



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/896,353	05/17/2013	Natalya K. Seals	12860	1221

27752 7590 12/29/2017
THE PROCTER & GAMBLE COMPANY
Global IP Services
Central Building, C9
One Procter and Gamble Plaza
CINCINNATI, OH 45202

EXAMINER

BRADY, MARIE P.

ART UNIT	PAPER NUMBER
3681	

NOTIFICATION DATE	DELIVERY MODE
12/29/2017	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

centraldocket.im@pg.com
pair_pg@firsttofile.com
mayer.jk@pg.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte NATALYA K. SEALS, KANISHKA DAS, and
SILVIA CEROLINI

Appeal 2016-005695
Application 13/896,353
Technology Center 3600

Before CAROLYN D. THOMAS, ERIC B. CHEN, and
JOSEPH P. LENTIVECH, *Administrative Patent Judges*.

CHEN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134(a) from the final rejection of claims 1–10, all the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

STATEMENT OF THE CASE

Appellants' invention relates to on-line sales, in particular, the creation and presentation of a particularized offer to an on-line shopper. (Spec. 1:4–5.)

Claim 1 is exemplary, with disputed limitations in italics:

1. A method for presenting an offer, the method comprising steps of:
 - a. receiving, via a communications network, on-line shopping basket contents information associated with an on-line shopper;
 - b. *analyzing the on-line shopping basket information according to the product market categories of the contents;*
 - c. *determining a market demographic from the analysis of the on-line shopping basket;*
 - d. *analyzing at least one of on-line and off-line shopping basket content information associated with the market demographic, according to a consumer benefit of a product market category of the content;*
 - e. *identifying a consumer need of the on-line shopper according to the consumer benefits; and*
 - f. *communicating, via an electronic communications network, information, associated with products or services related to the consumer need to the on-line shopper.*

Claims 1–10 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Claims 1–10 stand rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

Claims 1–10 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Dicker (US 2010/0191582 A1; July 29, 2010) and McLennan (US 2007/0214136 A1; Sept. 13, 2007).

ANALYSIS

§ 112, First Paragraph, Rejection

We are persuaded by Appellants' arguments (Br. 2–3) that the limitations “consumer benefit” and “consumer need,” as recited in independent claims 1 and 6, comply with the written description requirement under 35 U.S.C. § 112, first paragraph.

The Examiner found that “[i]t is unclear . . . the difference between a consumer benefit and a consumer need” and:

[i]t is also unclear . . . what algorithm the applicant will be using to determine what the needs and the benefits of the consumer will be based on the content of a shopping basket since the specification does not explain how the needs and the benefits are determined

(Final Act. 3). The Examiner also found that “[a] need and benefit of one consumer could very well be different for each consumer.” (Ans. 3 (emphasis omitted).) Accordingly, the Examiner concluded that “these claims contain subject matter that is not described in the specification and one skilled in the art would know how these are determined.” (Final Act. 3.) We do not agree.

Appellants' Specification discloses that “‘consumer benefit’ refers to the underlying reason a product is used” (Spec. 3:5) and “‘consumer need’ is used to refer to a broader conceptual need which the consumer benefit of a product is used to help address” (Spec. 3:8–9). Appellants' Specification further discloses that:

Once the *membership of the shopper has been determined*, notice may be sent to interested parties that a prospective shopper with a market demographic membership of interest is presently shopping at the site of the on-line retailer. *The notice may be accompanied by information relating to the current contents of*

the on-line shopping cart of the shopper, or this information may be held in confidence by the on-line retailer.

(Spec. 3:24 to 4:2 (emphases added).)

The correlated product categories may subsequently be analyzed to determine the consumer benefits associated with the products within the categories, as well as the underlying consumer needs associated with those consumer benefits individually and in combination as more than a single benefit may be necessarily combined to satisfactorily meet an underlying consumer need.

