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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JEFFREY ROBBINS, GABRIEL N. SCHAFFER,
BRETT J. COHEN, and ARVIND GOYAL

Appeal 2019-001379
Application 13/536,333
Technology Center 2100

Before JOSEPH L. DIXON, ST. JOHN COURTENAY III, and
LARRY J. HUME, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's Non-Final Rejection of claims 1–10, 12–22, 24, 53, 55–62, 64, and 66–77, which constitute all the claims pending in this application. Claims 11, 23, 25–52, 54, 63, and 65 are canceled. We have jurisdiction over the pending claims under 35 U.S.C. § 6(b).

We affirm.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). According to Appellant, the real party in interest is Livedata, Inc. *See* Appeal Br. 3.

STATEMENT OF THE CASE²

Introduction

Embodiments of Appellant’s invention relate generally to “enhancing the safety of surgical procedures and reducing the risk of errors in operating rooms.” (Spec. 3).

Representative Independent Claim 1

1. A processor-driven method of providing a medical checklist to a terminal device, the method performed by operating one or more processors to execute at least one processor programmed to:

receive a notification that a trigger event has occurred, the notification comprising an event identifier, a case identifier and one or more event data items;

obtain a checklist template from a checklist template repository based on at least one of: the event identifier, the case identifier and at least one of the one or more event data items, **[L]** *wherein the checklist template comprises a first plurality of prompts;*

create the medical checklist from the checklist template by selecting a second plurality of prompts from the first plurality of prompts of the checklist template based on the case identifier and at least one of the one or more event data items, the medical checklist associated with at least one surgical procedure, the second plurality of prompts being a subset of the first plurality of prompts and comprising:

at least one first prompt populated with data based on the event identifier, the case identifier and/or the one or more event data items;

² We herein refer to the Non-Final Office Action, mailed May 3, 2018 (“Non-Final Act.”); Appeal Brief, filed June 7, 2018 (“Appeal Br.”); Supplemental Appeal Brief (correcting the Summary of Claimed Subject Matter), filed June 29, 2018 (Supp. Appeal Br.); and the Examiner’s Answer, mailed Oct. 5, 2018 (“Ans.”).

at least one second prompt requiring at least one action to be performed in furtherance of the at least one surgical procedure and/or a response to be provided to complete the at least one second prompt, and wherein a user is prevented from proceeding until the at least one second prompt is completed; and

display at least a portion of the medical checklist on a terminal device.

Appeal Br. 16, CLAIMS APPENDIX (Bracketed lettering added and disputed limitation “L” emphasized).

Evidence

The prior art relied upon by the Examiner as evidence is:

Name	Reference	Date
Sullivan et al.	US 2005/0015276 A1	Jan. 20, 2005
Bauer et al.	US 2007/0136218 A1	June 14, 2007
Haddad	US 2009/0089081 A1	Apr. 2, 2009
Sweeney	US 2011/0137680 A1	June 9, 2011
Woolford	US 2012/0323597 A1	Dec. 20, 2012

Rejections A, B, and C under Pre-AIA 35 U.S.C. § 103(a)

Rej	Claims Rejected	Pre-AIA 35 U.S.C. §	Reference(s)/Basis
A	1–5, 7–10, 12–17, 19–22, 24, 53, 64, 74–77	103(a)	Sweeney, Haddad, Woolford
B	55–62, 66–73	103(a)	Sweeney, Haddad, Woolford, Sullivan et al. (“Sullivan”)
C	6, 18	103(a)	Sweeney, Haddad, Woolford, Bauer et al. (“Bauer”)

Issue on Appeal

Did the Examiner err in rejecting claims 1–10, 12–22, 24, 53, 55–62, 64 and 66–77 under pre-AIA 35 U.S.C. § 103(a), as being obvious over the combined teachings and suggestions of the cited references?

