

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CALLMINER, INC.,
Petitioner,

v.

NICE LTD.,
Patent Owner.

IPR2020-00245
Patent 8,553,872 B2

Before KEVIN F. TURNER, TERRENCE W. McMILLIN, and
STACY B. MARGOLIES, *Administrative Patent Judges*.

MARGOLIES, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining Some Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

In this *inter partes* review, instituted pursuant to 35 U.S.C. § 314, CallMiner, Inc. (“Petitioner”) challenges the patentability of claims 1, 2, and 4–6 of U.S. Patent No. 8,553,872 B2 (Ex. 1002, “the ’872 patent”), owned by NICE Ltd. (“Patent Owner”). We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed below, Petitioner has shown by a preponderance of the evidence that claims 1, 2, and 4 of the ’872 patent are unpatentable but has not shown by a preponderance of the evidence that claims 5 and 6 of the ’872 patent are unpatentable.

A. Procedural History

Petitioner filed a petition for *inter partes* review of claims 1, 2, and 4–6 of the ’872 patent. Paper 2 (“Pet.”). Patent Owner filed a Preliminary Response. Paper 9 (“Prelim. Resp.”). On July 13, 2020, we instituted an *inter partes* review of claims 1, 2, and 4–6 of the ’872 patent on the following ground:

Claims Challenged	35 U.S.C. §	References/Basis
1, 2, 4–6	103	Margulies I ¹ (incorporating Margulies II, ² Ezerzer ³), Wentink ⁴

¹ U.S. Patent No. 8,583,466 B2, filed Mar. 21, 2006, issued Nov. 12, 2013 (Ex. 1002).

² U.S. Patent No. 8,885,812 B2, filed Mar. 15, 2006, issued Nov. 11, 2014 (Ex. 1003).

³ U.S. Patent No. 7,366,293 B2, filed Mar. 2, 2001, issued Apr. 29, 2008 (Ex. 1004).

⁴ U.S. Patent Application Publication No. 2009/0003566 A1, filed June 29, 2007, published Jan. 1, 2009 (Ex. 1005).

Paper 8 (“Inst. Dec.”), 7, 23–24.

Subsequent to institution, Patent Owner filed a Patent Owner Response (Paper 21, “PO Resp.”), Petitioner filed a Reply (Paper 28, “Reply”), and Patent Owner filed a Sur-reply (Paper 37, “Sur-reply”). Petitioner relies on the Declaration of Benedict Occhiogrosso (Ex. 1006) and the Declaration of Benedict Occhiogrosso in Support of Petitioner’s Response (Ex. 1016). Patent Owner relies on the Declaration of Ivan Zatkovich (Ex. 2005).

We held an oral argument on April 13, 2021. A copy of the transcript of that argument was entered into the record. Paper 41 (“Tr.”).

B. Related Matters

The parties identify the following judicial proceeding in which the ’872 patent is asserted and which may affect, or be affected by, a decision in this proceeding: *NICE Ltd. v. CallMiner, Inc.*, Civil Action No. 1:18-cv-02024-RGA-SRF (D. Del). Pet. 3; Paper 3, 1; *see* 37 C.F.R. § 42.8(b)(2).

C. The ’872 Patent

The ’872 patent is titled “Method and System for Managing a Quality Process.” Ex. 1001, [54]. The ’872 patent discloses that many businesses and organizations use call centers to handle interactions with customers and that quality management of call centers is a valuable tool for maintaining and increasing performance, efficiency, and productivity. *Id.* at 1:6–17. According to the ’872 patent, “selecting calls for evaluation from thousands of recorded calls held by dozens of agents may be an overwhelming task” and randomly selecting calls “may severely limit or reduce possible benefits of an evaluation.” *Id.* at 1:33–39. The ’872 patent describes embodiments of an invention that “enable automatically selecting calls for evaluation

based on any number of parameters, indications, rules, thresholds, criteria, . . . or any other applicable data or information.” *Id.* at 3:19–23. For example, according the ’872 patent, “a quality plan may define any applicable parameters for selecting calls or interactions for evaluation.” *Id.* at 3:23–26.

The ’872 patent describes defining a quality task that “may be executed upon detecting various conditions,” such as breach of an associated key performance indicator (“KPI”). *Id.* at 4:54–57, 6:4–5, 6:22–26. According to the ’872 patent, examples of KPIs include call duration, average holding time, the time an agent took for completing an online form, and whether the call resulted in a sale. *Id.* at 5:44–46, 5:48–58.

Figures 2A–2E of the ’872 patent illustrate views of computer screens for defining a quality task. *Id.* at 6:13–14. Figure 2C is shown below.

Q-TASK DEFINITION

Q-TASK NAME & DETAILS

LOGIC

KPI

KPI NAME & THRESHOLD

TRANSFER RATE (%) THRESHOLD RED ZONE SPECIFICALLY ADVANCED

230

TERMINATE Q-TASK WHEN OUT OF KPI THRESHOLD.

EVALUATION FORMS

NOTIFICATIONS

SUMMARY

KPI ARE SELECTED FROM LIST OF DEFINED KPI IN THE SYSTEM.

