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#### BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DANIEL ALAN GREENSPUN Applicant: VEGAS.COM, LLC

Appeal 2015-006233 Application 13/681,142 Technology Center 3600

Before ANTON W. FETTING, NINA L. MEDLOCK, and ALYSSA A. FINAMORE, *Administrative Patent Judges*. FETTING, *Administrative Patent Judge*.

#### **DECISION ON APPEAL**

## STATEMENT OF THE CASE<sup>1</sup>

Daniel Alan Greenspun (Appellant) seeks review under 35 U.S.C. § 134 of a non-final rejection of claims 1, 3–5, 7–10, 12, 13, 15–22, and 24–27, the only claims pending in the application on appeal. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

<sup>&</sup>lt;sup>1</sup> Our decision will make reference to the Appellant's Appeal Brief ("App. Br.," filed May 8, 2014) and Reply Brief ("Reply Br.," filed October 1, 2014), and the Examiner's Answer ("Ans.," mailed August 1, 2014), and Non-Final Action ("Non-Final Act.," mailed November 14, 2013).

The Appellant invented a system and method for providing interactive computer activities and providing incentives for participating in the activities. Specification para. 2.

An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below (bracketed matter and some paragraphing added).

- 1. A computer-readable non-transitory storage medium comprising instructions to cause a computing device to perform operations for providing an incentive offer to a subset of a plurality of users visiting a venue, the operations comprising:
- [1] receiving a plurality of images corresponding to a plurality of users visiting the venue,

wherein each of the plurality of images is taken at a first physical venue;

- [2] storing the plurality of images in computer memory;
- [3] receiving contact information corresponding to each of the plurality of users;
  - [4] storing the contact information in computer memory;
- [5] filtering the plurality of images using image recognition software

to identify a subset of the plurality of users as selected users,

wherein the selected users are identified as attractive people by the image recognition software;

[6] generating an incentive offer

configured to provide an incentive for at least some of the selected users identified as attractive people

to revisit the first physical venue at a later date;

and

[7] transmitting the incentive offer

# to at least some of the selected users identified as attractive people

# using the contact information

The Examiner relies upon the following prior art:

Shostack	US 2004/0167794 A1	Aug. 26, 2004
Tran	US 2006/0015404 A1	Jan. 19, 2006
Agostinelli	US 7,174,029 B2	Feb. 6, 2007

Claims 1, 3–5, 7–10, 12, 13, 15–22, and 24–27 stand rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

Claims 1, 3–5, 7–10, 12, 13, 15–22, and 24–27 stand rejected under 35 U.S.C. § 112, first paragraph, as lacking a supporting written description within the original disclosure.

Claims 1, 3–5, 7–10, 12, 13, 15–22, and 24–27 stand rejected under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the invention.

Claims 1, 3–5, 7–10, 12, 13, 15–22, and 24–27 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Agostinelli, Tran, and Shostack.

#### **ISSUES**

The issues of eligible subject matter turn primarily on whether the claims recite more than conceptual advice. The issues of written description turn primarily on whether the application as originally filed disclosed filtering images using image recognition software wherein the selected users are identified as attractive people by the image recognition software. The

issues of definiteness turn primarily on whether the Specification provides means for objectively evaluating the criterion of attractiveness. The issues of obviousness turn primarily on whether the claims are sufficiently understandable to be meaningfully evaluated by one of ordinary skill.

### FACTS PERTINENT TO THE ISSUES

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

Facts Related to Claim Construction

- 01. The disclosure contains no lexicographic definition of "attractive."
- 02. The ordinary meaning of "attractive" is pleasing to the senses or mind; interesting because of the likelihood of being advantageous or profitable; or having the power to attract.<sup>2</sup>

Facts Related to Appellant's Disclosure

03. The images in a user profile 216 may be scanned manually or through use of image recognition software to filter users 102. Participating entities may then provide incentive offers to selected users 102 to encourage users 102 to visit respective establishments, properties, and the like. For example, social clubs

<sup>&</sup>lt;sup>2</sup> American Heritage Dictionary, https://www.ahdictionary.com/word/search.html?q=attractive

and similar evening entertainment establishments wish to encourage visitation of attractive people to increase the reputation of their property. In offering incentives and promotions to selected users, a greater portion of the selected users will likely attend. Specification para. 59.