ANALYSIS

We have considered all of Appellant’s arguments and any evidence presented. We highlight and address specific findings and arguments for emphasis in our analysis below.

*Rejection A of Claims 1–5, 7–10, 12–17,
19–22, 24, 53, 64, and 74–77 under § 103(a)*

Issues: Under 35 U.S.C. § 103(a), we focus our analysis on: (1) the disputed limitation **L** regarding Rejection A of claims 1–5, 7–10, 12–17, 19–22, 24, 53, 64, and 74–77, and, (2) the Examiner’s reasons for combining the cited references. We consider issues (1) and (2) *seriatim*:

1. Did the Examiner err by finding that Sweeney, Haddad, and Woolford collectively teach or suggest the disputed, dispositive limitation **L**:

[L] wherein the checklist template comprises a first plurality of prompts;

create the medical checklist from the checklist template by selecting a second plurality of prompts from the first plurality of prompts of the checklist template based on the case identifier and at least one of the one or more event data items, the medical checklist associated with at least one surgical procedure, the second plurality of prompts being a subset of the first plurality of prompts,

within the meaning of representative independent claim 1?³ (Emphasis added.) *See* Non-Final Act. 2–5.

2. Did the Examiner err in combining Sweeney, Haddad, and Woolford because, as alleged by Appellant, the Examiner did not provide an articulated reason or proper motivation to combine the references? *See* Appeal Br. 14.

Limitation L of Claim 1

Appellant disputes the Examiner’s findings regarding limitation L of claim 1, by contending Sweeney merely discloses obtaining a specific checklist based on patient-specific data obtained using a handheld device. Appellant argues that Sweeney makes no mention whatsoever of a *checklist template*. *See* Appeal Br. 12.

Regarding Haddad, Appellant contends:

Haddad describes a process in which a request for surgical plans are given to a vendor, which in turn provides a custom surgical plan to a healthcare facility Even if the surgical plans could be considered a medical checklist, the surgical plan is not created from a checklist template in the claimed manner. Specifically, in Haddad, the surgical plan is produced from a surgical plan request, which is nowhere disclosed as *comprising a plurality of prompts from which a subset are selected* to create the surgical plan.

Appeal Br. 12–13 (emphasis added).

The Examiner disagrees with Appellant, and explains that paragraph 44 of Haddad describes that “a surgical plan includes images relating to the

³ We give the contested claim limitations the broadest reasonable interpretation (“BRI”) consistent with the Specification. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

steps a surgeon is to follow in carrying out the surgical procedure; the surgical plan thusly received is properly described as a ‘template.’” Ans. 18.

The Examiner additionally notes the teachings of Woolford, as pertaining to limitation L, by explaining that Woolford’s paragraph 70 describes:

a received **interactive checklist** document, which contains prompts for steps in a medical procedure. This **interactive checklist** contains **prompts** for completing a medical procedure; included in the prompts as described can be decision trees, where a selection by a surgeon of one or other decision selects a specific **set of prompts** unique to that particular tree. This is another instance where the prior art shows a **subset of prompts** are selected from the entirety of **prompts** delivered as part of a medical or surgical procedure.

Ans. 18–19 (*see also* Non-Final Act. 4–5) (emphasis added).

Claim Construction

As an initial matter of claim construction, we turn to the Specification for context, and find no explicit definition for the recited claim 1 term “**prompt**.” Instead, we find only descriptions of non-limiting, exemplary embodiments, e.g., “a medical checklist comprising a sequence of prompts, each prompt *indicating one or more actions*.” Spec. 4, ll. 6–7 (emphasis added). *See generally* Spec. 4, ll. 4–19. The claimed “**checklist template**” is defined in claim 1 as “compris[ing] a first plurality of **prompts**.” Claim 1. We emphasize that because “applicants may amend claims to narrow their scope, a broad construction during prosecution creates no unfairness to the applicant or patentee.” *In re ICON Health and Fitness, Inc.*, 496 F.3d

1374, 1379 (Fed. Cir. 2007) (citation omitted).⁴

Turning to the evidence relied upon by the Examiner, we first note the following description in Sweeney of a **checklist** of displayed procedures (i.e., prompts) for the steps of drawing blood:

[T]he wireless handheld device includes *instructions for dealing with patient-specific conditions*. For example, *a patient being treated with anticoagulants* (blood thinners) is scheduled for a blood draw . . . the handheld device *displays procedures for drawing blood from an anti-coagulated patient in **checklist form***.

