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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/184,289	07/15/2011	John G. Stark	3343.005US3	1050

21186 7590 11/15/2017

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ART UNIT	PAPER NUMBER
3626	

NOTIFICATION DATE	DELIVERY MODE
11/15/2017	ELECTRONIC

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOHN G. STARK, DUANE OYEN,
TIMOTHY J. B. HANSON, TIMOTHY TRACEY,
STEVEN BACKES, and GARY MANNINEN

Appeal 2015-002596
Application 13/184,289[1]
Technology Center 3600

Before HUBERT C. LORIN, MICHAEL C. ASTORINO, and BRADLEY B. BAYAT, *Administrative Patent Judges*.

LORIN, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

John G. Stark, et al. (Appellants) seek our review under 35 U.S.C. § 134(a) of the Final Rejection of claims 40–59. We have jurisdiction under 35 U.S.C. § 6(b).

SUMMARY OF DECISION

We AFFIRM-IN-PART.

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[1] The Appellants identify IZEX Technologies, Inc. as the real party in interest. App. Br. 2.

THE INVENTION

Claim 54, reproduced below, is illustrative of the subject matter on appeal.

> 54. A method for monitoring patient compliance with a treatment protocol, the method comprising:
>
> presenting, with a server, at least two orthopedic injury treatment protocols;
>
> receiving, at the server, information identifying an approved treatment protocol, wherein the approved treatment protocol is one of the at least two presented treatment protocols;
>
> using a computer processor, generating with the server, formatted parameters corresponding to the approved treatment protocol, the formatted parameters configured in a form compatible with a handheld monitoring device;
>
> sending, with the server, the formatted parameters to the handheld monitoring device, the formatted parameters including parameters configured to provide communication signals to alter a patient's perception of the urgency of the patient's compliance with the instructions, wherein the formatted parameters include an exercise identification parameter, an exercise replication parameter, and an exercise initiation timing parameter;
>
> loading, at the handheld monitoring device, the sent formatted parameters as a script to be executed by the monitoring device;
>
> executing, at the handheld monitoring device, the script to configure the monitoring device to present the approved treatment protocol to the patient;
>
> receiving, at the handheld monitoring device, data from a sensor;
>
> generating, using the handheld monitoring device, the compliance data based on the data from the sensor and the formatted parameters, the compliance data indicating adherence to the treatment protocol;
>
> sending, using the handheld monitoring device, the compliance data to the server;

receiving, at the server, compliance data generated by the handheld monitoring device; and

presenting, with the server, compliance data generated by the handheld monitoring device.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

McIlroy	US 5,583,758	Dec. 10, 1996
Katayama	US 5,857,855	Jan. 12, 1999
Burgess	US 6,007,459	Dec. 28, 1999
Avitall	US 6,171,237 B1	Jan. 9, 2001

The following rejections are before us for review:

1. Claims 40–59 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.
2. Claims 46, 53, and 59 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.
3. Claims 40, 42–47, 49–54, and 56–59 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Burgess, McIlroy, and Avitall.
4. Claims 41, 48, and 55 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Burgess, McIlroy, Avitall, and Katayama.

ISSUES

Did the Examiner err in rejecting claims 40–59 under 35 U.S.C. § 101 as being directed to non-statutory subject matter?

Did the Examiner err in rejecting claims 46, 53, and 59 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention?

Did the Examiner err in rejecting claims 40, 42–47, 49–54, and 56–59 under 35 U.S.C. § 103(a) as being unpatentable over Burgess, McIlroy and Avitall?

Did the Examiner err in rejecting claims 41, 48, and 55 under 35 U.S.C. § 103(a) as being unpatentable over Burgess, McIlroy, Avitall and Katayama?

ANALYSIS

The rejection of claims 40–59 under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Alice Corp. Proprietary Ltd. v. CLS Bank International, 134 S. Ct. 2347 (2014) identifies a two-step framework for determining whether claimed subject matter is judicially-excepted from patent-eligibility under 35 U.S.C. § 101.