(Spec. 4:7–11.) Thus, according to Appellants’ Specification, once the membership of the shopper has been determined, the shopper demographics are known and accordingly, the “consumer need” for the shopper can be appropriately correlated to a product with having a specific “consumer benefit.” Appellants’ Specification further provides the following example:

the on-line retailer may provide notice that a shopper has arrived at their site with the appearance of being *the parent of a toddler (based upon past shopping history)* as well as having an interest in organic products as well as products free from scents. This may trigger an offer from a marketer, communicated to the on-line retailer, and ultimately to the on-line shopper, *related to infant care products, baby-wipes, shampoos, detergents, designed, or otherwise offering the benefit of being suitable for exposure to sensitive skin.*

(Spec. 5:3–8 (emphases added).) According to Appellants’ Specification, “consumer need” is based upon the shopper demographics (e.g., parent of a toddler) and “consumer benefit” is based upon the product, and thus, Appellants’ Specification adequately supports the claim limitations “consumer benefit” and “consumer need.”

Accordingly, we are persuaded by Appellants’ argument that “prior analysis of product and product categories may be undertaken to establish consumer benefits associated with the product and product categories” and

“[f]urther analysis may be undertaken to associate the identified [consumer] benefits with underlying [consumer] needs for the market demographic also associated with products or combinations of products.” (Br. 3.)

Thus, we do not agree with the Examiner that the Specification fails to provide written description support for the limitations “consumer benefit” and “consumer need.”

Accordingly, we do not sustain the rejection of independent claims 1 and 6 under 35 U.S.C. § 112, first paragraph. Claims 2–5 and 7–10 depend from claims 1 and 6. Therefore, we do not sustain the rejection of claims 2–5 and 7–10 under 35 U.S.C. § 112, first paragraph, for the same reasons discussed with respect to independent claims 1 and 6.

§ 101 Rejection

We are not persuaded by Appellants’ arguments (Br. 4–7) that independent claims 1 and 6 comply with 35 U.S.C. § 101 as statutory subject matter.

The Examiner concluded that “claims 1–10 are directed to presenting an offer to a shopper based on the analysis of the content of shopper’s shopping basket, which is considered to be an abstract idea inasmuch as such activity is considered a fundamental economic practice” (Final Act. 3) and “[t]he elements together execute in routinely and conventionally accepted coordinated manners and interact with their partner elements to achieve an overall outcome which, similarly, is merely the combined and coordinated execution of generic computer functionalities which are well-understood, routine and conventional activities previously known to the industry” (*id.* at 4). We agree with the Examiner.

A patent may be obtained for “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” 35 U.S.C. § 101. The Supreme Court has held that this provision contains an important implicit exception: laws of nature, natural phenomena, and abstract ideas are not patentable. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014); *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (“Phenomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work”). Notwithstanding that a law of nature or an abstract idea, by itself, is not patentable, the application of these concepts may be deserving of patent protection. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71–72 (2012). In *Mayo*, the Court stated that “to transform an unpatentable law of nature into a patent-eligible *application* of such a law, one must do more than simply state the law of nature while adding the words ‘apply it.’” *Mayo*, 566 U.S. at 72 (internal citation omitted).

In *Alice*, the Supreme Court reaffirmed the framework set forth previously in *Mayo* “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of these concepts.” *Alice*, 134 S. Ct. at 2355. The first step in the analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the claims are directed to a patent-ineligible concept, then the second step in the analysis is to consider the elements of the claims “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 566 U.S.

at 79, 78). In other words, the second step is to “search for an ‘inventive concept’—*i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* (brackets in original) (quoting *Mayo*, 566 U.S. at 72–73). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* at 2357 (brackets in original) (quoting *Mayo*, 566 U.S. at 77–78). The prohibition against patenting an abstract idea “cannot be circumvented by attempting to limit the use of the formula to a particular technological environment or adding insignificant post-solution activity.” *Bilski v. Kappos*, 561 U.S. 593, 610–11 (2010) (internal citation and quotation marks omitted). The Court in *Alice* noted that “[s]imply appending conventional steps, specified at a high level of generality,’ was not ‘*enough*’ [in *Mayo*] to supply an ‘inventive concept.’” *Alice*, 134 S. Ct. at 2357 (quoting *Mayo*, 566 U.S. at 82–83, 77–78, 72–73).

Step one: Are the claims at issue directed to a patent-ineligible concept?

Claim 1 is a method claim comprising of multiple steps, each of which can be performed in the human mind or by a human using pen and paper.