Sweeney ¶ 21 (emphasis added) (*see* Non-Final Act. 3).

We note Haddad teaches displaying ordered surgical steps (i.e., suggesting prompts):

In one embodiment, the *custom surgical plan 20* may include an *ordered selection of instructional images* that depict **individual surgical steps** that make up at least a portion of the orthopaedic surgical procedure to be performed. The instructional images may include images of surgical tools and associated text information

Haddad ¶ 44 (emphasis added) (*see* Non-Final Act. 3–4).

Haddad also teaches the *literal use of prompts* in paragraph 45:

In some embodiments, the surgeon 100 may also interact with the computing device 62 to control various devices of the CAOS system 30. For example, the surgeon 100 may interact with the CAOS system 30 to control user preferences or settings of the display device 94. Further, the computing device 62 may **prompt** the surgeon 100 for responses. For example,

⁴ Claim construction is an important step in a patentability determination. *Medichem, S.A. v. Rolabo, S.L.*, 353 F.3d 928, 933 (Fed. Cir. 2003) (“Both anticipation under § 102 and obviousness under § 103 are two-step inquiries. The first step in both analyses is a proper construction of the claims The second step in the analyses requires a comparison of the properly construed claim to the prior art.” (Internal citations omitted)).

the computing device 62 may **prompt** the surgeon to inquire if the surgeon has completed the current surgical step, if the surgeon would like to view other images, and/or other surgical procedure inquiries.

Haddad ¶ 45 (emphasis added).

Similarly, as discussed above, Woolford (¶ 70) teaches an “interactive checklist” (i.e., suggesting prompts).

(1) **Interactive Checklist (IC)** — This is a well-validated, *interactive checklist* directing the specific procedure to be performed In general, the IC displayed on the MFCD [multi-function color display] is customized to each procedure, enhancing team communication and active participation, outlining ideal technique and sequence as indicated by modern evidence-based medicine and provider preferences.

Woolford ¶ 70 (emphasis added) (*see* Non-Final Act. 4; *see also* Ans. 18–19).

Based upon our review of the evidence, we find Sweeney’s teachings (¶ 21) of displaying instructions for dealing with various “patient-specific conditions” in “checklist form” and Woolford’s teachings of an “interactive checklist” (¶ 70) “directing the specific procedure to be performed,” individually, and in combination, teach or suggest a “**checklist template** [that] *comprises a first plurality of prompts,*” as recited in claim 1.

Additionally, we note Haddad’s teaching of a “custom surgical plan” comprising “an *ordered selection* of instructional images” (i.e., prompts for specific steps of the procedure). Haddad ¶ 44 (emphasis added). We note that paragraph 47 of Haddad, as further relied upon by the Examiner (Non-Final Act. 4), describes data, such as X-rays, medical images (i.e., “*event data items*” — claim 1), patient medical records, and patient identification

data (i.e., “*case identifier*” – claim 1), that may be requested and used to *customize* a specific surgical procedure for the patient.⁵

In addition to Haddad’s teaching of *customized* surgical plans (¶ 44), we find the claimed “second plurality of prompts” is also suggested by Woolford’s teaching of “checklist pages [that] permit the *addition of surgeon preferences*,” such as a “Surgeon Enhanced Standard of Care (SESoC) . . . and descriptive/directive notes as deemed necessary to facilitate the best surgical outcome.” Woolford ¶ 25 (emphasis added).⁶ *See also* Ans. 18–19, i.e., the Examiner finds Woolford ¶ 70 teaches or suggests the claimed “second plurality of prompts being a subset of the first plurality of prompts.” Claim 1.