According to *Alice* step one, "[w]e must first determine whether the claims at issue are directed to a patent-ineligible concept," such as an abstract idea. *Alice*, 134 S. Ct. at 2355.

In that regard, the Examiner made the following determination.

> The claim(s) is/are directed to the abstract idea of treating an orthopedic injury of a patient under care of a treatment professional and preparing orthopedic treatment protocols used in conjunction with computerized or digitalized orthopedic treatment devices. (Appellant's Specification: page 2, lines 5-7; page 7, lines 14-17)

> Exemplary method claim 54 discloses presenting multiple treatment protocols, approving one of the treatment protocols, monitoring patient compliance to the protocol (using a patient monitoring device) and transmitting the patient compliance data from the monitoring device via a server.

Ans. 3.

Step two is "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*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. at 72–73).

In that regard, the Examiner made the following determination.

> The additional element(s) or combination of elements in the claim(s) other than the abstract idea per se amount(s) to no more than: (i) mere instructions to implement the idea on a computer, and (ii) recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry.
>
> Exemplary claim 40 recites a server configured to carry out the functions of method 54. There is no improvement to a process, and the system merely recites a generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry. The processor/ server is simply executing an abstract concept on a computer, which does not render a computer "specialized," nor does it transform a patent-ineligible claim into a patent-eligible one.
>
> Similarly, claim 47 recites a storage medium which merely stores code/instructions for simply executing the abstract concept on a computer. The storage medium with instructions does not render a computer "specialized," nor does it transform a patent-ineligible claim into a patent-eligible one.

Ans. 3–4.

We have carefully reviewed the Examiner's position but find it inadequate. We are unable to meaningfully decide the patent-eligibility of the rejected claims because the determinations under both *Alice* steps one and two that we are being asked to review for reaching such a decision are not commensurate in scope with what is in fact claimed.

Under step one, the Examiner determined that "[t]he claim(s) is/are directed to the abstract idea of treating an orthopedic injury of a patient under care of a treatment professional and preparing orthopedic treatment protocols used in conjunction with computerized or digitalized orthopedic treatment devices." Ans. 3. But there is no mention of treating an orthopedic injury of a patient, let alone under the care of a treatment professional in, for example, representative claim 54. There is also no mention of *preparing* orthopedic treatment protocols. There is no mention of orthopedic treatment devices, or orthopedic treatment protocols used in conjunction with computerized or digitalized versions of said devices.

The claims on appeal cannot be directed to the abstract idea the Examiner has characterized it to be because the claims describe something else. This is not a situation where the Examiner describes the abstract idea at a different level of abstraction. *Cf. Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240–1241 (Fed. Cir. 2016) ("An abstract idea can generally be described at different levels of abstraction.") This is a situation where the claims are directed to something entirely different, namely, monitoring patient compliance with an approved treatment protocol.

It is true that the Specification states that "[t]he present invention relates to orthopedic treatment processes and, in particular, the present invention relates to preparing orthopedic treatment protocols used in

conjunction with computerized or digitalized orthopedic treatment devices." Specification 2:5–7. The Examiner cites this and page 7, lines 14–15 ("The present invention, in a first embodiment, is a process for treating an orthopedic injury of a patient under care of a treatment professional."). But in step one of the *Alice* test, "the 'directed to' inquiry" asks whether, "considered in light of the [patent's] specification," the "character" of the *claims* at issue are directed "as a whole ... to [patent-ineligible] subject matter." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (emphasis added). At step one, we must ask whether the "focus of the *claimed* advance over the prior art" is directed to patent-ineligible subject matter. *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (emphasis added). The question is not whether the Specification is directed to an abstract idea but whether the *claims* are directed to an abstract idea (when considered *in light of* the specification). "The § 101 inquiry must focus on the language of the Asserted Claims themselves." *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1149 (Fed. Cir. 2016). *See Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed. Cir. 2013) (admonishing that "the important inquiry for a § 101 analysis is to look to the claim"); *see also Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1346 (Fed. Cir. 2014) ("We focus here on whether the claims of the asserted patents fall within the excluded category of abstract ideas."). "[T]he name of the game is the claim." *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998).