The steps of: (b) “analyzing the . . . shopping basket information according to the product market categories of the contents”; (c) “determining a market demographic from the analysis of the . . . shopping basket”; (d) “analyzing . . . shopping basket information according to the product market categories of the contents; and (e) “identifying a consumer need of the . . .

shopper according to the consumer benefits” can be performed in the human mind by a retail store clerk after viewing a customer’s shopping basket. For example, the retail store clerk may observe that a customer with baby wipes is a parent of an infant or toddler. Moreover, the step of “communicating . . . information, associated with products or services related to the consumer need to the on-line shopper” can also be performed by the retail store clerk by suggesting similar products to the product in the shopping basket. For example, the store clerk can inquire if the customer with baby wipes is also in need of diapers or other similar products.

Because all the method steps of claim 1 can either be performed by human thought alone, or by a human using pen and paper, claim 1 is directed to a patent-ineligible abstract idea. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372–73 (Fed. Cir. 2011) (“[U]npatentable mental processes” include “steps [that] can be performed in the human mind, or by a human using a pen and paper”). Claim 6 recites limitations similar to those discussed with respect claim 1. Thus, claim 6 is also directed to a patent-ineligible abstract idea.

Step two: Is there something else in the claims that ensures that they are directed to significantly more than a patent-ineligible concept?

Because claims 1 and 6 are directed to an abstract idea, the question to be settled next, according to *Alice*, is whether claims 1 and 6 recite an element, or combination of elements, that is enough to ensure that the claim is directed to significantly more than an abstract idea.

Claim 1 is a method claim, which includes “a communications network” and “an electronic communications network.” Similarly, claim 6 is a method claim, which includes “a communications network.”

The claimed hardware components, including “a communications network” and “an electronic communications network” are generic, purely conventional computer elements. Thus, the claims do no more than require generic computer elements to perform generic computer functions, rather than improve computer capabilities.

Accordingly, appending a conventional “communications network” and “an electronic communications network” to an abstract idea is not enough to transform an abstract idea into a patent-eligible invention. *See Alice*, 134 S. Ct. at 2358 (“[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention”).

Appellants argue that “[t]he activities of other shoppers in an identified demographic are also considered as well as the benefits associated with market categories related to the shopping basket contents are considered” and “[t]he scope of the claims is narrower than the stated abstraction [of presenting an offer to a shopper based upon the contents of the shopper’s shopping basket] upon which the rejection is based.” (Br. 6.) However, even if Appellants are correct, as discussed previously, the method steps of claim 1 can either be performed by human thought alone, or by a human using pen and paper, and accordingly, claim 1 is directed to a patent-ineligible abstract idea.

Appellants further argue that “[p]rior to the execution of the process, the shopper has an on-line basket and no offers for products relevant to their

needs, after the process has completed, there is the addition of an offer, or information, related not necessarily to the contents of the basket but instead to a fundamental need associated with the shopper according to those basket contents among other things.” (Br. 6–7.) However, other than providing a conclusory statement that claim 1 fulfills “a fundamental need associated with the shopper according to those basket contents among other things” including “the addition of an offer, or information, related not necessarily to the contents of the basket,” Appellants have not provided any additional explanation or evidence to support this position. For example, Appellants have not provided citations to the Specification to demonstrate that the claimed invention is an improvement of an existing technology or demonstrated a deficiency in the prior art. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016) (“Moreover, our conclusion that the claims are directed to an improvement of an existing technology is bolstered by the specification’s teachings that the claimed invention achieves other benefits over conventional databases, such as increased flexibility, faster search times, and smaller memory requirements”).

Accordingly, we sustain the rejection of independent claim 1 under 35 U.S.C. § 101. Claims 2–5 depend from claim 1, and Appellants have not presented any additional substantive arguments with respect to these claims. Therefore, we sustain the rejection of claims 2–5 under 35 U.S.C. § 101, for the same reasons discussed with respect to independent claim 1.

Independent claim 6 recites limitations similar to those discussed with respect to independent claim 1, and Appellants have not presented any additional substantive arguments with respect to this claim. We sustain the

rejection of claim 6, as well as dependent claims 7–10, for the same reasons discussed with respect to claim 1.

§ 103 Rejection

Claims 1, 4–6, 9, and 10

First, we are unpersuaded by Appellants’ arguments (Br. 8) that the combination of Dicker and McLennan would not have rendered obvious independent claim 1, which includes the limitation “analyzing the on-line shopping basket information according to the product market categories of the contents.”

