UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/827,566	03/14/2013	Doug Dohring	40288-714.201	2131

21971   7590   07/24/2018
WILSON, SONSINI, GOODRICH & ROSATI
650 PAGE MILL ROAD
PALO ALTO, CA 94304-1050

EXAMINER
EGLOFF, PETER RICHARD

ART UNIT	PAPER NUMBER
3715	

NOTIFICATION DATE	DELIVERY MODE
07/24/2018	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):

patentdocket@wsgr.com

UNITED STATES PATENT AND TRADEMARK OFFICE

———————

BEFORE THE PATENT TRIAL AND APPEAL BOARD

———————

Ex parte DOUG DOHRING, WILLIAM McCAFFREY,
STEPHANIE YOST, DAVID HENDRY, LEE BORTH and
NATHAN DROBNACK

———————

Appeal 2017-005532
Application 13/827,566
Technology Center 3700

———————

Before STEVEN D.A. McCARTHY, MICHELLE R. OSINSKI and
PAUL J. KORNICZKY, *Administrative Patent Judges*.

McCARTHY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

1   The Appellants[1] appeal under 35 U.S.C. § 134(a) from the Examiner's

2   decision finally rejecting claims 1–3, 5–9, 11–15, 17 and 18 under 35 U.S.C.

3   § 101 as being directed to ineligible subject matter. (*See* Examiner's

4   Answer, mailed Dec. 15, 2016 ("Ans."), at 2–5). We have jurisdiction under

5   35 U.S.C. § 6(b).

---

[1]   The Appellants identify the real party in interest as Age of Learning,
Inc. (*See* "Appellant's Brief under 37 C.F.R. § 41.37," dated Oct. 13, 2016,
at 3).

1   We AFFIRM.

2   The appealed claims are directed to computer-based systems and

3 methods permitting a mentor to customize learning content for a student.

4 (*See* Spec., para. 20). Claims 1, 7 and 13 are independent. Claim 13 recites:

5   13.   A computer-implemented method of educating a learner by
6   applying both computer analysis and mentor feedback to provide
7   a customized learning experience with learning activity
8   suggestions to a learner in a guided learning mode comprising
9   the steps of:

10   a.   providing, by a computer, a population of learning
11   activities associated with an area of skill, interest, or
12   expertise;

13   b.   providing, by the computer, an interface allowing a mentor
14   to select a plurality of learning activities from among the
15   population of activities associated with an area of skill,
16   interest, or expertise to create a subpopulation of activities
17   to be completed by a learner, wherein the interface allows
18   the learner to sort subpopulations of activities based on
19   each activity's association with one of more areas of skill,
20   interest, or expertise, and the interface further allows the
21   learner to complete learning activities in sequence and
22   freely select learning activities;

23   c.   providing, by the computer, an interface displaying and
24   providing the learner access to the subpopulation of
25   learning activities, wherein the interface allows the learner
26   to sort subpopulations of activities based on each activity's
27   association with one or more areas of skill, interest, or
28   expertise, and the interface further allows the learner to
29   complete learning activities in sequence, freely select
30   learning activities, and remove learning activities from
31   subpopulations of activities;

32   d.   maintaining, by the computer, a database of learner data in
33   a computer memory, the learner data comprising past
34   learner performance data including affinity for particular
35   learning activities, previous completion of learning

2

1   activities, speed of completion of learning activities, and
2   accuracy of completion of learning activities, learner
3   preferences including configured preference settings,
4   previous selections, and activity repetition, and mastery of
5   educational objectives including learner scores and
6   number of rewards earned associated with learning
7   activities;

8   e.   automatically applying, by the computer, pattern analysis
9   to the learner data to suggest or recommend one or more
10   particular learning activities within the subpopulation of
11   activities to the learner; and

12   f.   providing, by the computer, an interface allowing the
13   mentor to view and tune learner data on which suggestions
14   or recommendations are based by indicating, rating, or
15   ranking subjects, skills, education objectives, and learning
16   activities.