The determination under step 2 is also deficient. The rejection fails to fully analyze the claim elements, individually or in their ordered combination.

The rejection states that "[e]xemplary method claim 54 discloses presenting multiple treatment protocols, approving one of the treatment protocols, monitoring patient compliance to the protocol (using a patient monitoring device) and transmitting the patient compliance data from the monitoring device via a server." Ans. 3. There is more to claim 54 than that. As the Appellants point out, claim 54 also includes "the formatting of the parameters, the content of the formatted parameters, loading the parameters as a script" (Reply Br. 6). Are these also "generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry" (Ans. 3)? It is unclear from reading the rejection.

The rejection also addresses the other two independent claims – claims 40 and 47 – but little is said about what is actually claimed. For claim 40, it is said that "[t]he processor/ server is simply executing an abstract concept on a computer" (Ans. 3); for claim 47, "[it] recites a storage medium which merely stores code/instructions for simply executing the abstract concept on a computer" (Ans. 4). But the abstract idea to which the claims are directed to has not been properly characterized. *See supra*. Thus, the statements that claim 40 recites a processor/server simply executing *an abstract concept* and that claim 47 recites a storage medium which merely stores code/instructions for simply executing *the abstract concept* do not accurately state what they recite.

The abstract idea to which the claims are directed to has not been properly characterized and the claim elements, individually or in their ordered combination, have not been fully analyzed, to determine whether the claims include an element or combination of elements sufficient to ensure that the claimed subject matter amounts to significantly more than being upon the abstract idea itself.

Although claim construction is not required for making a patentability determination, here it would have been helpful to have properly construed the claims before determining whether the claims are patent-eligible in accordance with the *Alice* two-step framework. "[I]t will ordinarily be desirable—and often necessary—to resolve claim construction disputes prior to a § 101 analysis, for the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter." *Bancorp Services, L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1273–74 (Fed. Cir. 2012).

For the foregoing reasons, the rejection is reversed.

The rejection of claims 46, 53, and 59 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

The following passage from the Answer substantially repeats the Examiner's position as set forth in the Final Rejection, albeit more succinctly. *Cf.* Final Act. 3-4.

> Claims 46, 53, and 59 recite "wherein the first amount of data is less than the second amount of data information." The term "less than" in the claim(s) is a relative term which renders the claim indefinite. The term "less than .." is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree.

> Most importantly, one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is not clear what information is provided or what information applicant is attempting to include or exclude with the current recitation. Moreover, there is no standard metric or scale in the specification or claim language by which one may determine "more or less information." (e. g. more/less characters/words; more/less detailed in descriptive nature; more/less memory required to store the data). Therefore, the rejections under 35 U.S.C. § 112, 2nd paragraph have been maintained.

Ans. 10–11.

In other words, the Examiner presumes that the phrase "less than" in the claims necessarily renders them indefinite *unless* the Specification provides a "standard for ascertaining the requisite degree." The Examiner appears to require the Specification to characterize "information." The Examiner posits that information could be characterized as "characters/words;" "descriptive nature;" or, "memory required to store the data" (Ans. 11). So, if the Specification would characterize "information" as "characters/words," for example, then a "standard for ascertaining the requisite degree" would exist for determining when a "first amount of data is less than the second amount of data information" (claims), thereby rendering the claims definite. (Ans. 10, 11).

In this case, we do not *see* the necessity to further characterize "information" in order to render the claims definite.