KPI NAME: SELECT KPI

SCORE BASED: SCORE IS

SCORE IS: LOWER THAN 80

AND

SCORE IS: GREATER THAN 60

ADD EDIT DELETE

PLAN EXECUTION

EXECUTE WHEN KPI IS BREACHED FOR:

OVER 5 DAYS

ADD EDIT DELETE

235

237

FIG. 2C

Figure 2C above illustrates a computer screen for selecting a KPI to be associated with a quality task. *Id.* at 6:13–14, 7:57–59. As shown in

block 237, “a user may configure a quality task to be activated upon a breaching of an associated KPI.” *Id.* at 8:2–4. For example, as illustrated, the quality task may be activated if the KPI was breached for more than five days. *Id.* at 8:5–7. The ’872 patent also discloses associating an evaluation form with the quality task. *Id.* at 8:10–12.

Figure 4 of the ’872 patent, below, illustrates a flowchart of steps to implement embodiments of the invention. *Id.* at 10:46–48.

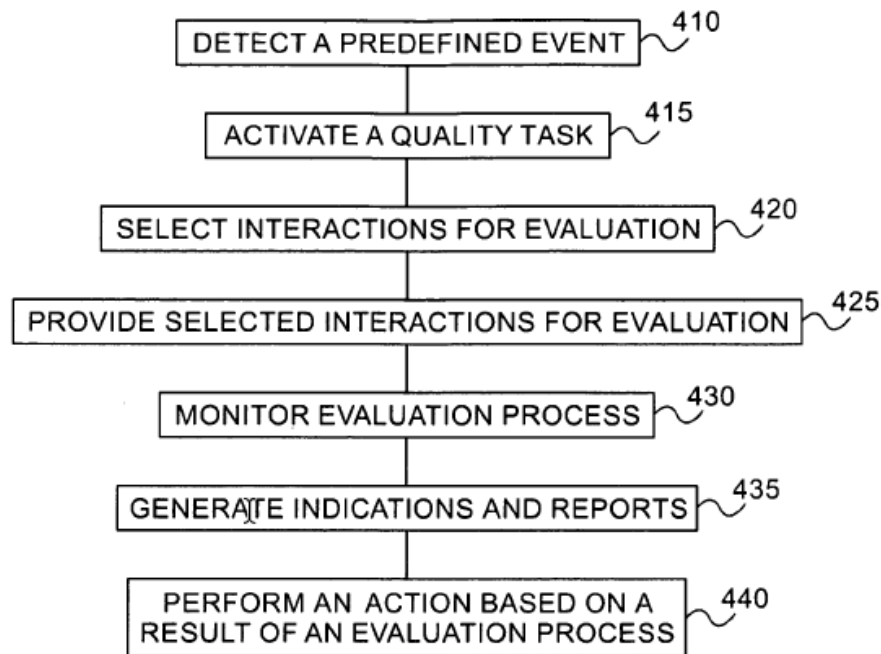


FIG. 4

As illustrated above, step 410 is detecting a predefined event, such as a breach of a KPI. *Id.* at 10:46–48. At step 415, a quality task is activated. *Id.* at 11:8. At step 420, interactions are selected for evaluation. *Id.* at 11:15–17. The ’872 patent discloses that “any applicable criteria may be used for selecting interactions for evaluation,” such as breaching of a KPI, a quota related to an agent, and a quota related to a quality manager. *Id.* at 11:17–26. Next, at step 425, selected interactions are provided to a quality

manager for evaluation. *Id.* at 11:43–44. At step 430, the evaluation process is monitored. *Id.* at 11:49–50. For example, according to the '872 patent, the number of evaluated interactions may be compared to a predefined quota of evaluations to be performed by a particular quality manager. *Id.* at 11:50–53.

At step 435, indications and/or reports related to the evaluated interactions are generated. *Id.* at 11:58–63. At step 440, based on a result of the evaluation process, an action is performed, such as launching a coaching package, scheduling a meeting of an evaluated agent with a superior, or updating an agent's record. *Id.* at 12:22–34.

D. Illustrative Claim

Among the challenged claims (claims 1, 2, and 4–6), claim 1 is independent. Claim 1 is illustrative of the subject matter of the challenged claims and reads as follows:

1. A computer-implemented method for performing a quality evaluation, the method comprising:
 - accepting a definition of a quality task associated with a predefined evaluation form, wherein the definition of the quality task is based on quality task parameters selected by a user on a graphical user interface;
 - activating the quality task upon detecting breaching of a predefined key performance indicator (KPI);
 - selecting from a plurality of interaction recordings one or more selected interaction recordings for evaluations, the one or more interactions recordings selected with relation to said quality task;
 - associating the selected interaction recordings with the predefined evaluation form;
 - displaying a graphical representation of the one or more interaction recordings and the evaluation form, wherein the

evaluation form is used to evaluate the one or more interaction recordings; and

performing at least one predefined action based on the results.

Id. at 14:37–58.

II. DISCUSSION

A. Principles of Law

To prevail in its challenge to Patent Owner’s patent claims, Petitioner must demonstrate by a preponderance of the evidence that the claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). “In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). The burden of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–27 (Fed. Cir. 2008)) (discussing the burden of proof in *inter partes* review).