17   Claim 1 recites an "electronic educational system assembling platform . . .

18   comprising: a digital processing device [and] a computer program, provided

19   to the digital processing device, including executable instructions that create

20   an educational environment." Claim 7 recites "[n]on-transitory computer-

21   readable storage media encoded with a computer program including

22   instructions executable by a processor to create an electronic educational

23   system assembling platform." Both the educational environment recited in

24   claim 1, and the educational system assembling platform of claim 7,

25   comprise a "guided learning mode" including software modules for

26   performing substantially steps b.–f. recited in claim 13.

27

28   ISSUES

29   The Appellants' arguments do not distinguish between the respective

30   language of independent claims 1, 7 and 13; neither do the Appellants

3

1   appear to argue any dependent claim separately. Except as otherwise noted,

2   claim 13 will be taken as representative. *See* 37 C.F.R. § 41.37(c)(1)(iv).

3   Even apart from this procedural consideration, it is noted that,

4   although claim 1 recites an "electronic educational system assembling

5   platform . . . comprising: a digital processing device [and] a computer

6   program provided to the digital processing device, including executable

7   instructions that create an educational environment[;]" claim 7 recites

8   "[n]on-transitory computer-readable storage media encoded with a computer

9   program including instructions executable by a processor to create an

10   electronic educational system assembling platform[;]" and claim 13 recites

11   "a computer-implemented method of educating a learner by applying both

12   computer analysis and mentor feedback to provide a customized learning

13   experience with learning activity suggestions to a learner in a guided

14   learning mode[,]" in each case the educational environment comprises a

15   "guided learning mode" including software modules for performing

16   substantially steps c.–f. recited in claim 13.[2] In assessing a rejection for

---

[2]   Step "b." of claim 13 consists of "providing, by the computer, an
interface allowing a mentor to select a plurality of learning activities from
among the population of activities associated with an area of skill, interest,
or expertise to create a subpopulation of activities to be completed by a
learner, wherein the interface allows the learner to sort subpopulations of
activities based on each activity's association with one of more areas of skill,
interest, or expertise, and the interface further allows the learner to complete
activities in sequence and freely select learning activities." The "wherein"
clause differs substantially from the corresponding "wherein" clauses in the
software modules "a." recited in claims 1 and 7. The "wherein" clause
recited in step "b." of claim 13 may be an error, because it suggests that
learners should be given access to the mentor interface in order to sort
learning activities within the subpopulation selected by the mentor.

1   ineligible subject matter under § 101, we look not to the name or intended

2   use assigned to the claimed subject matter in the preamble, but to the nature

3   of the claimed subject matter as a whole, to determine whether the claim

4   falls within the "abstract idea" exception. *See CyberSource Corp. v. Retail*

5   *Decisions, Inc.*, 654 F.3d 1366, 1374 (Fed. Cir. 2011) ("Regardless of what

6   statutory category ('process, machine, manufacture, or composition of

7   matter,' 35 U.S.C. § 101) a claim's language is crafted to literally invoke,

8   we look to the underlying invention for patent-eligibility purposes.").

9   Therefore, we may treat claims 1, 7 and 13 as interchangeable for purposes

10 of eligibility under § 101.

11   The Supreme Court has established a two-step analysis for

12 determining whether the subject matter of a claim is eligible for patent

13 protection. First, one must determine whether the claim is "directed to one

14 of [the] patent-ineligible concepts," such as an abstract idea. *Alice Corp. v.*

15 *CLS Bank Int'l*, 134 S.Ct. 2347, 2355 (2014). Second, if so, one must

16 determine if the remainder of the claim recites an "inventive concept," such

17 that the claim as a whole recites a specific application of the patent-

18 ineligible concept. *Id.* at 2357 & 2358. The sole issue in this appeal is

19 whether the subject matter of representative claim 13 is eligible for patent

20 protection under the two-step analysis laid down by the Court.