The use of the phrase "less than" in claims is common. *See, e.g.*, *In re Miller*, 441 F.2d 689 (CCPA 1971). And claims including such a phrase have not been deemed to be necessarily indefinite. *See, e.g.*, *In re Kirsch*, 498 F.2d 1389, 1393–94 (CCPA 1974) ("The rejection is based on the view that the language of the recitation ["less than"] sets only a maximum amount

of olefin and hence 'is inclusive of substantially no olefin, resulting in the termination of any reaction.' We see no merit in this rejection.") In this case, the question is whether those skilled in the art would discern the meaning of the phrase "wherein the first amount of data is less than the second amount of data information." "[I]f the meaning of the claim is discernible, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, we have held the claim sufficiently clear to avoid invalidity on indefiniteness grounds." *Exxon Research & Eng'g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001). We see no uncertainty concerning what subject matter falls within the scope of the claims. As long as "the *first amount* of data is *less than* the *second amount* of data," the claims cover it. That "information" can be characterized in a number of ways (e.g., "characters/words;" "descriptive nature;" or, "memory required to store the data" (Ans. 11)) does not alter our view. It simply means that the claim term "information" is broad; thereby giving the claim phrase "the first amount of data is less than the second amount of data" a broad scope. But breadth is not indefiniteness. *Cf. In re Robins*, 429 F.2d 452, 458 (CCPA 1970) ("Giving the language its broadest possible meaning, as we are bound to do in the absence of special definitions by appellant, the breadth of the claims insofar as the catalyst is concerned is indeed immense. However, 'Breadth is not indefiniteness.' *In re Gardner*, 427 F.2d 786 [, 788], (57 CCPA 1970) 166 USPQ 138 (1970).")

The rejection is not sustained.

The rejection of claims 40, 42–47, 49–54, and 56–59 under 35 U.S.C. § 103(a) as being unpatentable over Burgess, McIlroy and Avitall.

Independent claims 40, 47, and 54

The Appellants do not dispute the Examiner's characterization of the scope and content of the cited prior art or the differences between what is claimed and what is disclosed in said prior art. The Examiner's findings of fact on those inquiries are not contested. The arguments go to the rationale for combining the references in reaching what is claimed.

Three arguments are made.

First, the Appellants argue that "[a] person of ordinary skill in the art at the time of Appellant's invention would not have been motivated to combine the techniques disclosed in Burgess with those of McIlroy" because "the guidelines and approval process of McIlroy are already realized in Burgess." App. Br. 12. "Burgess already discloses techniques for continuously updating and modifying treatments." App. Br. 12.

The Examiner relied on McIlroy to show that "[presenting multiple possible protocols for approval . . .]" were known in the prior art. *See* Final Act. 7. The Appellants do not challenge that finding. Rather, the Appellants consider McIlroy superfluous on that point. But this reinforces the Examiner's position. It does not show the claims were rejected in error.

Second, the Appellants argue that "[t]he Examiner asserted that the computerized guidelines and approval process of McIlroy can be combined with Burgess." App. Br. 13. But

> [b]ecause the human therapist in Burgess supplies the treatment protocol (through video and audio communication), the computerized guidelines and approval protocol of McIlroy would supplant the human therapist, thereby changing the principle of operation of Burgess.

App. Br. 14.

The Appellants are arguing that substituting a human therapist (Burgess) who supplies a treatment protocol with a computerized guidelines and approval protocol (McIlroy) changes human therapist's principle of operation and by so doing it would not have been obvious to make the substitution. The argument is unpersuasive as to error in the rejection. Albeit a human therapist supplying a treatment protocol would be affected and potentially supplanted by a treatment protocol with a computerized guidelines and approval protocol, it does not make the result obtained from the substitution of the therapist for the treatment protocol any less obvious. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007) ("when a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result").

Finally, the Appellants argue that "it would not have been obvious to consider Burgess in combination with Avitall in the manner suggested by the Examiner, because such a combination would change the principle of operation of Burgess." App. Br. 14.