The Examiner found that the “similar items list” of Dicker and the identification of popular items, as illustrated in Figure 3B of Dicker, collectively correspond to the limitation “analyzing the on-line shopping basket information according to the product market categories of the contents.” (Final Act. 6; *see also* Ans. 7.) We agree with the Examiner.

Dicker relates to “determining the relatedness between products or other viewable items represented within a database . . . and user interfaces for presenting recommended items and shopping cart contents to users.” (¶ 2.) Dicker explains “user actions that evidence users’ interests in, or affinities for, particular items are recorded for subsequent analysis” and “[t]o identify items that are related or ‘similar’ to one another, an off-line table generation component analyses the histories of item-affinity-evidencing actions of a community of users” (¶ 14), for example, the generation of a “similar items lists” (¶ 48). Figure 3A of Dicker, which illustrates a method for generating the similar items table (¶ 22), includes a process for identifying “popular” items (¶ 97). Because Dicker explains that a “similar

items lists” can be generated, as well as a “popular” items list, Dicker teaches the limitation “analyzing the on-line shopping basket information according to the product market categories of the contents.”

Appellants argue that “[t]he Office Action takes a license to insert the term [market category] into the description of the cited portion of the reference with no mention of this term actually present in the reference.” (Br. 8.) Contrary to Appellants’ arguments, the Examiner cited to the “popular” items list of Dicker for teaching the limitation “product market categories.” (Ans. 7.)

Thus, we agree with the Examiner that the combination of Dicker and McLennan would have rendered obvious independent claim 1, which includes the limitation “analyzing the on-line shopping basket information according to the product market categories of the contents.”

Second, we are unpersuaded by Appellants’ arguments (Br. 8–9) that the combination of Dicker and McLennan would not have rendered obvious independent claim 1, which includes the limitation “determining a market demographic from the analysis of the on-line shopping basket.”

The Examiner found that the market basket analysis of McLennan, which analyzes customer data, corresponds to the limitation “determining a market demographic from the analysis of the on-line shopping basket.” (Final Act. 7; *see also* Ans. 8.) We agree with the Examiner.

McLennan relates to “data mining” or “the practice of automatically searching large stores of data for patterns or trends.” (¶ 1.) McLennan provides for a “market basket analysis for which the user has used a data mining engine to analyze customer data” including items purchased, and “[t]o view the results of the data mining engine, the user can render a

decision tree to analyze the consumers and their shopping habits such as in terms of age groups, home demographics (e.g., marital status, kids, etc.), occupation, and income range.” (§ 37.) Because the market basket analysis of McLennan includes items purchased and home demographics, McLennan teaches the limitation “determining a market demographic from the analysis of the on-line shopping basket.”

Appellants argue that “*MacLennan* describes methods for presenting information gleaned from data mining to present generalizations regarding a large body of shoppers, not a method necessarily applicable to the analysis of consumer market demographics based upon a single sample.” (Br. 8–9.) However, Appellants’ arguments are not commensurate in scope with claim 1, because the claim does not require market demographics based upon a single sample.

Thus, we agree with the Examiner that the combination of Dicker and McLennan would have rendered obvious independent claim 1, which includes the limitation “determining a market demographic from the analysis of the on-line shopping basket.”

Last, we are unpersuaded by Appellants’ arguments (Br. 9) that the combination of Dicker and McLennan would not have rendered obvious independent claim 1, which includes the limitations “analyzing at least one of on-line and off-line shopping basket content information associated with the market demographic, according to a consumer benefit of a product market category of the content,” “identifying a consumer need of the on-line shopper according to the consumer benefits,” and “communicating, via an electronic communications network, information, associated with products or services related to the consumer need to the on-line shopper.”

The Examiner found that the algorithm of Dicker, which determines item relationships by analyzing user historical data and providing recommendations to users, corresponds to the limitations “analyzing at least one of on-line and off-line shopping basket content information associated with the market demographic, according to a consumer benefit of a product market category of the content,” “identifying a consumer need of the on-line shopper according to the consumer benefits,” and “communicating, via an electronic communications network, information, associated with products or services related to the consumer need to the on-line shopper.” (Final Act. 6–7; *see also* Ans. 9–10.) We agree with the Examiner.