21   We address the two steps of the test in turn. Only those arguments

22 actually made by the Appellants have been considered. Arguments that

23 the Appellants could have made, but chose not to make, have not been

24 considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv); *In*

25 *re Jung*, 637 F.3d 1356, 1365 (Fed. Cir. 2011).

1   DISCUSSION OF THE FIRST STEP

2   Claim 13 recites a "computer-implemented method of educating a

3   learner by applying both computer analysis and mentor feedback to provide

4   a customized learning experience." The Examiner determines that claim 13

5   is directed to the abstract idea of:

6   allowing a mentor to select a plurality of learning activities from
7   among a population of activities and [to] sort, sequence, rank,
8   and remove activities within the subpopulation; allowing a
9   learner to sort and complete learning activities; storing a set of
10   learner data; analyzing the learner data to suggest or recommend
11   learning activities; and allowing the mentor to view and tune
12   learner data.

13   (Ans. 3). The Examiner characterizes the subject matter of the claim as "a

14   series of steps for information management and managing human behavior,

15   and is an idea 'of itself' akin to other arrangements that have been identified

16   as abstract ideas." (*Id.*)

17   The Examiner cites *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350

18   (Fed. Cir. 2014), as support for the Examiner's determination. (Ans. 6). In

19   fact, a number of different cases provide support for the Examiner's

20   determination that claim 13 is directed to an abstract idea.

21   The step of "providing . . . an interface displaying and providing the

22   learner access to [a] subpopulation of learning activities" is properly

23   characterized as an abstract idea. In *Affinity Labs of Tex., LLC v.*

24   *Amazon.com Inc.*, 838 F.3d 1266 (Fed. Cir. 2016), our reviewing court

25   addressed the eligibility of a claim for a media system for delivering

26   streaming content from a network-based resource to a handheld wireless

27   electronic device:

28   A media system, comprising:

1   a network based media managing system that maintains a
2 library of content that a given user has a right to access and a
3 customized user interface page for the given user;

4   a collection of instructions stored in a non-transitory
5 storage medium and configured for execution by a processor of
6 a handheld wireless device, the collection of instructions
7 operable when executed: (1) to initiate presentation of a
8 graphical user interface for the network based media managing
9 system; (2) to facilitate a user selection of content included in the
10 library; and (3) to send a request for a streaming delivery of the
11 content; and

12   a network based delivery resource maintaining a list of
13 network locations for at least a portion of the content, the
14 network based delivery resource configured to respond to the
15 request by retrieving the portion from an appropriate network
16 location and streaming a representation of the portion to the
17 handheld wireless device.

18 (*Id.* at 1267 & 1268). Our reviewing court held that this claim was directed

19 to the abstract idea of "delivering user-selected media content to portable

20 devices." (*Id.* at 1269).

21   Just as the system recited in the claim at issue in *Affinity Labs*

22 provided "a network based media managing system that maintains a library

23 of content that a given user has a right to access and a customized user

24 interface page for the given user," appealed claim 13 recites a method

25 providing both a subpopulation of learning activities that a learner may

26 access; and "an interface displaying and providing the learner access to the

27 subpopulation of learning activities." Appealed claim 13 recites providing a

28 specific type of media content, namely, learning activities, rather than

29 content in general. Nevertheless, any distinction between the learning

30 activities recited in appealed claim 13 and the media content at issue in

31 *Affinity Labs* lies in the manner in which the content is perceived and

1   understood by the learner. Hence, the recitation, "displaying and providing

2   the learner access to [a] subpopulation of learning activities," is an

3   expression of an abstract idea.