Facts Related to the Prior Art

Agostinelli

- 04. Agostinelli is directed to presentation of informational material such as sales promotions and advertisements in real-time, based upon awareness of the current operating environment and the classification of the individual(s) viewing the informational material. Agostinelli 1:7–15.
- 05. Agostinelli describes a) sensing the presence of at least one individual in a predetermined area; b) determining at least one characteristic of the at least one individual; c) selecting one of the plurality of informational material programs based upon the determined of at least one characteristic; and d) presenting the selected informational material program by the system.

  Agostinelli 2:61–3:2.
- 06. Agostinelli describes the existence of numerous algorithms available for detecting faces in images. Agostinelli 8:66–67.
- 07. Agostinelli describes classification algorithms being used by a sentient system to classify individuals based upon

the characteristics of the individuals. The classification stage is composed of one or more classifiers, including a gender classifier, age classifier, and race classifier. Agostinelli 9:14–21.

- 08. Agostinelli describes the existence of gender classification using different classifiers in facial recognition software. Agostinelli 9:50–54.
- 09. Agostinelli describes age classification operated by performing an analysis of a digital image of a subject's face for particular detailed facial features such as facial feature ratios and wrinkle analysis. Agostinelli 9:62–65.

Tran

- 10. Tran is directed to targeted ads. Tran para. 1.
- 11. Tran describes a consumer purchasing behavior profiling system in which consumer profiles are formed and updated based on a variety of data points, including demographic data, psychographic data, life style affinity, brand affinity, product preferences, real-time responses to advertising messages, past purchases, use of coupon and discount offers, price sensitivity, and market trends. Tran para. 18.

Shostack

12. Shostack is directed to the field of Internet dating services and to services designed to facilitate a compatible matching amongst individuals seeking companionship via the World Wide Web. Shostack para. 2.

#### **ANALYSIS**

Claims 1, 3–5, 7–10, 12, 13, 15–22, and 24–27 rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter

# The Supreme Court

set forth a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts. First, [] determine whether the claims at issue are directed to one of those patent-ineligible concepts. [] If so, we then ask, "[w]hat else is there in the claims before us? [] To answer that question, [] consider the elements of each claim both individually and "as an ordered combination" to determine whether the additional elements "transform the nature of the claim" into a patent-eligible application. [The Court] described step two of this analysis as a 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."

Alice Corp., Pty. Ltd. v CLS Bank Int'l, 134 S. Ct. 2347, 2355 (2014) (citing Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289 (2012)).

To perform this test, we must first determine whether the claims at issue are directed to a patent-ineligible concept.

Although the Court in *Alice* made a direct finding as to what the claims were directed to, we find that this case's claims themselves and the Specification provide enough information to inform one as to what they are directed to.

The preamble to claim 1 recites that it is for providing an incentive offer to a subset of a plurality of users visiting a venue. The steps in claim 1 result in transmitting an incentive offer to a subset of a plurality of users. The Specification at paragraph 2 recites that the invention relates to providing interactive computer activities and providing incentives for participating in the activities. Thus, all this evidence shows that claim 1 is directed to providing incentive offers, i.e., marketing promotion.

It follows from prior Supreme Court cases, and *Bilski* in particular, that the claims at issue here are directed to an abstract idea. Like the risk hedging in *Bilski*, the concept of providing incentive offers is a fundamental marketing practice long prevalent in our system of commerce. The use of providing incentive offers is also a building block of sales generation in market economies. Thus, providing incentive offers, like hedging, is an "abstract idea" beyond the scope of §101. *See Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2356.

As in *Alice Corp. Pty. Ltd.*, we need not labor to delimit the precise contours of the "abstract ideas" category in this case. It is enough to recognize that there is no meaningful distinction in the level of abstraction

between the concept of risk hedging in *Bilski* and the concept of providing incentive offers at issue here. Both are squarely within the realm of "abstract ideas" as the Court has used that term. *See Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2357.