Given this evidence, we find the Examiner’s proffered combination of Sweeney, Haddad, and Woolford teaches or suggests limitation **L**:

*create the medical checklist from the checklist template by selecting a **second plurality of prompts** from the first plurality of prompts of the checklist template based on the case identifier and at least one of the one or more event data items, the medical checklist associated with at least one surgical procedure, the **second plurality of prompts** being a subset of the first plurality of prompts.*

⁵ *See* claim 1: “obtain a checklist template from a checklist template repository based on **at least one of**: the event identifier, the case identifier and at least one of the one more **event data items**, wherein the checklist template comprises a first plurality of **prompts**,” (emphasis added).

⁶ “[T]he question under 35 USC 103 is not merely what the references expressly teach but what they would have *suggested* to one of ordinary skill in the art at the time the invention was made.” *Merck & Co. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807 (Fed. Cir. 1989) (emphasis added) (quoting *In re Lamberti*, 545 F.2d 747, 750 (CCPA 1976)); *see also* MPEP § 2123.

Claim 1 (emphasis added).

Thus, on this record, we find that the Examiner is relying on Sweeney and Woolford to teach or suggest “*the checklist template comprises a first plurality of prompts,*” and Haddad and Woolford to collectively teach or suggest the limitation:

create the medical checklist from the checklist template by selecting a second plurality of prompts from the first plurality of prompts of the checklist template based on the case identifier and at least one of the one or more event data items, the medical checklist associated with at least one surgical procedure, the second plurality of prompts being a subset of the first plurality of prompts,

within the meaning of claim 1 (*see* Non-Final Act. 2–5).

For at least the aforementioned reasons, and based upon a preponderance of the evidence, we are not persuaded the Examiner erred in finding that Sweeney, Haddad, and Woolford collectively teach or suggest the disputed limitation **L** of independent claim 1.

Motivation to Combine Sweeney, Haddad, and Woolford

Appellant contends that Examiner’s proffered motivation to combine Sweeney, Haddad, and Woolford is:

nothing more than a conclusory statement about the general combinability of the technology described in these references The Office Action simply does not establish a supportable reason that one of ordinary skill would have modified Sweeney based on Haddad and Woolford or how one of ordinary skill in the art would have done so.

Appeal Br. 14.

The Examiner disagrees and explains that because “all of the [claim] elements are taught in the prior art, one of ordinary skill in the art could

combine those elements using known programming techniques, and that the resulting combination of elements in one medical checklist system would be predictable.” Ans. 19.

We note Sweeney and Woolford are both directed to presenting medical procedures in a checklist form. Additionally, Haddad and Woolford both teach customizing existing medical procedures based upon the patient information or the physician’s preference.

It is our view that the Examiner’s proffered combination of the respective cited features of Sweeney, Haddad, and Woolford would have realized a predictable result—and thus it would have been obvious to one of ordinary skill in the art to modify such pre-existing medical procedures by including additional physician-specific instructions based upon patient information. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 401 (2007) (“[A] combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.”). “[W]hen a patent ‘simply arranges old elements with each performing the same function it had been known to perform’ and yields no more than one would expect from such an arrangement, the combination is obvious.” *KSR*, 550 U.S. at 417 (quoting *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 282 (1976)).

Further, in *KSR*, 550 U.S. at 418, the Court stated that when considering obviousness that “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” When there is a design need or market pressure to solve a problem and there are a finite number of

identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. *See id.* at 421.