A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time of the invention to a person having ordinary skill in the art. *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including the following: (1) the scope

and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) objective evidence of nonobviousness.⁵ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). “A determination of whether a patent claim is invalid as obvious under § 103 requires consideration of all four *Graham* factors, and it is error to reach a conclusion of obviousness until all those factors are considered.” *Apple Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1048 (Fed. Cir. 2016) (en banc) (citations omitted). “This requirement is in recognition of the fact that each of the *Graham* factors helps inform the ultimate obviousness determination.” *Id.*

B. Level of Ordinary Skill

Petitioner asserts that a person of ordinary skill in the art “would have held a bachelor’s degree in electrical engineering, computer engineering, or telecommunications engineering, and would have had a combined 3 to 5 years of experience working in the technical fields of: (1) telephone communications systems design and implementation; (2) voice/audio digitization and digital recording; and (3) Computer Telephony Integration (CTI).” Pet. 7 (citing Ex. 1006 ¶ 56). Petitioner adds that a person of ordinary skill in the art “would also have had 1 year of experience in call or contact center design and operations, including work force quality management.” *Id.* Petitioner also asserts that “[a]dditional formal technical education could substitute for less technical experience, and vice versa.” *Id.*

⁵ The parties do not address objective indicia of nonobviousness, which accordingly do not form part of our analysis.

Patent Owner disagrees with Petitioner’s assessment of the level of ordinary skill, asserting that the educational background is too narrow and that the work experience is incorrect. PO Resp. 8–10. Specifically, Patent Owner asserts that an ordinarily skilled artisan “would have held a bachelor’s degree in electrical engineering, computer engineering, telecommunications engineering, computer science, or a related field, and would have had 1 to 3 years of experience working in call or contact center design and operations, including work force quality management.” PO Resp. 9–10 (citing Ex. 2005 ¶ 29). Like Petitioner, Patent Owner asserts that “[a]dditional formal technical education could substitute for less technical experience, and vice versa.” *Id.* at 10.

Neither party asserts that the patentability issues turn on the level of ordinary skill that we adopt. *See* Tr. 36:14–19; Ex. 2005 ¶ 25 (Patent Owner’s declarant stating that, “[w]hile I disagree with Petitioner’s proposed definition of a [person of ordinary skill in the art, my opinions would not change if Petitioner’s level of ordinary skill was adopted in this proceeding”). We determine that the level of ordinary skill proposed by Petitioner is consistent with the challenged patent and the asserted prior art and we therefore adopt that level for purposes of our analysis below.

C. Claim Construction

In an *inter partes* review based on a petition filed on or after November 13, 2018, we apply the same claim construction standard that would be used in a civil action under 35 U.S.C. § 282(b), following the standard articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). 37 C.F.R. § 42.100(b) (2019); 83 Fed. Reg. 51,340, 51,340–41, 51,343 (Oct. 11, 2018). In applying such standard, claim terms

are generally given their ordinary and customary meaning, as would be understood by a person of ordinary skill in the art, at the time of the invention and in the context of the entire patent disclosure. *Phillips*, 415 F.3d at 1312–13. “In determining the meaning of the disputed claim limitation, we look principally to the intrinsic evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips*, 415 F.3d at 1312–17).

Petitioner proposes constructions for the phrases (1) “key performance indicator”/“KPI”; (2) “quality task”; and (3) “selecting from a plurality of interaction recordings one or more selected interaction recordings for evaluations, the one or more interactions recordings selected with relation to said quality task.” Pet. 24–30. Patent Owner asserts that, of the terms Petitioner proposes for construction, only “quality task” requires express construction to resolve the patentability issues raised in this proceeding. PO Resp. 10. Below, we address the construction of “quality task” and determine that the other terms do not require express construction.

The parties’ proposed constructions of “quality task” are shown below:

Petitioner’s proposal	Patent Owner’s proposal
an associated collection of KPIs, logic, actions, evaluation forms, parameters, thresholds, criteria, settings, configuration, context, aspects or any other applicable data or information	executable logic that performs a quality evaluation of one or more interaction recordings

Pet. 26; PO Resp. 11.

Petitioner’s proposed construction comes from the ’872 patent specification, which states that “[a] quality task may be viewed as an associated collection of KPIs, logic, actions, evaluation forms, parameters, thresholds, criteria, settings, configuration, context, aspects or any other applicable data or information.” Ex. 1001, 6:5–9; *see* Pet. 26–27.

Patent Owner argues that Petitioner’s “exceedingly broad construction should be rejected because it is so at odds with the plain and ordinary meaning of the term that it would entirely eliminate both concepts of ‘quality’ and ‘task.’” PO Resp. 10–11. Relying on the testimony of its declarant, Mr. Zatkovich, Patent Owner proposes that the term means “executable logic that performs a quality evaluation of one or more interaction recordings.” *Id.* at 11 (citing Ex. 2005 ¶ 37). Patent Owner asserts that the language of claim 1 “expressly demands that the ‘*quality* task’ provide some indication or measure of *quality*.” *Id.* at 12–13. Patent Owner further argues that, according to the ’872 patent, a fundamental part of the concept of a quality task is providing a quality evaluation of one or more interaction recordings. *Id.* at 13–14.

In reply, Petitioner asserts that Patent Owner ignores an explicit definition of “quality task” in the specification. Reply 3–4 (citing Ex. 1001, 6:5–9). Petitioner also argues that the ’872 patent discloses that a human being performs quality evaluations and there is no disclosure of executable logic performing quality evaluations. *Id.* at 4.

In sur-reply, Patent Owner asserts that the cited passage from the specification, which states how a quality task “may be viewed as,” is not a definition. Sur-reply 5–10. Patent Owner also asserts that Figure 3’s disclosure that “the quality task will have more evaluations performed if

other q-tasks do not have enough interactions to evaluate” is evidence that the specification discloses that executable logic can perform quality evaluations. *Id.* at 11–13.