Further, claims involving data collection, analysis, and display are directed to an abstract idea. *Elec. Power Grp. v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (holding that "collecting information, analyzing it, and displaying certain results of the collection and analysis" are "a familiar class of claims 'directed to' a patent ineligible concept"); *see also In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016). Claim 1, unlike the claims found non-abstract in prior cases, uses generic computer technology to perform data collection, analysis, and transmission and does not recite an improvement to a particular computer technology. *See, e.g., McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314–15 (Fed. Cir. 2016) (finding claims not abstract because they "focused on a specific asserted improvement in computer animation"). As such, claim 1 is directed to the abstract idea of receiving, analyzing, and transmitting data.

The remaining claims merely describe identifying participants and modifying the incentive. We conclude that the claims at issue are directed to a patent-ineligible concept.

The introduction of a computer into the claims does not alter the analysis at *Mayo* step two.

[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention. Stating an abstract idea "while adding the words 'apply it'" is not enough for patent eligibility. Nor is limiting the use of an abstract idea "to a particular technological environment." Stating an abstract idea while adding the words "apply it with a computer" simply combines those two steps, with the same deficient result. Thus, if a patent's recitation of a computer amounts to a mere instruction to "implemen[t]" an abstract idea "on . . . a computer," that addition cannot impart patent eligibility. This conclusion accords with the preemption concern that undergirds our § 101 jurisprudence. Given the ubiquity of computers, wholly generic computer implementation is not generally the sort of "additional feature[e]" that provides any "practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself."

Alice Corp. Pty. Ltd., 134 S. Ct. at 2358 (citations omitted).

"[T]he relevant question is whether the claims here do more than simply instruct the practitioner to implement the abstract idea [] on a generic computer." *Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2359. They do not.

Taking the claim elements separately, the function performed by the computer at each step of the process is purely conventional. Using a computer to receive, store, and transmit, and to filter data and generate a description amounts to electronic data query and retrieval—one of the most basic functions of a computer. All of these computer functions are well-understood, routine, conventional activities previously known to the industry. The use of image recognition software for filtering is not a

technical feature per se, but merely conceptual advice for using a notoriously well-known tool for its intended purpose. *See In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d at 612–613 (Using a generic telephone for its intended purpose was a well-established "basic concept" sufficient to fall under *Alice* step 1.). In short, each step does no more than require a generic computer to perform generic computer functions.

Considered as an ordered combination, the computer components of Appellant's method add nothing that is not already present when the steps are considered separately. Viewed as a whole, Appellant's method claims simply recite the concept of providing incentive offers as performed by a generic computer. To be sure, the claims recite doing so by advising one to use facial recognition to identify attractive people as targets of the offers. But this is no more than abstract conceptual advice on the parameters for such promotion and the generic computer processes necessary to process those parameters; the claims do not recite any particular implementation.

The method claims do not, for example, purport to improve the functioning of the computer itself. Nor do they effect an improvement in any other technology or technical field. The 28 pages of Specification spell out different generic computer equipment that might be used, different incentives that might be offered, and various user parameters that might be collected using this concept and the particular steps such conventional processing would entail based on the concept of matching incentives to users. They do not describe any particular improvement in the manner a computer functions. Instead, the claims at issue amount to nothing significantly more than an instruction to apply the abstract idea of providing

incentive offers using some unspecified, generic computer. Under our precedents, that is not enough to transform an abstract idea into a patent-eligible invention. *See Alice Corp. Pty. Ltd.*, 134 S. Ct. at 2360.

As to the structural claims, they

are no different from the method claims in substance. The method claims recite the abstract idea implemented on a generic computer; the system claims recite a handful of generic computer components configured to implement the same idea. This Court has long "warn[ed] ... against" interpreting § 101 "in ways that make patent eligibility 'depend simply on the draftsman's art."

Alice Corp. Pty. Ltd., 134 S. Ct. at 2360.