Moreover, it is sufficient that references **suggest** doing what Appellant did, although the Appellant's particular purpose was different from that of the references. *In re Heck*, 699 F.2d 1331, 1333 (Fed. Cir. 1983) (citing *In re Gershon*, 372 F.2d 535, 539 (CCPA 1967)). For a prima facie case of obviousness to be established, *the reference need not recognize the same problem solved by the Appellants*. *See In re Kemps*, 97 F.3d 1427, 1430 (Fed. Cir. 1996). [N]either the particular motivation nor the avowed purpose of the [Appellant] controls" when performing an obviousness analysis. *KSR*, 550 U.S. at 419 (2007).

This reasoning is applicable here. In reviewing the record, we are not persuaded the Examiner erred because Appellant does not point to any evidence of record that shows combining the teachings of Sweeney, Haddad, and Woolford in the manner proffered by the Examiner (Non-Final Act. 5) would have been "uniquely challenging or difficult for one of ordinary skill in the art" or would have "represented an unobvious step over the prior art." *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007) (citing *KSR*, 550 U.S. at 418).

Appellant has not identified knowledge gleaned only from the present application that was not within the level of ordinary skill at the time the claimed invention was made. *See In re McLaughlin*, 443 F.2d 1392 (CCPA 1971). Moreover, Appellant has not provided any objective evidence of secondary considerations (e.g., unexpected results), which our reviewing court guides "operates as a beneficial check on hindsight." *Cheese Sys., Inc. v. Tetra Pak Cheese & Powder Sys., Inc.*, 725 F.3d 1341, 1352 (Fed.

Cir. 2013). Nor has Appellant filed a Reply Brief to further rebut the Examiner's responsive explanations. *See* Ans. 17–19.

We find one of ordinary skill in the art would have understood that familiar medical procedures may be customized for a specific patient in order to safeguard patient safety. Thus, we find the Examiner sets forth a sufficient rational underpinning explaining why an artisan would have combined the teachings of Sweeney, Haddad, and Woolford. *See* Non-Final Act. 5.

Therefore, on this record, and based upon a preponderance of the evidence, we are not persuaded of error regarding the Examiner's underlying factual findings and ultimate legal conclusion of obviousness regarding Rejection A of independent representative claim 1.

Accordingly, we sustain the Examiner's Rejection A of independent representative claim 1, and also Rejection A of independent claim 13, which recites similar limitations of commensurate scope. *See* Non-Final Act. 5. The remaining grouped dependent claims also rejected under Rejection A (and not argued separately) fall with representative independent claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv). Accordingly, we sustain the Examiner's obviousness Rejection A of claims 1–5, 7–10, 12–17, 19–22, 24, 53, 64, and 74–77.

Rejections B and C of claims 6, 18, 55–62, and 66–73 under § 103(a)

In view of the lack of any substantive, separate arguments directed to Rejection B of claims 55–62 and 66–73, and Rejection C of claims 6 and 18 under § 103(a) (*see* Appeal Br. 14–15), we sustain the Examiner's Rejection B of claims 55–62 and 66–73, and Rejection C of claims 6 and 18.

Arguments not made are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

CONCLUSION

The Examiner did not err in rejecting claims 1–10, 12–22, 24, 53, 55–62, 64, and 66–77 as being obvious under pre-AIA 35 U.S.C. § 103(a), over the cited combinations of references.

DECISION SUMMARY

Claims Rejected	Pre-AIA 35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–5, 7–10, 12–17, 19–22, 24, 53, 64, 74–77	103(a)	Sweeney, Haddad, Woolford	1–5, 7–10, 12–17, 19–22, 24, 53, 64, 74–77	
55–62, 66–73	103(a)	Sweeney, Haddad, Woolford, Sullivan	55–62, 66–73	
6, 18	103(a)	Sweeney, Haddad, Woolford, Bauer	6, 18	
Overall Outcome			1–10, 12–22, 24, 53, 55–62, 64, 66–77	

FINALITY AND RESPONSE

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). *See* 37 C.F.R. § 41.50(f).

AFFIRMED