We agree with Patent Owner that the statement in the specification on which Petitioner relies for its construction is not definitional, because it states how the quality task “may be viewed” rather than how the task is necessarily viewed. *See* Ex. 1001, 6:5–9. Also, because the passage from the specification is a broad description of what the quality plan may encompass, we do not find Petitioner’s proposal helpful in delineating the scope of “quality task” in the context of the patentability issues raised in this proceeding. However, we do acknowledge that the ’872 patent describes a “quality task” quite broadly, and provides options for what a quality task may encompass. As explained below, we are not persuaded that we should adopt Patent Owner’s construction because the specification does not clearly describe the quality task itself as *performing* a quality evaluation for one or more interaction recordings. Rather, the patent describes a quality task as facilitating a person such as a manager to perform the evaluation.

Figures 2A–2E of the ’872 patent illustrate examples of computer screens used to define a quality task. Ex. 1001, 6:13–14. Figures 2A and 2B show that defining a quality task includes defining “various aspects of a quality task’s logic.” *Id.* at Figs. 2A, 2B, 6:26–30. Figures 2A and 2D illustrate that “an evaluation form may be associated with a quality task.” *Id.* at Figs. 2A, 2D, 8:10–28. According to the ’872 patent, the “associated evaluation form may be provided to a quality manager who may use the evaluation form to evaluate an interaction.” *Id.* at 8:11–13.

The '872 patent also describes configuring a “quality plan,” which “may be associated with one or more quality tasks, KPIs, agents or agents groups, quality managers, indications etc.” *Id.* at 9:18–21. Patent Owner asserts that Figure 3—which “may be used to configure a quality plan” (*id.* at 9:35–36)—illustrates why a “quality task” (as opposed to a person) can perform an evaluation. PO Resp. 14–15; Sur-reply 11–13. The bottom portion of Figure 3 is shown below.

QUALITY TASK	KPI	PERCENT	COMPENSATION	ACTIVE
SERVICES	SERVICE AHT	80%	☐	☐
SALE TRANSFER	SALE TRANSFER	15%	☐	☐
STANDARD QM		5%	☐	☐

321: THIS IS THE ONLY QUALITY TASKS WHICH IS NOT ATTACHED TO A KPI

322: INDICATES THE PERCENTAGE OF QM QUOTA WHICH SHOULD BE SPENT ON THE Q-TASK

323: INDICATES THE PERCENTAGE OF QM QUOTA WHICH SHOULD BE SPENT ON THE Q-TASK

324: OPENS QUALITY TASK DEFINITION PANE FOR Q-PLAN

325: INDICATES THAT THIS Q-TASK WILL HAVE MORE EVALUATIONS PERFORMED IF OTHER Q-TASKS DO NOT HAVE ENOUGH INTERACTIONS TO EVALUATE

326: OPENS QUALITY TASK DEFINITION PANE FOR Q-PLAN

FIG. 3

Block 320 of Figure 3, above, illustrates that “[a]ny number of quality tasks described herein may be associated with a quality plan.” Ex. 1001, 10:5–6. The '872 patent states that, “[a]s shown by 324, a user may configure a quality task to compensate for other quality tasks by checking the appropriate check box.” *Id.* at 10:21–23. For example, according to the '872 patent, “by checking the check box of the ‘services’ quality task[,] a

user may cause the ‘services’ quality task to select more interactions for evaluation than the allocated 80% in case other quality tasks . . . fail to select their share.” *Id.* at 10:23–27. The explanation bubble in Figure 3 originating from the top box in the “compensation” column discloses that checking that box “indicates that this [quality task] *will have more evaluations performed* if other [quality tasks] do not have enough interactions to evaluate.” *Id.* at Fig. 3 (emphasis added). Patent Owner relies on this description in Figure 3 as disclosing that the quality task itself performs the evaluation. Sur-reply 11–13. We are not persuaded.

The description in the patent accompanying Figure 3 explains that the compensation box is used to indicate that the corresponding quality task is used to “select more interactions for evaluation.” Ex. 1001, 10:23–27. The patent does not say that the quality task performs the evaluation. Also, the explanation bubble in the figure uses the passive voice of “have more evaluations performed” and does not definitively say that the quality task—as opposed to a manager or supervisor—is the entity performing the evaluation. *See id.* at Fig. 3. Moreover, the description accompanying Figure 3 refers to the quality tasks “described herein.” *Id.* at 10:5–6. The ’872 patent consistently and repeatedly describes evaluations as being performed by a person such as a quality manager and does not describe executable logic performing an evaluation. *See id.* at 9:46–49, 9:55–56, 10:37–40, 11:43–49. As Petitioner argues, the quality task facilitates the evaluation but does not perform the evaluation. *See* Tr. 7:25–8:8, 11:16–22.

In light of the foregoing, we agree with Patent Owner that the ’872 patent describes a quality task as “executable logic” but do not agree that the patent describes, let alone limits, a quality task as executable logic *that*

performs a quality evaluation. We also do not find it necessary to adopt the last portion of Patent Owner’s construction—“of one or more interaction recordings”—because the claim later recites limitations directed to interaction recordings and the evaluation. Thus, we modify Patent Owner’s proposal and construe “quality task” as “executable logic that facilitates a quality evaluation.”

We determine that no other claim terms require express construction in order to address the patentability issues presented in this proceeding.