We are not persuaded by Appellant's argument that the claims do not preempt all incentives. Reply Br. 7–8. The claims provide conceptual advice as to providing incentives without reciting any technological implementation.

That the claims do not preempt all forms of the abstraction or may be limited to the abstract idea in the e-commerce setting does not make them any less abstract. *See OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1360–1361 (2015). Beyond the abstract idea of incentive distribution, the claims merely recite well-understood, routine conventional activities, either by requiring conventional computer activities or routine data-gathering steps. Considered individually or taken together as an ordered combination, the claim elements fail to transform the claimed abstract idea into a patent-eligible application. *Id.* at 1363. Because the claims are directed to an abstract idea, the claims must include an "inventive concept" in order to be

patent-eligible. No such inventive concept is present here. Instead, the claims "add" only generic computer components such as a "system," "processor," and "computer-readable non-transitory storage medium." These generic computer components do not satisfy the inventive concept requirement. *See Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324–1325 (Fed. Cir. 2016).

Claims 1, 3–5, 7–10, 12, 13, 15–22, and 24–27 rejected under 35 U.S.C. § 112, first paragraph, as lacking a supporting written description within the original disclosure

The Examiner finds no support in the Specification for the limitation [5] filtering images using image recognition software wherein the selected users are identified as attractive people by the image recognition software. Final Act. 2–3. We are not persuaded by Appellant's argument that each of the recited elements is (1) explicitly recited within the Specification and (2) fully implementable by a person having reasonable skill in the art. App. Br. 7.

The second argument is moot as this is a rejection under written description rather than enablement. The first argument is erroneous on its face. The limitation at issue, in each of the independent claims, was not in the claims as originally filed, but was entered in amendments filed April 22, 2013 and October 14, 2013. The only support in the Specification for using the recited image recognition software is at paragraph 59, and this is corroborated by Appellant's recital of this paragraph as support. App. Br. 4.

This paragraph makes two separate assertions. First, images in a user profile may be scanned manually or through use of image recognition software to filter users. This passage supports the use of image recognition software to filter users, but not the recited criterion of being attractive. The second assertion is that social clubs and similar evening entertainment establishments wish to encourage visitation of attractive people to increase the reputation of their property. It is immediately apparent that this is no more than an assertion of desire rather than function or its implementation.

There is no connection between the use of image recognition software to filter users and the desirability of attractive persons to use some manifestation of attractiveness as a filter criterion. More to the point, the attribute of being attractive goes beyond visual attractiveness. Social clubs and similar evening entertainment establishments may wish to encourage visitation of attractive people based on many criteria, including wealth, income, social stature, family ties, vocal mellifluence, education, profession, and similar other measures of attraction, none of which can be filtered by image recognition software.

The sentence linking the two passages does not help. This sentence states that participating entities may provide incentive offers to selected users to encourage users to visit respective establishments, properties, and the like. This sentence does not state that the users so selected are the result of image recognition software filtration and does not state that the offers are based on the criterion the next sentence lists as being desirable.

Therefore there is no inherent or implied connection between the two passages. Obviousness is not pertinent.

One shows that one is "in possession" of *the invention* by describing *the invention*, with all its claimed limitations, not that which makes it obvious. . . . One does that by such descriptive means as words, structures, figures, diagrams, formulas, etc., that fully set forth the claimed invention. Although the exact terms need not be used *in haec verba*, . . . , the Specification must contain an equivalent description of the claimed subject matter.

Lockwood v. Am. Airlines, Inc., 107 F.3d 1565, 1572 (Fed. Cir. 1997).

Claims 1, 3–5, 7–10, 12, 13, 15–22, and 24–27 rejected under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the invention

The Examiner finds the limitation [5] filtering images using image recognition software wherein the selected users are identified as attractive people by the image recognition software to be subjective because the Appellant's disclosure does not contain any parameter or algorithm associated with who is identified as attractive and who is identified as not attractive. Final Act. 3–4. We are not persuaded by Appellant's argument that although the Examiner may personally feel that attractiveness is subjective, the as-filed Specification clearly states that the filtering of attractive people is performed via image recognition software. App. Br. 14.