4   Likewise, the steps of:

5   providing . . . a population of learning activities associated with
6   an area of skill, interest, or expertise; [and]

7   providing . . . an interface allowing a mentor to select a plurality
8   of learning activities from among the population of
9   activities associated with an area of skill, interest, or
10   experience to create a subpopulation of activities to be
11   completed by a learner

12   are properly characterized as an abstract idea. In *Dietgoal Innovations LLC*

13   *v. Bravo Media LLC*, 33 F. Supp. 3d 271 (SDNY 2014), *aff'd* 599 Fed.

14   Appx. 956 (Fed. Cir. Apr. 8, 2015), the district court addressed claims to a

15   system of computerized meal planning. Claim 1 recited:

16   1.   A system of computerized meal planning, comprising:

17   a User Interface;

18   a Database of food objects organizable into meals; and

19   at least one Picture Menus, which displays on the User Interface
20   meals from the Database that a user can select from to meet
21   customized eating goals.

22   *Id.* at 274. The district court determined that the claims at issue in the case

23   "recite[d] nothing more than the abstract concept of selecting meals for the

24   day, according to one's particular dietary goals and food preferences." *Id.* at

25   283.

26   In other words, claim 1 at issue in *Dietgoal Innovations* recited a

27   system that provided a population, that is, a database, of food objects; and

28   also provided an interface allowing a user to select a subpopulation of meals

29   from the population stored in the database. The analogy to the steps of

1   "providing . . . a population of learning activities associated with an area of

2   skill, interest, or expertise; [and] providing . . . an interface allowing a

3   mentor to select a plurality of learning activities from among the population

4   of activities," as recited in appealed claim 13, is apparent. Indeed, because

5   the selection contemplated by appealed claim 13 is of a subpopulation of

6   learning activities to which a learner is to be granted access, which, at least

7   arguably, is more abstract than a subpopulation of food objects to be

8   consumed in a meal, the determination that the steps recited in appealed

9   claim 13 are abstract is more persuasive than the determination in *Dietgoal*

10 *Innovations.*

11   Indeed, the "select[ion of the] plurality of learning activities from

12 among the population of activities associated with an area of skill, interest,

13 or expertise to create the subpopulation of activities to be completed by a

14 learner" contemplates the performance of a mental step in a narrow sense of

15 the term. Although the Specification teaches configuring a software module

16 to allow the mentor to identify learning activities by area of skill, interest or

17 expertise, by activity type or by activity theme; and to present selectable

18 elements representing groups of activities of a particular type or teaching

19 toward particular learning objectives (*see* Spec., paras. 70–72), the

20 Specification contemplates that at least the initial selection of the plurality of

21 learning activities within a subpopulation will be performed entirely within

22 the mentor's own mind. Likewise, appealed claims 1 and 7 recite software

23 modules for "allow[ing] the mentor to sort subpopulations of [learning]

24 activities based on each activity's association with one or more areas of skill,

25 interest, or expertise, and . . . further allow[ing] the mentor to sequence,

26 rank, prioritize, and remove activities within subpopulations of activities."

1   Although the software modules include instructions for receiving and

2   recording the mentor's decisions regarding sorting, sequencing, ranking or

3   prioritizing the activities, the mentor actually sorts, sequences, ranks or

4   prioritizes the activities in the mentor's own mind. (*See generally* Spec.,

5   paras. 79–87 (describing input formats within which the mentor may

6   indicate choices regarding the organization of learning activities in a

7   subpopulation, but providing only cursory guidance as to criteria to be used

8   in organizing the activities)). Purely mental steps are abstract ideas.

9   *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1146–48 (Fed. Cir.

10   2016).

11   With respect to the steps of "automatically applying . . . pattern

12   analysis to . . . learner data to suggest or recommend one or more particular

13   learning activities within the subpopulation of activities to the learner; and

14   providing . . . an interface allowing the mentor to view and tune learner data

15   on which suggestions or recommendations are based by indicating, rating, or

16   ranking subjects, skills, education objectives, and learning activities," our

17   reviewing court has held that analyzing data and presenting the results of the

18   analysis is an abstract idea. *See Electric Power Group v. Alstom S.A.*, 830

19   F.3d 1350, 1353 & 1354 (Fed. Cir. 2016). This is particularly true where, as

20   here, the data in question is generated as a result of a learner's progress

21   through learning activities. As noted earlier, the presentation of learning

22   activities to a learner itself represents an abstract idea akin to the

23   presentation of media content to a viewer. The analysis and presentation of

24   data representative of the learner's progress through such learning activities

25   merely manipulates abstract concepts.

