UNITED STATES PATENT AND TRADEMARK OFFICE

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Ex parte JONATHAN ROBERT PHILLIPS
and GREGORY D. WEBER

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Appeal 2017-002106
Application 13/630,290
Technology Center 3600

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Before: BRADLEY W. BAUMEISTER, MICHAEL J. STRAUSS, and
NABEEL U. KHAN, *Administrative Patent Judges*.

STRAUSS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's Final rejection of claims 1–3, 6–11, 13–15, and 18–22. Final Act. 4. Claims 4, 5, 12, 16 and 17 are canceled. Final Act. 2. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

THE INVENTION

The claims are directed to creating virtual groups for managing a contact center. Spec., Title. Claim 1, reproduced below with formatting added, is illustrative of the claimed subject matter:

> 1. A method comprising:
>
> receiving, by a microprocessor, via a network, a first communication from a first entity communication device;
>
> placing, by the microprocessor, the first communication into a contact center queue;
>
> connecting, by the microprocessor, from the contact center queue, the first communication from the first entity communication device to a first agent terminal;
>
> in response to connecting, from the contact center queue, the first communication from the first entity communication device to the first agent terminal, dynamically creating, by the microprocessor, a first virtual group, wherein the first virtual group comprises:
>
> > a first agent avatar representing a first agent;
> >
> > a first monitoring avatar representing a person at a supervisor/subject matter expert terminal;
> >
> > a first entity avatar representing a first entity; and
> >
> > a first virtual reality setting in a first virtual room;
>
> receiving, by the microprocessor, via the network, a second communication from a second entity communication device;

placing, by the microprocessor, the second communication into the contact center queue;

connecting, by the microprocessor, from the contact center queue, the second communication from the second entity communication device to a second agent terminal;

in response to connecting, from the contact center queue, the second communication from the second entity communication device to the second agent terminal, dynamically creating, by the microprocessor, a second virtual group, wherein the second virtual group comprises

a second agent avatar representing a second agent and

a second entity avatar representing a second entity, in

a second virtual reality setting, wherein the second virtual reality setting is a second virtual room,

wherein dynamically creating the first or second virtual group is based on a skill set of a group of agents, wherein if an agent terminal for a member of the group of agents is not currently involved in a communication, an agent avatar for an agent of the agent terminal not currently involved in a communication is created in the first or second virtual group without a corresponding entity avatar and wherein the agent avatar without a corresponding entity avatar can monitor each of the first and second communications; and

combining, by the microprocessor, the first virtual group and the second virtual group, wherein combining the first virtual group and the second virtual group results in the first virtual room and the second virtual room being connected, and wherein the first monitoring avatar can be virtually moved between the first virtual room and the second virtual room.

REFERENCES

The following prior art is relied upon by the Examiner in rejecting the claims on appeal:

| Pickford | US 2006/0062376 A1 | Mar. 23, 2006 |
| Walker et al. ("Walker") | US 2009/0251457 A1 | Oct. 8, 2009 |

REJECTIONS

The Examiner made the following rejections:

Claims 1, 13 and 20 stand rejected under 35 U.S.C. § 112(b) as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor regards as the invention. Final Act. 2–4.

Claims 1–3, 6–11, 13–15, and 18–22 stand rejected under 35 U.S.C. § 101 as directed to a judicial exception and, thereby, non-statutory subject matter. Final Act. 4–11.

Claims 1–3, 6–11, 13–15, and 18–22 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Walker and Pickford. Final Act. 12–50.

ANALYSIS

We agree with Appellants' conclusions as to (i) the rejection of the claims under 35 U.S.C. § 112(b) as being indefinite (App. Br. 24–26) and (ii) the rejection of claim 21 under 35 U.S.C. § 103(a). App. Br. 32–33. However, Appellants' arguments in connection with (i) the rejection of all pending claims under 35 U.S.C. § 101 (App. Br. 11–24) and (ii) the rejection of claims 1–3, 6–11, 13–15, 18–20, and 22 under 35 U.S.C. § 103(a) are unpersuasive. App. Br. 25–32. In connection with the sustained rejections, and as otherwise discussed below, we adopt as our own (1) the findings and reasons set forth by the Examiner in the action from which this appeal is taken (Final Act. 4–50, 53–56) and (2) the reasons set forth by the Examiner in the Examiner's Answer in response to Appellants' Appeal Brief (Ans. 2–

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18) and concur with the conclusions reached by the Examiner. We highlight the following for emphasis.