*D. Asserted Obviousness Over Margulies I
(Incorporating Margulies II and Ezerzer) and Wentink*

Petitioner contends that claims 1, 2, and 4–6 of the ’872 patent are unpatentable under 35 U.S.C. § 103 as obvious over Margulies I (incorporating Margulies II and Ezerzer) and Wentink. Pet. 6, 31–66. Relying in part on the testimony of Mr. Occhiogrosso, Petitioner explains how the references allegedly teach or suggest the claim limitations and provides reasoning for combining the teachings of the references. *Id.* at 31–66.

1. Summary of Margulies I

Margulies I is a U.S. patent titled “System and Method for Routing Workflow Items Based on Workflow Templates in a Call Center.” Ex. 1002, [54]. Margulies I discloses creating workflow templates for call centers and routing workflow items in response to key performance indicator (KPI) triggers. *Id.* at 1:22–27, 5:54–63, 6:21–28. Margulies I discloses that “each workflow item template can be used to link to KPI-specific triggers, such as . . . triggers for supervisor intervention.” *Id.* at 12:46–49.

Margulies I also discloses software that allows supervisors to monitor contact center agents and to score agent transactions. *Id.* at 8:6–11. For example, Margulies I discloses that supervisors can score agent performance based on “the efficient handling of workflow items.” *Id.* at 19:7–10. A workflow item may be a phone call. *Id.* at 1:29–33. According to Margulies I, a supervisor can “select a specific workflow item” and “answer questions dealing with scoring and weighting the KPIs in question for that agent.” *Id.* at 19:19–23. Specifically, as illustrated in Figure 15, Margulies I discloses that the supervisor selects a specific workflow item (step 1518), the KPI template is loaded (step 1520), and “the workflow item is displayed/played for the supervisor” (step 1522). *Id.* at 19:30–41.

Margulies I further discloses that supervisors can score agent transactions using templates described in Margulies II (*id.* at 8:11–16), which Margulies I incorporates in its entirety by reference (*id.* at 1:13–16).

2. *Summary of Margulies II*

Margulies II is a U.S. patent titled “Dynamic Customer Satisfaction Routing.” Ex. 1003, [54]. Margulies II discloses that “[s]upervisors or third parties (e.g., a compliance officer) can score agent performance and/or customer interaction” based on templates. Ex. 1003, 12:4–6. As illustrated in Figure 13 (which is similar to Figure 15 of Margulies I), Margulies II discloses that a supervisor can select a specific interaction (step 1318) and a KPI template is loaded (step 1320). *Id.* at 12:27–33. According to Margulies II, “[o]nce the specific interaction is selected, a KPI Template as well as one or more . . . scripts are displayed for Supervisor input.” *Id.* at 12:34–36. Margulies II also discloses that a KPI metric and a score for the

KPI metric “are available from a drop down list for the supervisor to select.” *Id.* at 12:36–38.

Margulies II further discloses that “[w]hen the supervisor completes the scoring session, the scores are stored in a database (step 1346) and the supervisor is then queried on whether a specific action is required (step 1348).” *Id.* at 12:45–48. Margulies II also discloses “routing subsequent call center actions based on the stored score.” *Id.* at 3:22–25; *see also id.* at 18:23–25 (disclosing “dynamically rout[ing] subsequent interactions based on the historical performance of any agent”).

3. Summary of Ezerzer

Ezerzer is a U.S. patent titled “Call Center Administration Manager.” Ex. 1004, [54]. Margulies I incorporates Ezerzer by reference in its entirety. Ex. 1002, 2:6–12. Ezerzer describes an administration manager for configuring a call center and a call center’s resources. Ex. 1004, 8:29–32. Ezerzer illustrates interactive screens of the administration manager as they appear in a web browser (Internet Explorer). *Id.* at 9:65–10:2; Figs. 2–96.

4. Summary of Wentink

Wentink is a U.S. patent application publication titled “System and Method for Scoring Recorded Interactions.” Ex. 1005, [54]. Wentink explains as background that systems for facilitating supervision of contact center agents “often require additional personnel and distract contact center employees from their primary task of speaking with customers.” *Id.* ¶ 4. Wentink discloses a system for “automatically facilitating the process of assigning and delivering recorded communications to supervisors for scoring within a contact center.” *Id.* ¶ 1.

Specifically, Wentink discloses a system to “automatically distribute selected communication recordings to a workgroup of scoring users, receive and store the scores assigned by the scoring users, and generate reports based upon scoring progress, status, and workload in addition to agent performance.” *Id.* ¶ 24. Wentink discloses that “a set of business rules defin[e] which communication recordings should be scored.” *Id.* ¶ 25. The business rules are used “to select a subset of communication recordings from a continually growing/changing collection.” *Id.* According to Wentink, the business rules “are defined using a software implemented wizard allowing a contact center manager or other supervisor to quickly define what portion and/or type of recordings should be scored and other associated attributes.” *Id.*

Wentink discloses “match[ing] the attributes of the recording to those of a subset of scoring users,” thereby “increasing the accuracy of scoring by assigning recording to users having the requisite skills to analyze the communication.” *Id.* ¶ 5. Wentink also discloses “distribut[ing] recordings to the selected scoring users based upon availability or work load.” *Id.* ¶ 6.

Wentink further describes presenting a scoring user with a scoring form and an audio file of the communication recording to be scored. *Id.* ¶ 26. Figure 3 of Wentink, below, illustrates an embodiment of the electronic scoring form. *Id.* ¶ 26.