Dicker explains that user interfaces “are provided for presenting item recommendations to a user when the user selects an item to add to a shopping cart” generated by a recommendation or selection algorithm.

(Abstract.) Dicker further explains the following:

Item relationships are determined by analyzing user purchase histories, product viewing histories, and/or other types of historical browsing data reflecting users’ interests in particular items. . . . The resulting item relatedness data may be used to provide personalized item recommendations to users (e.g., product recommendations to customers of an online store), and/or to provide users with non-personalized lists of related items (e.g., lists of related products on product detail pages).

(¶ 12.) Because the algorithm of Dicker analyzes user purchase histories, product viewing histories, and historical browsing data reflecting user interest in particular items, Dicker teaches the limitation “analyzing at least one of on-line and off-line shopping basket content information associated with the market demographic, according to a consumer benefit of a product market category of the content.” Similarly, because the algorithm of Dicker uses item relatedness data to provide personalized item recommendations to

users, Dicker teaches the limitations “identifying a consumer need of the on-line shopper according to the consumer benefits” and “communicating, via an electronic communications network, information, associated with products or services related to the consumer need to the on-line shopper.”

Appellants argue that “[t]he cited references do not teach or suggest the claimed combination of steps as well as failing to teach or suggest many of the individual steps.” (Br. 9.) However, Appellants merely provide a conclusory statement that Dicker does not teach the limitations of claim 1 without pointing out with particularity how the claim is distinguishable over Dicker.

Thus, we agree with the Examiner that the combination of Dicker and McLennan would have rendered obvious independent claim 1, which includes the limitations “analyzing at least one of on-line and off-line shopping basket content information associated with the market demographic, according to a consumer benefit of a product market category of the content,” “identifying a consumer need of the on-line shopper according to the consumer benefits,” and “communicating, via an electronic communications network, information, associated with products or services related to the consumer need to the on-line shopper.”

Accordingly, we sustain the rejection of independent claim 1 under 35 U.S.C. § 103(a). Claims 2–5 depend from claim 1, and Appellants have not presented any additional substantive arguments with respect to these claims. Therefore, we sustain the rejection of claims 2–5 under 35 U.S.C. § 103(a), for the same reasons discussed with respect to independent claim 1.

Independent claim 6 recites limitations similar to those discussed with respect to independent claim 1, and Appellants have not presented any

additional substantive arguments with respect to this claim. We sustain the rejection of claim 6, as well as dependent claims 7–11, for the same reasons discussed with respect to claim 1.

Claims 2 and 7

Although Appellants nominally argue the rejection of dependent claims 2 and 7 separately (Br. 9–10), the arguments presented do not point out with particularity or explain why the limitations of these dependent claims are separately patentable. Instead, Appellants merely provide a conclusory statement that “[p]urchase histories, product viewing histories, and other types of historical browsing data, do not constitute an analysis based upon consumer benefits, or an identification of consumer needs based upon the identified benefits” (*id.*) without a sufficient explanation as to why these dependent claims are patentable over Dicker. We are not persuaded by these arguments for the reasons discussed with respect to claims 1 and 6, from which claims 2 and 7 depend. Accordingly, we sustain this rejection.

Claims 3 and 8

Although Appellants nominally argue the rejection of dependent claims 3 and 8 separately (Br. 10), the arguments presented do not point out with particularity or explain why the limitations of these dependent claims are separately patentable. Instead, Appellants merely provide a conclusory statements that:

[t]he references fail to describe the identification of a shopper as a member of a market demographic according to their market basket contents, further, there is no description of an analysis of market basket contents with an intention to identify a fundamental consumer need based upon the benefits the shopper

appears to be seeking to achieve based upon their current market basket contents and “[t]he references fail to describe the claimed steps associated with identifying consumer needs” (*id.*) without a sufficient explanation as to why these dependent claims are patentable over Dicker. We are not persuaded by these arguments for the reasons discussed with respect to claims 1 and 6, from which claims 3 and 8 depend. Accordingly, we sustain this rejection.

DECISION

The Examiner’s decision rejecting claims 1–10 under 35 U.S.C. § 112, first paragraph, is reversed.

The Examiner’s decision rejecting claims 1–10 under 35 U.S.C. § 101 is affirmed.

The Examiner’s decision rejecting claims 1–10 under 35 U.S.C. § 103(a) is affirmed.

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