35 U.S.C. § 112

The Examiner finds claims 1, 13, and 20 are rendered indefinite by use of the term "combine" in describing a step resulting in the first and second virtual rooms being connected such that a monitoring avatar can move between the rooms. Final Act. 2–3. According to the Examiner, combine means to become one and act together so that the spaces are no longer independent but become one space. Final Act. 3. Thus, according to the Examiner, as one integrated space, it "is unclear . . . how the monitoring avatar is performing a 'moved between' function, as the rooms are 'combined.'" *Id.*

Appellants contend: (i) the claims self-define the term by reciting the required result of combining the virtual groups and connecting the rooms; (ii) the definitions adopted by the Examiner are inconsistent with use of the term combine in the Specification; and (iii) even if contrary or inconsistent with its ordinary meaning, Appellants are entitled to redefine the term if the asserted meaning is clearly set forth in the Specification. App. Br. 24–26.

Appellants' arguments are persuasive. Although the Examiner might find other terms more descriptive of the step (e.g., associate, join or bridge), for the reasons argued by Appellants, use of the term "combine" does not render the claims ambiguous or otherwise indefinite. In particular, in view of the requirement that the rooms be connected to allow movement between the rooms, as described by the claims and the Specification, characterizing that results as a step of combining is not so offensive as to render the claims

indefinite. In particular, we disagree with the Examiner the step of combining the groups must result in loss of identity of the individual rooms such that it is unclear how an avatar can move between rooms. Accordingly, we do not sustain the rejection of claims 1, 13 and 20 under 35 U.S.C. § 112(b).

35 U.S.C. § 101

Under 35 U.S.C. § 101, a patent may be obtained for "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." *Alice Corp. v. CLS Bank Int'l*, 134 S.Ct. 2347, 2354 (2014). The Supreme Court has "long held that this provision contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable." *Alice*, 134 S.Ct. at 2354 (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)). The Supreme Court in *Alice* reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012), "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice*, 134 S.Ct. at 2355.

The first step in that analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts," such as an abstract idea. *Id.* The Court acknowledged in *Mayo* that "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Mayo*, 566 U.S. at 71. We, therefore, look to whether the claims focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is

the abstract idea and merely invoke generic processes and machinery. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016).

If the claims are not directed to an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered "individually and 'as an ordered combination[,]' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Alice*, 134 S.Ct. at 2355 (quoting *Mayo*, 566 U.S. at 78–80).

STEP ONE OF ALICE/MAYO FRAMEWORK

Under the first step of the *Alice/Mayo* framework, the Examiner finds the claims "are directed to an abstract idea of contact center management, specifically, directed towards receiving a communication from an entity, placing the entity into a queue, creating a group for the entity, assigning an agent, and managing multiple requests for assistance across a communication network." Final Act. 5. The Examiner supports the finding that contact center management is an abstract idea, finding it is either (i) a fundamental economic practice, (ii) a method of organizing human activities, (iii) an idea of itself, or (iv) a mathematical relationship or formula. *Id.*

Appellants argue the invention is not directed to (i) a fundamental economic practice because it "is not a concept relating to the economy and commerce, such as agreements between people in the form of contracts, legal obligations, and business relations." App. Br. 15. According to Appellants "[w]hile it is true that the claimed invention is directed to a business servicing customer communications, this can hardly be considered

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to be a fundamental economic practice." *Id.* Appellants further argue
"[b]ecause the claimed invention is directed to a virtual environment for
agent and customer communication devices to interact, it is not [(ii)] a
method of organizing human activities let alone a 'certain' method of
organizing human activities that is not patentable subject matter under the
Alice decision." App. Br. 14. Appellants further argue the invention is not
(iii) an idea of itself because it requires communications activities that
cannot be performed in a person's head. *Id.* According to Appellants

> A person cannot abstractly think and create a virtual
> environment. A person cannot abstractly monitor a
> communications from a contact center queue because this
> requires hardware (a microprocessor) to implement. A person
> cannot create a virtual room based on a communication being
> connected to an agent terminal. A person cannot render the
> combined first and second virtual groups for display via a
> computer display as required by claim 13.