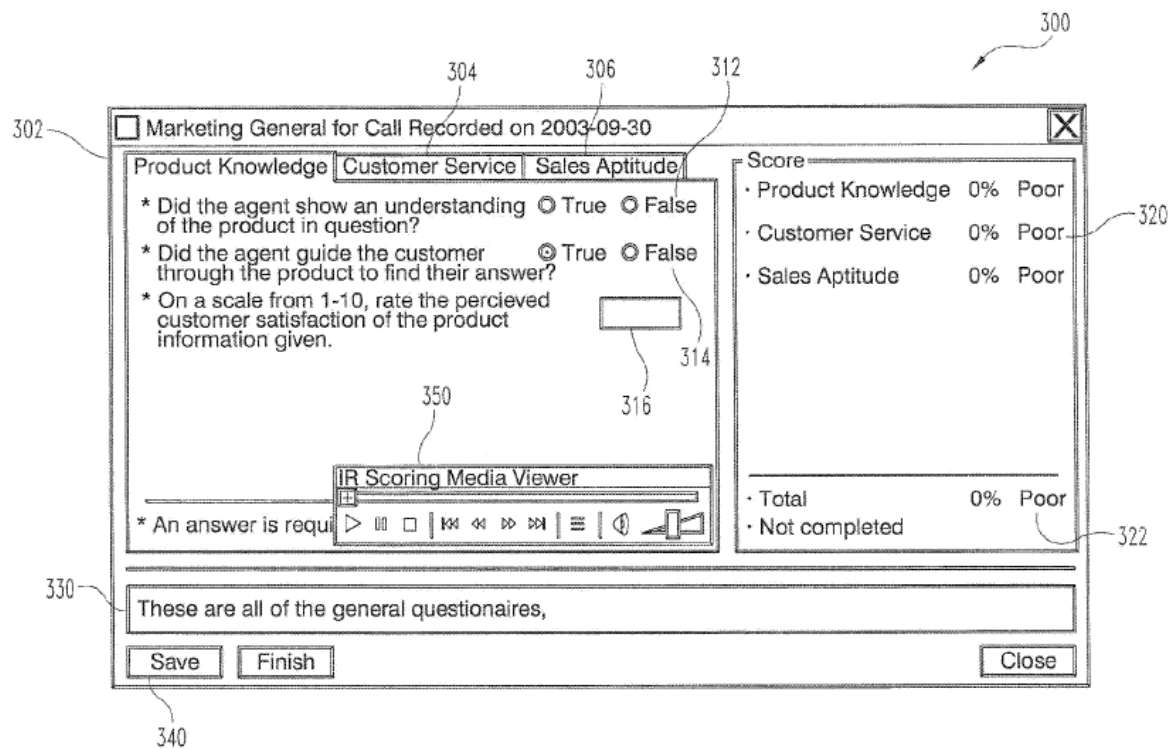


Fig. 3

As illustrated in Figure 3 above, scoring form 300 is divided into several components, such as Product Knowledge tab 302, Customer Service tab 304, and Sales Aptitude tab 312. *Id.* ¶ 27. Wentink discloses that “the scoring user may interface with the scoring form 300 to assign scores to various criteria such as . . . the agent’s understanding of the product, the agent’s customer interaction skills, and/or the agent’s overall performance.” *Id.* Wentink discloses that “the scoring user is able to listen to the recorded communication using integrated playback controls 350.” *Id.* ¶ 28. According to Wentink, once the scoring form is completed, “the scoring user selects the save option 340.” *Id.*

5. *Analysis*

a. *Independent claim 1*

Petitioner generally relies on Margulies I or Margulies II for teaching defining and activating a quality task, on the combination of Margulies I and Wentink for teaching selecting interaction recordings with relation to the quality task, and on either Margulies II or the combination of Margulies II and Wentink for teaching displaying a graphical representation of the recordings and an evaluation form. Pet. 32–55.

i. *“A computer-implemented method for performing a quality evaluation”*

Petitioner persuasively shows that Margulies I, which incorporates Margulies II, discloses the preamble. Pet. 32–33 (citing Ex. 1002, Fig. 1, 8:6–9; Ex. 1003, Fig. 13, 12:18–41; Ex. 1006 ¶¶ 74–77). Margulies I discloses a computer-implemented workflow that allows a supervisor to perform a quality evaluation. Ex. 1002, 8:6–9 (“The Internet/User Zone 10 further implements access software that allows Supervisors to provide monitoring and coaching of both contact center agents and knowledge workers.”), 8:9–16 (disclosing that supervisors can score agent transactions and other workflow items in real time or off-line using templates as described in Margulies II); Fig. 1 (illustrating Internet/User Zone 10); Ex. 1006 ¶ 75 (citing Ex. 1002, 8:11–16). Margulies II also discloses, as illustrated in Figure 13, a computer-implemented process in which a supervisor can score an interaction. Ex. 1003, Fig. 13, 12:18–41.

ii. *“accepting a definition of a quality task associated with a predefined evaluation form, wherein the definition of the quality task is based on quality task parameters selected by a user on a graphical user interface”*

Petitioner persuasively shows that Margulies I discloses the “accepting a definition of a quality task” limitation. Pet. 33–41 (citing Ex. 1002, Figs. 9A–9C, 8:48–49, 12:18–67, 13:41–46, 13:52–54, 14:4–9, 14:35–58, 15:11–14, claim 1; Ex. 1004, Fig. 16, 9:65–10:9; Ex. 1006 ¶¶ 78–91). Petitioner persuasively shows that Margulies I (incorporating Margulies II and Ezerzer) discloses accepting a definition of a workflow template (a quality task) associated with a key performance indicator (KPI) template (a predefined evaluation form), and that the definition is based on parameters selected by a user on a graphical user interface.

