contend that
18 the customers may have postponed the decision or may not have yet
19 received the offer in Lerat (Br. 20).

20 We disagree with the Appellants. Claim 16 broadly requires capacity to
21 decline, not performance of such a decline. Claim 16 does not further limit
22 the manner in which declination occurs. Whether the customer postpones a
23 decision to decline does not diminish a customer's inherent capacity to
24 decline any offer.

1 *Claims 7-15 and 33-41 rejected under 35 U.S.C. § 103(a) as unpatentable*
2 *over Lerat, DeLapa, and Walker.*

3 The Appellants argue that the references may not be properly combined
4 (Br. 22-24), and repeat their arguments from claim 1 that the references fail
5 to describe unspecified or variable offer parameters. As to the arguments
6 repeated from claim 1, we find the Appellants have not sustained their
7 burden of showing error for the same reasons we found *supra*. As to the
8 motivation to combine Walker with the other references, we find that
9 Walker is directed to a frequent shopper reward system that tracks
10 performance data of members (FF 12), and therefore its teachings of
11 tracking performance is complementary to the promotional teachings of
12 Lerat and DeLapa. Thus, we agree with the Examiner's finding that one of
13 ordinary skill would have seen from Walker that the performance of Lerat's
14 and DeLapa's promotional systems would be improved by aligning each
15 customer's promotion with that customer's profile as described by Walker
16 (Answer 5).

17 The Appellants have not sustained their burden of showing that the
18 Examiner erred in rejecting claims 7-15 and 33-41 under 35 U.S.C. § 103(a)
19 as unpatentable over Lerat, DeLapa, and Walker.

20 CONCLUSIONS OF LAW

21 The Appellants have not sustained their burden of showing that the
22 Examiner erred in rejecting claims 1 and 3-48 under 35 U.S.C. § 103(a) as
23 unpatentable over the prior art.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

DECISION

To summarize, our decision is as follows:

- The rejection of claims 1, 3-6, 16-32, and 42-48 under 35 U.S.C. § 103(a) as unpatentable over Lerat and DeLapa is sustained.
- The rejection of claims 7-15 and 33-41 under 35 U.S.C. § 103(a) as unpatentable over Lerat, DeLapa, and Walker is sustained.

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)(iv).

AFFIRMED

BAHR, *Administrative Patent Judge*, concurring

I join in the opinion of my colleagues with the exception of the portions addressing the rejection of claims 4, 30, and 48. While I take issue with the statements in the opinion that “The Examiner implicitly found that changes to declining values daily or at other periods were known to those of ordinary skill and concluded that it would have been obvious to a person of ordinary skill in the art to have used changes at predetermined intervals” and “The Examiner implicitly found that one of ordinary skill knew that declining values were typically performed with a fixed amount (linear) or percentage (polynomial or exponential) per day,” I concur with the decision of my colleagues to affirm the rejection as to those claims.

1 It is not clear to me that the Examiner's statement that "[r]egarding
2 claim 4, it would have been obvious to one of ordinary skill at the time of
3 the invention to have reduced the value once a day (or other time period)
4 until the offer expires" (Answer 3-4) is a finding that "changes to declining
5 values daily or at other periods were known to those of ordinary skill," as
6 opposed to an inference that Lerat's teaching that the coupons can diminish
7 in value based on the available time to live of the coupon somehow suggests
8 or implies such a reduction in value. In my opinion, the Appellants
9 reasonably question where the Examiner finds support for the determination
10 of obviousness (Br. 19). In any event, any lack of clarity in the Examiner's
11 explanation of the rejection is harmless error, given the scope of claim 4,
12 which, as pointed out by my colleagues, only requires capability of the
13 assigned default values to be changed a predetermined number of times.
14 Moreover, I additionally observe that such predetermined number could be
15 any number, including 1. In teaching that the coupons can diminish in value
16 based on the available time to live of the coupon, Lerat teaches such
17 capability.

18 Likewise, it is not clear to me that the Examiner's statement that
19 "[r]egarding claim 48, Lerat does not appear to specify or limit the type of
20 discount value decay and it would have been obvious to one of ordinary skill
21 at the time of the invention to have provided any reasonable function
22 including linear (x amount per day)" (Answer 4) is an implicit finding that
23 "one of ordinary skill knew that declining values were typically performed
24 with a fixed amount (linear) or percentage (polynomial or exponential) per
25 day," as opposed to a finding that linear functions are known and a legal
26 conclusion that the application of any known function would have been

1 obvious to a person of ordinary skill in the art to implement the decline in
2 value of Lerat's coupon. The selection of any one of a finite number of
3 identified, predictable solutions to a problem is likely the product not of
4 innovation but of ordinary skill and common sense. *KSR*, 127 S. Ct. at
5 1742. Accordingly, the Examiner's conclusion that the subject matter of
6 claim 48 would have been obvious is fundamentally sound.

7

8

9 vsh

10

11 MCGINN & GIBB PLLC
12 SUITE 304
13 2568 A RIVA ROAD
14 ANNAPOLIS MD 21401