App. Br. 15. Appellants further argue the invention is not (iv) a
mathematical relationship or formula because it does not include
mathematical concepts or calculations. *Id.*

The Examiner responds by directing attention to the admitted prior art
wherein, in managing a distributed contact center, a supervisor can no longer
physically traverse the facility to monitor center and agent operations.
Ans. 4. *See also* Ans. 5–9. The Examiner finds "Appellant[s have] clearly
established that the invention is to manage a contact center and where the
Appellant[s'] invention is using computer technology as tools in managing
operations of call centers." Ans. 4. Thus, according to the Examiner, "[t]he
invention is directed to the abstract idea of organizing, storing and
transmitting information" consistent with (i) the "July 2015 Update: Subject
Matter Eligibility" to 2014 Interim Guidance on Subject Matter Eligibility

(2014 IEG), 79 Fed. Reg. 74618 (Dec. 16, 2014) (hereinafter "July 2015 Update"), and (ii) *Cyberfone Systems, LLC v. CNN Interactive Group, Inc.*, 558 Fed. Appx. 988, 992 (Fed. Cir. 2014). *Id.* The Examiner further finds the argued use of communication devices is simply another use of "computer technology as a tool to manage and perform communications and contact center operations using computers being operated by people such as agents and supervisors in order to interact with customers." Ans. 6. Furthermore, according to the Examiner, "it is old and well known in the art where communications are monitored by supervisors/managers to ensure that customers are receiving the proper responses to requests for service." Ans. 7. Likewise, the Examiner explains other aspects of the claim are old and were well known in the art including, e.g., the use of avatars to represent parties participating in a dialog such as an online forum represented by a virtual room. Ans. 7–8.

Appellants reply, arguing the claims "improve upon the existing contact center queues queue management by providing a virtual environment to manage communication from a contact center queue[, which] clearly provides something more. Existing contact centers do not combine the use of virtual reality and contact center queue management." Reply. 7.

As an initial matter, we are unpersuaded of error by Appellants' characterization of the Court's decision in *Alice* as being based on preemption of a preexisting and well known human activity by the claims therein at issue. Appeal Br. 15–16. Although preemption may be the concern driving the exclusion of abstract ideas from patent-eligible subject matter, preemption is not the test for eligibility. "The Supreme Court has made clear that the principle of preemption is the basis for the judicial

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exceptions to patentability" and "[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citing *Alice*, 134 S.Ct. at 2354).

We agree with the Examiner in finding the claims are directed to "contact center management" and "managing contact center activities." Final Act. 5. Although Appellants argue the claims "are directed to managing received communications in a contact center and creating a virtual environment to manage the received communications in parallel," (App. Br. 19), the argued steps are but conventional activities performed in operating a contact center, which necessarily include receiving communications and visualizing communication status using, for example, a virtual environment.

Appellants' Specification describes a problem that prior art tools provided to allow a supervisor to select an agent to monitor calls in geographically dispersed contact centers were "limited and sometimes difficult to use." Spec. ¶ 3. To address this issue, Appellants claim providing a virtual reality setting wherein agents, supervisors/subject matter experts, and callers (i.e., first and second entities) are represented by avatars indicating which agents a supervisor can monitor and is currently monitoring. Spec. ¶ 4. However, other than pictorially depicting which of the agents is being monitored, the virtual environment and avatars do not otherwise provide any additional functionality or capability. As such, we agree with the Examiner that monitoring the activities of others including, for example, agents employed to provide a service, i.e., the monitoring of a human activity, is a method of organizing human activities constituting an

abstract idea. *See* e.g. July 2015 Update ("[C]ases have found concepts relating to managing relationships or transactions between people abstract.").

STEP TWO OF ALICE/MAYO FRAMEWORK

Under step two of the *Alice/Mayo* framework, the Examiner finds

> The claim[] does not include additional element[s] that are
> sufficient to amount to significantly more than the judicial
> exception because the claim recited generic computer elements
> (e.g. a microprocessor with computer readable medium) which
> do not add a meaningful limitation to the abstract idea because
> they would be routine in any computer implementation.