1   Therefore, the Examiner correctly characterizes claim 13, as a whole,

2   as directed to:

3   allowing a mentor to select a plurality of learning activities from
4   among a population of activities and [to] sort, sequence, rank,
5   and remove activities within the subpopulation; allowing a
6   learner to sort and complete learning activities; storing a set of
7   learner data; analyzing the learner data to suggest or recommend
8   learning activities; and allowing the mentor to view and tune
9   learner data.

10   (Ans. 3). The Examiner also correctly characterizes that statement as an

11   abstract idea. (*See id.*)

12   The Appellants argue that the method recited in claim 13 is not

13   directed to an abstract idea because it "provides technological improvements

14   by providing specific tools that improve the technical field of assembling

15   electronic educational systems." (*See* "Appellant's Brief under 37 C.F.R.

16   § 41.37," dated Oct. 13, 2016 ("App. Br."), at 15). This argument is not

17   persuasive because assembling electronic educational systems is not a

18   technical field. An electronic educational system, as described in the

19   application underlying this appeal, allows a mentor to select learning

20   activities, that is, media content, for one or more learners to work through.

21   As such, assembling electronic educational systems is an abstraction, not a

22   technical field. Hence, claim 13 does not provide technological

23   improvements to a technical field.

24   The Appellants also argue that claim 13 is analogous to claims

25   determined not to be directed to abstract ideas in *DDR Holdings, LLC v.*

26   *Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014), and *McRO, Inc. v. Bandai*

27   *Namco Games Am. Inc.*, 837 F.3d 1299 (Fed. Cir. 2016). (*See generally*

28   App. Br. 16–18). The Appellants characterize the claims at issue in *DDR*

1   *Holdings* as "address[ing] the problem of retaining website visitors that, if

2   adhering to the routine, conventional functioning of Internet hyperlink

3   protocol, [instantly would have been transported] away from the host's

4   website after 'clicking' on an advertisement and activating a hyperlink."

5   (*See* App. Br. 16). Our reviewing court held that "these claims stand apart

6   because they do not merely recite the performance of some business practice

7   known from the pre-Internet world along with the requirement to perform it

8   on the Internet." *DDR Holdings*, 773 F.3d at 1257. In the present case,

9   however, the appealed claims do merely recite the performance of a known

10   practice, namely, assembling electronic educational systems (*see* Spec., para.

11   20). The Appellants do not persuade us that the claims at issue in *DDR*

12   *Holdings* are analogous to appealed claim 13.

13   *McRO* addressed a claim reciting a method for "automatically

14   animating lip synchronization and facial expression of three-dimensional

15   characters." (App. Br. 17, quoting *McRO* at 1307 (claim 1)). Our reviewing

16   court ruled that the "claimed process uses a combined order of specific rules

17   that renders information into a specific format that is then used and applied

18   to create desired results: a sequence of synchronized, animated characters."

19   *McRO* at 1315. The determination that the claim at issue in *McRO* was not

20   directed to an abstract idea relied heavily on the court's determination that

21   the claim was "focused on a specific asserted improvement in computer

22   animation." (*Id.*) Although that improvement took the form of "a combined

23   order of specific rules," the mere presence of specific rules, even if intended

24   to be performed in a particular order, does not imply that a claim is directed

25   to other than an abstract idea. The Appellants do not persuade us that the

26   claims at issue in *McRO* are analogous to appealed claim 13.