According to the Appellants, "[t]he Examiner asserted that the handheld monitoring device of Avitall can be combined with Burgess." App. Br. 14. But "[t]hese functions of the monitoring unit of Avitall are provided in Burgess by the Therapist and communication link, respectively." App. Br. 14. According to the Appellants, "the care unit of Avitall would supplant the human therapist, thereby changing the principle of operation of Burgess." App. Br. 15. In other words, the Appellants consider Avitall superfluous of what Burgess discloses and as to Avitall's care unit, it would

supplant the therapist in Burgess. But in so arguing, the Appellants reinforce the Examiner's position rather than show the claims were rejected in error. As for Avitall's care unit supplanting the therapist in Burgess, that possibility does not make result of substituting the therapist with Avitall's care unit any less obvious.

The rejection is sustained.

Dependent claims 42, 43, 49, 50, 56, and 57

We agree with the Appellants that the claim limitation "*wherein the at least two orthotic injury treatment protocols comprise prior patient records of patients with similar injuries*" (claims 42, 49, and 56) is not disclosed in McIlroy as the Examiner has alleged. App. Br. 15. The Appellants correctly point out that the "Examiner asserted that McIlroy discloses this feature at FIGS. 28-30 and Col. 18 line 47 – Col. 19, line 17." App. Br. 15 (*see* Final Act. 10). The McIlroy col. 18, line 47-col. 19, line 17 passage is reproduced in the Brief. App. Br. 15–16. We do not see the disclosed claim limitation "wherein the at least two orthotic injury treatment protocols comprise prior patient records of patients with similar injuries," (claims 42, 49, and 56). Accordingly, the rejection of claims 42, 49, and 56 is reversed, as is the rejection of claims 43, 50, and 57 depending therefrom, respectively.

Dependent claims 45, 52, and 58

We also agree with the Appellants that the claim limitation "wherein the server is configured to: compare the formatted parameters against a safeguard to determine if the formatted parameters are consistent with patient data" (claims 45, 52, and 58) is not disclosed in col. 5, lines 51–67 of

Burgess as the Examiner has alleged. App. Br. 18. *See* Final Act. 11. There is nothing there about comparing formatted parameters against a safeguard to determine if the formatted parameters are consistent with patient data, as claimed. The rejection is not sustained.

Claims 44, 46, 51, 53 and 59

The Appellants have not addressed the rejection of claims 44 and 46; and, 51, 53 and 59 and 51. They depend from independent claims 40 and 47 respectively, whose rejection we have affirmed above. The rejection of claims 44, 46, 51, 53 and 59 is affirmed.

The rejection of claims 41, 48, and 55 under 35 U.S.C. § 103(a) as being unpatentable over Burgess, McIlroy, Avitall and Katayama.

The Appellants have not addressed this rejection. Claims 41, 48 and 55 depend from independent claims 40, 47, and 54 whose rejection we have affirmed above. The rejection of claims 41, 48, and 55 is affirmed.

CONCLUSIONS

The rejection of claims 40–59 under 35 U.S.C. § 101 as being directed to non-statutory subject matter is reversed.

The rejection of claims 46, 53, and 59 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention is reversed.

The rejection of claims 40, 44, 46, 47, 51, 53, 54 and 59 under 35 U.S.C. § 103(a) as being unpatentable over Burgess, McIllroy and Avitall is affirmed.

The rejection of claims 42, 43, 45, 49, 50, 52, and 56–58 under 35 U.S.C. § 103(a) as being unpatentable over Burgess, McIllroy, and Avitall is reversed.

The rejection of claims 41, 48, and 55 under 35 U.S.C. § 103(a) as being unpatentable over Burgess, McIllroy, Avitall, and Katayama is affirmed.

DECISION

The decision of the Examiner to reject claims 40–59 is affirmed-in-part.

AFFIRMED-IN-PART