Final Act. 10. According to the Examiner, the invention merely links generic devices to the abstract idea of contact center management by establishing communications with parties, placing entities in queues, and assigning and monitoring communications between entities. *Id.* The Examiner adds "[Appellant] has not identified an improvement to the microprocessor or an improvement to how the microprocessor functions." *Id.* The Examiner further finds

> The claims require no more than a generic computer to perform
> generic computer functions that are well-understood, routine
> and conventional activities previously known to the industry.
> The managing of users on a communication system in order to
> provide resources to the users are [no] more than organizing,
> storing and transmitting information.

Final Act. 11 (emphasis omitted).

Appellants argue the claims recite more than "receiving, placing, identifying, creating, sending, receiving, and sending data." App. Br. 17. According to Appellants, the claims "create[] two virtual groups based on connecting two separate communications from two entity communication

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devices from a contact center queue to two agent terminals." App. Br. 17.
Appellants further argue the claims require combining the groups so that a
supervisor can move a monitoring avatar between the agents. *Id.*
Appellants assert the steps of creating first and second groups, at least one
group dynamically created based on a skill set of a group of agents, and
combining the first and second groups to allow a supervisor avatar to move
between the first and second virtual rooms, are not disclosed by the prior art.
Appellants further assert:

> *The inventions claimed in claims 1, 13, and 20 improve another
> technology or technical field (e.g., providing a virtual
> environment that allows a supervisor to virtually monitor
> multiple communication sessions in a virtual environment),
> transform[] customer contacts into a different state or thing
> (e.g., a set of virtual objects), and improve the functioning of
> the computer itself (e.g., by enabling a supervisor the ability to
> virtually monitor multiple communications in a virtual
> environment at the same time).*

App. Br. 18.

Appellants further argue the claims are unlike those found to be
ineligible in *Alice*; *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350 (Fed. Cir.
2014); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709 (Fed. Cir. 2014); and
Accenture Global Servs., GmbH v. Guidewire Software, Inc., 728 F.3d 1336
(Fed. Cir. 2013). App. Br. 19–20. According to Appellants, rather than
broadly and generically reciting the use of a generic network and a generic
computer, the claims recite routing of communications from an entity
communication device, to a contact center queue, and then to an agent
terminal for display in a novel virtual setting. *Id.*

Appellants instead analogize the claims to those held patent-eligible in
DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245 (Fed. Cir. 2014) in

which, by providing a specific way to automate the creation of a web page, the claims were "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks." App. Br. 21 (citing *DDR Holding*, 773 F.3d at 1257–58).

> Like *DDR Holdings*, the methods and systems of claims 1, 13, and 20 are necessarily rooted in computer technology to overcome a problem specifically arising in the realm of contact centers. The claims recite a specific contact center architecture implementing a structure and interaction between various hardware elements, including a microprocessor, an entity communication device, an agent terminal, a network, a contact center queue, and a virtual reality setting based on a skill set of a group of agents.

App. Br. 21. Appellants further argue "the claims recite a specific way to virtually automate the process of monitoring multiple communications between entities and contact center agents at the same time." *Id.*

The Examiner responds, finding "using rooms or virtual spaces to manage activities and to monitor activities [was] well known in the art at the time of the invention and therefore is not 'significantly more.'" Ans. 12. The Examiner further finds the "significantly more" must be more than adding a microprocessor "but rather an improvement to the [technical] field itself." *Id* (citing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016)).

The Examiner disputes Appellants' contention that the claims are directed to providing a technological improvement as in *Enfish*, finding "Appellant[s have] not provided distinctions of the invention that improve upon existing technology" and further finding Appellants' "generic reference to the use of a microprocessor to be used in the invention simply means the microprocessor is being used as a tool and [Appellants have] not

identified where the invention is improving upon the technical field or the equipment." *Id.* Contrary to Appellants' contention, the Examiner finds the pending claims are similar to those found ineligible in *buySafe* and that "Appellant[s'] analysis of *DDR Holdings* is not appropriate[,] as the disclosure provides a general overview of the invention and further the invention is not deeply rooted in the technology." Ans. 13.