Margulies I’s Figures 9A through 9C illustrate the steps for defining a workflow template. Ex. 1002, 9:3–4, 13:38–41. Margulies I discloses that the system accepts a definition of the workflow template by way of an administrator user selecting parameters on an administrator manager interface. *Id.* at 13:41–46 (“An administrator will use the Administration Manager interface . . . to define Workflow Templates.”); *see also* Ex. 1004, 9:65–10:9, Figs. 2–96 (Ezerzer disclosing screenshots of the graphical user interface for the administration manager). The parameters may relate to quality in that Margulies discloses that workflow templates “provide the means to create, define and store . . . ‘trigger points’ for each workflow item” and that each template “can be used to link to KPI-specific triggers, such as routing triggers or triggers for supervisor intervention.” Ex. 1002, 12:42–49. Margulies I further discloses that “[s]kills, workgroup requirements such as service levels, customer priorities, and workforce preferences may also be used as triggers.” *Id.* at 13:21–23. According to Margulies I, “any piece of data or workflow event that can be characterized and parameterized in the database can essentially be used as a trigger.” *Id.*

at 13:23–25. Margulies I further discloses that workflow templates include scripts and routing rules. *Id.* at claim 1; Ex. 1006 ¶ 81. Margulies I thus discloses that its workflow template is executable logic that facilitates a quality evaluation.

Margulies I also discloses that the workflow template may be associated with a KPI template (a predefined evaluation form). For example, Figures 10–13 “illustrate processes for linking Workflow Templates and KPI Templates to specific media and/or project types.” *Id.* at 15:11–14. Margulies II provides further details as to how a call center supervisor uses a KPI template as an evaluation form to score a call center agent or a caller interaction. Ex. 1003, Fig. 13, 12:18–44.

Relying on its proposed construction of “quality task,” Patent Owner argues that Margulies I’s workflow template is not a quality task. PO Resp. 28–32. Patent Owner asserts that the workflow template is “for defining a workflow in a call center, not for performing a quality evaluation.” *Id.* at 31; *see also id.* at 30–31 (arguing that workflow templates are “used as instructions for generating the user interfaces that guide an agent through an interaction and/or route workflow items once received in the contact center” and are not executable to “perform a quality evaluation of one or more interaction recordings”). All of Patent Owner’s arguments regarding this claim limitation are based on a purported distinction of the quality task performing a quality evaluation. *See id.* at 28–32; Sur-reply 15–16.

Because we do not adopt the portion of Patent Owner’s construction requiring that the quality task “perform” a quality evaluation (*see supra* Section II.C.), Patent Owner’s arguments distinguishing Margulies I’s workflow template from the claimed “quality task” are not persuasive.

iii. “activating the quality task upon detecting breaching of a predefined key performance indicator (KPI)”

Petitioner persuasively shows that Margulies I discloses the “activating the quality task” limitation. Pet. 42–44 (citing Ex. 1002, 5:54–63, 6:21–26, 9:35–40, 13:6–7, 13:23–25, 15:52–55; Ex. 1006 ¶¶ 92–96). Margulies I discloses activating the workflow template (quality task) upon detecting breaching of a predefined KPI. Ex. 1002, 5:54–63, 6:21–26, 9:35–40, 13:4–7, 13:21–25. Specifically, Margulies I discloses “executing a workflow template associated with a workflow item and at least one trigger point” and “routing the workflow item in response to activation of the trigger point.” Ex. 1002, 5:54–58. Margulies I also discloses that “[t]he trigger point may be a key performance indicator trigger.” *Id.* at 5:61–63; *see also id.* at 6:21–26 (disclosing that a workflow template is used to link a customer priority to “key performance indicator (KPI) specific triggers”). Margulies I explains that “[t]riggers are actions based on pre-set parameters that occur as a result of certain events or thresholds being accomplished” and that “[t]riggers may act as ‘entry points’ or ‘next step’ instructions for workflow.” *Id.* at 13:4–7. Margulies states that “service levels [and] customer priorities” may be used as triggers. *Id.* at 13:21–23.

Patent Owner argues that Margulies I does not teach detecting breaching of a KPI. PO Resp. 33–35. Patent Owner asserts that there is no indication in Margulies I that a KPI-specific “trigger” is a detected “breach” of a KPI. *Id.* at 34–35. In reply, Petitioner points to the disclosure in Margulies II (incorporated in Margulies I by reference) that “thresholds of measured KPIs” are used to take action on calls that breach the threshold. Reply 19–20 (citing Ex. 1003, 3:34–38, 10:53–55). Petitioner also points to

the disclosure in Margulies I that “[t]riggers are actions based on pre-set parameters that occur as a result of certain events or thresholds being accomplished.” *Id.* at 20 (quoting Ex. 1002, 13:4–7). Petitioner gives an example of how there is no functional difference between breaching and triggering: “[I]f a user wishes to identify calls that lasted longer than 30 seconds, they can either set the KPI trigger to 31 seconds or set the KPI threshold to 30 seconds[,] thereby initiating a breach at 31 seconds.” *Id.* (emphasis omitted).