First, as we find supra, the Specification does not state that the filtering of attractive people is performed via image recognition software. Second, even if the Specification did so state, the issue of what criteria is used to evaluate the attribute of being attractive remains. The Specification provides no examples or algorithms to provide one of ordinary skill any idea of how to evaluate this for filtration. Appellant simply asserts the existence

of objective measures of attractiveness. *Id.* Presumably, Appellant is referring to several publications cited at Appeal Brief 9 in support of overcoming the written description rejection.

None of these is cited in the originally filed Specification, and none of them appears to constitute the base knowledge of one of ordinary skill in the art. In fact, the reference, An Objective System for Measuring Facial Attractiveness, 18 Plastic & Reconstructive Surgery 757 (2006), available at <a href="http://ecfb.bli.uci.edu/ckfinder/ECFB/files/An\_Objective\_System\_for\_Measuring\_Facial\_Attractiveness-Bashour.pdf">http://ecfb.bli.uci.edu/ckfinder/ECFB/files/An\_Objective\_System\_for\_Measuring\_Facial\_Attractiveness-Bashour.pdf</a>, recites that "[t]he general conclusion is that indeed it seems possible that at some point in time researchers will be able to devise a highly accurate method for measuring facial attractiveness objectively." Thus, this article admits that such objective measures were not available.

Further, as we find supra, the attribute of attractiveness goes beyond visual appearance, and the Specification provides no guidance as to objective indicia for attractiveness beyond visual appearance. Thus, the originally filed Specification provides no description of how to objectively evaluate the attribute of attractiveness. Absent this, such evaluation is subjective. "The scope of claim language cannot depend solely on the unrestrained, subjective opinion of a particular individual purportedly practicing the invention." *Datamize LLC v Plumtree Software, Inc.*, 417 F.3d, 1342, 1350 (Fed. Cir. 2005).

Claims 1, 3–5, 7–10, 12, 13, 15–22, and 24–27 rejected under 35 U.S.C. § 103(a) as unpatentable over Agostinelli, Tran, and Shostack

We are unable to ascertain the scope of these claims because one of ordinary skill would not be able to ascertain the metes and bounds of using the characteristic of being attractive as a filter in image recognition software.

As a procedural matter, we reverse the rejection of claims 1, 3–5, 7–10, 12, 13, 15–22, and 24–27 under § 103. A rejection of a claim, which is so indefinite that "considerable speculation as to meaning of the terms employed and assumptions as to the scope of such claims" is needed, is likely imprudent. *See In re Steele*, 305 F.2d 859, 862 (CCPA 1962) (holding that the examiner and the board were wrong in relying on what at best were speculative assumptions as to the meaning of the claims and basing a rejection under 35 U.S.C. § 103 thereon). We find it imprudent to speculate as to the scope of claims 1, 3–5, 7–10, 12, 13, 15–22, and 24–27 in order to reach a decision on the obviousness of the claimed subject matter under § 103. It should be understood, however, that our reversal is based on the indefiniteness of the claimed subject matter and does not reflect on the merits of the underlying rejection.

#### CONCLUSIONS OF LAW

The rejection of claims 1, 3–5, 7–10, 12, 13, 15–22, and 24–27 under 35 U.S.C. § 101 as directed to non-statutory subject matter is proper.

The rejection of claims 1, 3–5, 7–10, 12, 13, 15–22, and 24–27 under 35 U.S.C. § 112, first paragraph, as lacking a supporting written description within the original disclosure is proper.

The rejection of claims 1, 3–5, 7–10, 12, 13, 15–22, and 24–27 under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the invention is proper.

The rejection of claims 1, 3–5, 7–10, 12, 13, 15–22, and 24–27 under 35 U.S.C. § 103(a) as unpatentable over Agostinelli, Tran, and Shostack is improper based on the indefiniteness of the claimed subject matter and does not reflect on the merits of the underlying rejection.

## **DECISION**

The rejection of claims 1, 3–5, 7–10, 12, 13, 15–22, and 24–27 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). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2011).

# **AFFIRMED**