Appellants do not persuade us that the Examiner erred in finding the claims lack additional elements that are sufficient to amount to significantly more than the judicial exception under step 2 of the *Alice/Mayo* framework. In particular, Appellants' argument that the claims require specific implementations of the various steps and functions performed by the microprocessor fail to identify any improvement to another technology, i.e., an improvement to how the microprocessor performs or executes the abstract idea identified in step 1 of *Alice/Mayo* framework. For example, although asserting the functioning of the computer itself is improved "by enabling a supervisor the ability to virtually monitor multiple communications in a virtual environment at the same time" (App. Br. 18), Appellants fail to identify any improvement specific to the computer rather than an improvement to the underlying abstract idea of contact center monitoring. Thus, we further disagree that the claims are unlike to those found to be patent-ineligible in *Alice, buySAFE, Ultramercial,* and *Accenture.*

We also are unpersuaded the claims are similar to those found eligible in *DDR.* App. Br. 20–21. The claims in *DDR Holdings* were directed to a "challenge particular to the Internet," and did not "broadly and generically

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claim 'use of the Internet' to perform an abstract business practice (with insignificant added activity)." *DDR Holdings,* 773 F.3d at 1257, 1258.

For example, in *DDR,* the claims involved, *inter alia,* "web pages displays [with] at least one active link associated with a commerce object associated with a buying opportunity of a selected one of a plurality of merchants." *Id.* at 1249 (claim 19 of US 7,818,399 B1; issued to Ross, Jr., Oct. 19, 2010). There is nothing similar to such a web page with an active link in Appellants' claim 1. Rather, all that claim 1 requires is the use of a microprocessor to connect first and second communications from respective entities to respective agent terminals of respective virtual groups, each virtual group including avatars representing the associated entities in a virtual room setting. That is, the claims are directed to connecting incoming communications to an appropriate agent, allowing a supervisor to monitor the communications, and visualizing or displaying the relationships of the various entities using avatars, i.e., providing a graphical representation of each entity such as a user, agent, or supervisor.

Appellants provide insufficient evidence or reasoning explaining why any of these steps are other than conventional or are directed to a particular technological challenge. Instead, we find, as in *Alice, buySAFE, Ultramercial,* and *Accenture,* the argued additional elements are well-understood, routine and conventional. Merely implementing a concept in a particular technological environment, such as in a contact center, does not confer patent eligibility on an otherwise abstract concept. *See Versata Development Group, Inc. v. SAP America, Inc.,* 793 F.3d 1306, 1332 (Fed. Cir. 2015) (citations omitted) ("[T]he prohibition on patenting an ineligible

concept cannot be circumvented by limiting the use of an ineligible concept
to a particular technological environment.").

Accordingly, we sustain the Examiner's rejection of the claims under
35 U.S.C. § 101 as directed to patent-ineligible statutory subject matter.

35 U.S.C. § 103(a)

Claims 1, 13, and 20 (App. Br. 26–31)

Appellants contend neither Pickford nor Walker "teach[es] or
suggest[s] creation of a virtual group . . . based on connecting a
communication from the contact center queue[,] as required by claim 1."
App. Br. 27. This contention is unpersuasive because it fails to address the
Examiner's findings and, instead, is an attack on the references individually.
"Non-obviousness cannot be established by attacking references individually
where the rejection is based upon the teachings of a combination of
references." *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986)
(citing *In re Keller*, 642 F.2d 413, 425 (CCPA 1981)).

The Examiner finds Walker's disclosure of (i) user initiated
communication with others, (ii) the grouping of people performing similar
tasks into the same dynamic virtual space, and (iii) the automatic creation of
a 3D space based upon a person's actions with the space populated with
resources associated with those actions and the participants represented as
avatars (Final Act. 15) collectively teaches or suggests "in response to
connecting, *[. . .]*, the first communication from the first entity
communication device to the first agent terminal, dynamically creating <u>by
the</u> <u>microprocessor</u>, a first virtual group" (Final Act. 12). The Examiner
applies Pickford's disclosure of, *inter alia*, a customer call center identifying

agents based on availability, skill sets, needs of the customer, etc. and appropriate routing of the call (Final Act. 18) for the elements of the disputed limitation missing from Walker (Final Act. 19) such that the entirety of the disputed limitation is taught by the combination of Walker and Pickford. Final Act. 20. Appellants fail to persuade us this combination of Walker and Pickford, as described above, is deficient in teaching or suggesting the disputed limitation.