1   Finally, the Appellants argue that its claims are not directed to an

2   abstract idea because they "do not seek to tie up all ways of 'providing a

3   customized learning experience to a learner' or any other fundamental idea."

4   (App. Br. 19; *see also* "Appellants' Reply Brief," dated Feb. 14, 2017

5   ("Reply Br."), at 5). As discussed earlier, however, the Examiner correctly

6   determines that representative claim 13 is directed to the abstract idea of:

7   allowing a mentor to select a plurality of learning activities from
8   among a population of activities and [to] sort, sequence, rank,
9   and remove activities within the subpopulation; allowing a
10   learner to sort and complete learning activities; storing a set of
11   learner data; analyzing the learner data to suggest or recommend
12   learning activities; and allowing the mentor to view and tune
13   learner data.

14 (Ans. 3). The Appellants' argument fails to persuasively address preemption

15 in the context of this determination. We agree with the Examiner that claim

16 13 is directed to an abstract idea.

17

18   DISCUSSION OF THE SECOND STEP

19   It remains to address the second step of the analysis. The Appellants

20 argue that the Examiner has conflated the first and second steps of the

21 analysis. (*See* App. Br. 20). There is no sharp boundary between the first

22 and second steps. Often, the same facts and reasoning will apply both to the

23 question whether the claim is directed to an abstract idea and to the question

24 whether the claim includes "something more." Any overlap in the

25 Examiner's findings and reasoning is not determinative of whether the

26 Examiner's findings and reasoning is adequate to support a rejection.

27   In addition, the Appellants argue that the subject matter of claim 13 is

28 eligible for patent protection because the subject matter represents an

1   improvement to a technical field, namely, creating web-based educational

2   environments. (*See* App. Br. 22). As discussed earlier, however,

3   assembling electronic educational systems is not a technical field, even if

4   implemented using computer equipment or a computer network. Because

5   the creation of web-based educational environments is not a technical field

6   for purposes of a patent eligibility analysis, the Appellants' argument is not

7   persuasive.

8   The Appellants argue that the subject matter of claim 13 is eligible for

9   patent protection because the claimed method includes "specific limitations

10   other than what is well-understood, routine and conventional in the field."

11   (App. Br. 25 (emphasis omitted) (quoting *2014 Interim Guidance on Patent*

12   *Subject Matter Eligibility*, 79 Fed. Reg. 74618, 74624 (Dec. 16, 2014)).

13   That said, the Appellants do not identify which specific limitations, if any,

14   do not constitute what is well-understood, routine and conventional in the

15   field with sufficient specificity for us to review the Examiner's findings.

16   Instead, the Appellants assert that the "claimed subject matter improves

17   online education platforms by tapping into both automated computer-

18   implemented data analysis and the insights and observations of a mentor to

19   identify and recommend learning activities that are appropriate and offer the

20   right level of challenge for each individual learner." (App. Br. 26). As

21   discussed earlier, both data analysis, and the mental steps performed by a

22   mentor in providing insights and observations, are abstract ideas in and of

23   themselves. The Appellants have not provided a persuasive reason why the

24   steps of claim 13, separately or as a whole, recite an application of an

25   abstract idea rather than an abstract idea itself.

1   The Examiner also correctly determines that claim 13, as a whole,

2 fails to recite a specific application of the abstract idea. (*See* Ans. 3–4).

3 Therefore, we conclude that the subject matter of representative claim 13 is

4 not eligible for patent protection.

5

6   DECISION

7   We sustain the rejection of claims 1–3, 5–9, 11–15, 17 and 18 under

8 35 U.S.C. § 101 as being directed to ineligible subject matter.

9   Therefore, we AFFIRM the Examiner's decision rejecting claims 1–3,

10 5–9, 11–15, 17 and 18.

11   No time period for taking any subsequent action in connection with

12 this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R.

13 § 1.136(a)(1)(iv).

14

15   <u>AFFIRMED</u>