In connection with Appellants' contention the combination of Walker and Pickard is improper, the Examiner finds "it would have been obvious to one of ordinary skill in the art at the time of the invention for Walker to use a queue type system for managing interactions as disclosed by Pickford in monitoring the virtual spaces and the resources to make available to the virtual spaces." Final Act. 19 (emphasis omitted). Appellants contend, because the problem solved by Pickard is different than that addressed by the claimed invention, "[t]here is no motivation or suggestion in Pickford or Walker to create a virtual group based on a communication being connected from a contact center queue." App. Br. 27.

The Examiner responds that "*KSR* forecloses [A]ppellant[s'] argument that a specific teaching is required for a finding of obviousness." Ans. 15 (citing *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007)). In defense of the combination, the Examiner finds a lack of evidence that modifying Walker to include the relied-upon features of Pickford would have been uniquely challenging or difficult. *Id.* The Examiner finds one skilled in the art instead would have made the combination "to manage virtual spaces using a queue type system in order to more efficiently manage a customer contact center." *Id.* at 16. The Examiner further finds "the improvements

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are no more than the predictable use of prior art elements according to their established functions." *Id.*

We are not persuaded the Examiner erred in combining Walker and Pickford in rejecting the claims. The Examiner's reason for "modify[ing] the combination of Walker with the teachings of Pickford" (Ans. 16 (emphasis omitted)) need not address the same problem as that to which the invention is directed. *In re Kahn*, 441 F.3d 977, 987 (Fed. Cir. 2006) (The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant.); *Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1323 (Fed. Cir. 2005) ("One of ordinary skill in the art need not see the identical problem addressed in a prior art reference to be motivated to apply its teachings."); *In re Linter*, 458 F.2d 1013 (CCPA 1972); *In re Dillon*, 919 F.2d 688 (Fed. Cir. 1990), *cert, denied*, 500 U.S. 904(1991).

Moreover, the Supreme Court has held, "[i]n determining whether the subject matter of a patent claim is obvious, neither the particular motivation nor the avowed purpose of the patentee controls." *KSR Int'l Co, v. Teleflex, Inc.*, 550 U.S. 398, 419 (2007). For a prima facie case of obviousness to be established, the reference need not recognize the same problem solved by Appellants. *See Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Int. 1985) ("The fact that [Appellants have] recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious.").

Appellants next contend the Examiner has failed to show the prior art teaches or suggests the limitation of "wherein dynamically creating the first or second virtual group is based on a skill set of a group of agents." App. Br. 27. Appellants argue "Pickford does not disclose a virtual group being created based on a skill set of a group of agents [or] the use of virtual groups." *Id.* Appellants argue the application of Walker fails to overcome the deficiencies of Pickford because Walker is not based on a contact center or a contact center queue and does not otherwise disclose creating a virtual group based on a skill set of a group of agents as required by claim 1. App. Br. 28.

The Examiner finds "[t]he system of Walker allows for the system [(i)] to filter resources based on factors such as user knowledge (skill set)" (Final Act. 16 (emphasis omitted)) and (ii) to "evaluat[e] the resources that have the knowledge (skill set) to assist with the appropriate request" (Ans. 20). The Examiner further finds Pickford's customer call center identifies agents based on, *inter alia*, skill sets (Final Act. 18) and manages the number of call in a queue for a particular skill set of agents (App. Br. 19).

Appellants fail to adequately address the Examiner's findings in connection with the disputed limitation. Merely citing a claim limitation and asserting it is not present falls short of identifying an error in the Examiner's rejection as required on appeal. "Filing a Board appeal does not, unto itself, entitle [Appellants] to *de novo* review of all aspects of a rejection." *See Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential) (internal citations omitted). Arguments must address the Examiner's action. 37 C.F.R. § 41.37(c)(1)(iv) ("The arguments shall explain why the examiner

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erred as to each ground of rejection contested by [Appellants]."); *In re Lovin*, 652 F.3d 1349, 1357 (Fed. Cir. 2011) ("[T]he Board reasonably interpreted Rule 41.37 to require more substantive arguments in an appeal brief than a mere recitation of the claim elements and a naked assertion that the corresponding elements were not found in the prior art."). "[I]t has long been the Board's practice to require an applicant to identify the alleged error in the examiner's rejections." *In re Jung*, 637 F.3d 1356, 1365–66 (Fed. Cir. 2011). The Board will not advocate for Appellants by scouring the record to see if the Board can identify some flaw in the Examiner's findings of fact, articulated reasoning, or legal conclusions. *See, e.g.*, *Halliburton Energy Services, Inc. v. M-I LLC*, 514 F.3d 1244, 1250 n.2 (Fed. Cir. 2008) ("'A skeletal 'argument[,]' really nothing more than an assertion, does not preserve a claim.'") (citation omitted). Accordingly, Appellants' contentions are insufficient to persuade us of reversible Examiner error.

Appellants also allege error in connection with the claim limitation, "wherein the first monitoring avatar can be virtually moved between the first virtual room and the second virtual room." Final Act. 13–14. In this regard, the Examiner finds Walker's toggling of team spaces by a monitoring person so as to view other virtual spaces and see details of the activities within those spaces (including member activity) and the movement of a user's associated avatar or representation in the virtual world from room to room (Final Act. 16–17) teaches or suggests the stated result of the disputed limitation. *Id.* Appellants contend Walker's toggle function does not disclose the rooms are connected because the rooms remain separate and are displayed separately. App. Br. 28. Instead, according to Appellants, "when the user toggles to a new room, which is a separate space, the user's avatar is

moved into the new room." *Id*. The Examiner responds "the rooms are connected as the user is able to move between connected communications." Ans. 16 (emphasis omitted).

We are not persuaded of Examiner error. During examination, claims are given their broadest reasonable interpretation consistent with the specification. *See In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). "Construing claims broadly during prosecution is not unfair to the applicant . . . because the applicant has the opportunity to amend the claims to obtain more precise claim coverage." *Id*.

The disputed limitation requires the connection of, not physical rooms or spaces but, virtual rooms. Unlike physical rooms, which may be connected by a doorway, hallway, or other path between the rooms, it is not self-evident what is meant by connecting virtual rooms, which exist only in the memory of a computer, i.e., virtually. As to such virtual environment, Appellants have provided insufficient evidence or persuasive argument that the step of connecting virtual rooms is not fully satisfied by the wherein clause of claim 1 specifying the desired result, i.e., providing a process by which an avatar can be virtually moved between virtual rooms. We are not persuaded the rooms are not connected because the rooms are displayed separately. Such argument is not commensurate in scope with the argued limitation. Instead, under a broad but reasonable interpretation of the disputed limitation, we agree with the Examiner in finding Walker's toggle function, which moves an avatar from room to room, teaches or suggests the argued limitation.

Appellants further contend error in the Examiner's alternative claim interpretation concluding the subject matter included in various "wherein"

clauses are recitations of intended use that are non-functional descriptive subject matter that do not limit the scope of the claims. App. Br. 29–31. Because we are unpersuaded by Appellants' arguments that the combination of Pickford and Walker is either improper or deficient in teaching or suggesting the disputed limitations including those recited by the subject wherein clauses, we do not decide whether the Examiner's alternative claim interpretation is improper.

For the reasons discussed above, we are unpersuaded the Examiner erred in rejecting independent claim 1 or, for the same reasons, independent claims 13 and 20. Accordingly, we sustain the rejection of independent claims 1, 13, and 20 under 35 U.S.C. § 103(a) over Walker and Pickford.

Claims 2, 3, 6–10, 14, 15, 18, and 19 (App. Br. 31–32).

Appellants do not separately argue the rejection of dependent claims 2, 3, 6–10, 14, 15, 18, and 19. App. Br. 31–32. Accordingly, we sustain the rejection of those claims under 35 U.S.C. § 103(a) over Walker and Pickford for the reasons set forth above in connection with their based independent claims 1 and 13.

Claim 11 (App. Br. 32)

Dependent claim 11 recites "[t]he method of claim 1, wherein, based on a defined attribute, the monitoring avatar is presented in a view that is shown to a supervisor and the monitoring avatar is not displayed in a view that is presented to the agent." The Examiner finds: (i) Walker's "ghost" display of a user associated with an activity, but who is not logged into the system; or (ii) Walker's ghost display of a monitoring user teaches or

suggests the disputed limitation of claim 11. Final Act. 26. Appellants
contend, in either case, Walker's ghost is displayed to each user; there is no
disclosure of displaying the ghost to a specific user and not to others. App.
Br. 32.

The Examiner responds, finding "Walker discloses [] in par. 0043
[that] the participant can be displayed as a ghost or semi-transparent avatar.
Walker does not disclose the monitoring avatar *has to be* represented by an
avatar[,] merely that the invention *can* represent a monitoring avatar."
Ans. 17 (emphasis added). The Examiner further finds

> it is well known in the art of computing and monitoring of
> computer technology, that monitoring computer activities of
> employees is performed without any designation or notification
> or alert or any other means. In other words, monitoring of
> computer activity and employees using computing devices
> [was] a common practice without providing any indication that
> monitoring is being performed. The Examiner asserts this is a
> well-known practice in the art to perform monitoring of
> computer activity without notifying users of the monitoring
> activity.

Id.

Appellants contend claim 11 requires more than not notifying
employees that they are being monitored, further specifying that "based [on]
a defined attribute, the monitoring avatar is presented in a view that is shown
to a supervisor and the monitoring avatar is not displayed in a view that is
presented to the agent." Reply Br. 12. Appellants argue, in Walker, "[t]he
ghost avatar is still presented to the user (i.e., the agent of claim 11), which
is contrary to what claim 11 requires." *Id.*

We are unpersuaded by Appellants' argument. Walker not only
suggests it is optional whether to display a user who is not logged into the

system, but that what is displayed may be in the form of a ghost, i.e., "a slight trace or vestige of something." *See The American Heritage Dictionary of the English Language* 555 (Morris ed., 1981). Thus, we agree Walker teaches or suggests display of some avatars to some users and not to others including the display of a user avatar only to the associated user (e.g., supervisor) and not to other users. Accordingly, we sustain the rejection of claim 11 under 35 U.S.C. § 103(a) over Walker and Pickford.

Claim 21 (App. Br. 32–33)

Dependent claim 21 recites

> The method of claim 1, further comprising:
> detecting, by the processor, in a third communication, at least one of a gesture and a facial recognition, wherein the third communication is a video call; and
> in response to detecting the at least one of the gesture and the facial recognition in the third communication, creating, by the processor, a third virtual group.

The Examiner finds Walker discloses monitoring user gestures to identify users who do not want to be bothered (Final Act. 50 (citing Walker ¶ 38)) and the reconfiguration of spaces based on information regarding context and content and user activity. *Id* (citing Walker ¶¶ 24, 31). Appellants argue Walker's gesture detection has nothing to do with creating virtual space, only to whether a user should be bothered. App Br. 33.

Appellants' argument is persuasive. The Examiner does not explain why the separate disclosures of Walker should be combined so as to teach or suggest to one skilled in the art that gesture detection be used as a basis to create a third virtual group. Accordingly, we do not sustain the rejection of dependent claim 21 under 35 U.S.C. § 103(a) over Walker and Pickford.

DECISION

We reverse the Examiner's decision to reject claims 1, 13, and 20 under 35 U.S.C. § 112(b).

We affirm the Examiner's decision to reject claims 1–3, 6–11, 13–15, and 18–22 under 35 U.S.C. § 101.

We affirm the Examiner's decision to reject claims 1–3, 6–11, 13–15, 18–20, and 22 under 35 U.S.C. § 103(a).

We reverse the Examiner's decision to reject claim 21 under 35 U.S.C. § 103(a).

Because we affirm at least one ground of rejection with respect to each claim on appeal, we affirm the Examiner's decision rejecting claims 1–3, 6–11, 13–15, and 18–22. *See* 37 C.F.R. § 41.50(a)(1).

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