We are not persuaded by Patent Owner’s arguments attempting to distinguish a trigger from a breach. Margulies I (including Margulies II) discloses that a trigger point may be a KPI trigger and that a trigger may be based on a threshold. Ex. 1002, 5:61–63, 13:4–7; Ex. 1003, 3:34–38, 10:53–55. We agree with Petitioner that disclosing acting on a KPI trigger based on a threshold discloses detecting a breach of a KPI, as illustrated by Petitioner’s example of a 30-second threshold. *See* Reply 20 (citing Ex. 1016 ¶ 27).

Patent Owner also argues that “once a KPI trigger occurs in Margulies I, it is not used to identify the existence of a problem or activate the selection of interactions for further evaluation.” Sur-reply 19 (emphasis omitted). Rather, according to Patent Owner, the KPI trigger “is used for purposes related to directing interactions between a customer and an agent.” *Id.* We disagree with Patent Owner. Patent Owner focuses too narrowly on the aspect of Margulies I regarding routing of calls. *See id.* However, Margulies I also discloses that “each workflow item template can be used to link to KPI-specific triggers, such as routing triggers or triggers for supervisor intervention.” Ex. 1002, 12:46–49; *see also id.* at 6:21–28

(disclosing supervisors using workflow templates). Petitioner persuasively shows that Margulies I discloses activating the workflow template (quality task) upon detecting breaching of a predefined KPI.

- iv. *“selecting from a plurality of interaction recordings one or more selected interaction recordings for evaluations, the one or more interactions recordings selected with relation to said quality task”*

Petitioner persuasively shows that the combination of Margulies I and Wentink teaches the “selecting” limitation. Pet. 44–49 (citing Ex. 1002, 1:29–44, 8:9–16, 19:7–23, 19:30–41; Ex. 1003, 12:4–6, 12:10–13, 12:20–44; Ex. 1005 ¶¶ 4, 5, 24, 25; Ex. 1006 ¶¶ 97–108). Margulies I (including Margulies II) discloses a supervisor manually selecting interaction recordings to evaluate in conjunction with a workflow template (a “quality task”). Figure 15 illustrates the supervisor view of a workflow document in which “[s]upervisors can score agent and knowledge worker performance (KPIs) based on the efficient handling of workflow items based on the Workflow Templates.” Ex. 1002, 19:5–10. Margulies I discloses that a supervisor “select[s] specific workflow items based on a plurality of search criteria including company, customer, agent, knowledge worker and specific workflow item.” *Id.* at 19:15–19. As illustrated in Figure 15, at steps 1504 and 1506, a supervisor searches for an interaction to score based on worker or workflow item. *Id.* at Fig. 15, 19:28–30. After choosing a date range and specific workflow item, a KPI template is loaded. *Id.* at Fig. 15 (steps 1516, 1518, and 1520), 19:34–37. Next, the workflow item is found from a database and “displayed/played for the supervisor to see or hear or both.” *Id.* at Fig. 15 (steps 1522 and 1524), 19:38–41. Margulies II similarly discloses a supervisor “select[ing] specific interactions based on a plurality

of search criteria including company, customer, agent and specific interaction.” Ex. 1003, Fig. 13, 12:10–13, 12:18–33.

Wentink discloses using a set of business rules to automatically select a subset of communication recordings for evaluation. Specifically, Wentink discloses an improved system for distributing call recordings for scoring by, for example, matching the attributes of the recording to those of the scoring users. Ex. 1005 ¶¶ 4, 5. Figure 2 illustrates the process for configuring and operating the system to “automatically distribute selected communication recordings to a workgroup of scoring users.” *Id.* ¶ 24. As illustrated in Figure 2, the system receives “a set of business rules defining which communication recordings should be scored (stage 202).” *Id.* at Fig. 2, ¶ 25. According to Wentink, “these business rules are utilized by Recording Server 26 [shown in Figure 1] to select a subset of communication recordings from a continually growing/changing collection it maintains.” *Id.* ¶ 25. Wentink discloses that “the rules are defined using a software implemented wizard allowing a contact center manager or other supervisor to quickly define what portion and/or type of recordings should be scored and other associated attributes.” *Id.*

Petitioner provides persuasive reasoning with rational underpinning for combining the teachings of Margulies I (incorporating Margulies II) and Wentink. Pet. 44, 47, 48–49 (citing Ex. 1006 ¶¶ 97, 106–108). Petitioner persuasively shows that it would have been obvious to a person of ordinary skill in the art to substitute the manual selection of interaction recordings disclosed in Margulies I and Margulies II “with a system that automatically and non-randomly selects the interaction recordings for evaluation, using certain predetermined criteria, as disclosed in Wentink.” Pet. 44 (citing Ex.

1006 ¶ 97) (emphasis omitted). An ordinarily skilled artisan would have made this substitution (replacing a manual selection process with an automated, business rules-driven process) to cure the inefficiency disclosed in Wentink that “quality management systems in the prior art ‘often require additional personnel and distract contact center employees from their primary task of speaking with customers.’” Ex. 1005 ¶ 4; Ex. 1006 ¶ 108. Moreover, the substitution would have no unexpected results and would have required nothing more than a straightforward software modification of replacing the manual selection code disclosed in Margulies I and II with automated rules to determine which interaction recordings to select based on parameters defined by a user, as disclosed in Wentink. Ex. 1006 ¶¶ 106–108.

Patent Owner argues that “using the Wentink selection method in place of the Margulies I and II selection method does not result in” the claimed system because “Petitioner proposes replacing the very thing in Margulies I and II that it relies on for the claim requirement of selection ‘with relation to said quality task.’” PO Resp. 38–39 (emphases omitted). In other words, Patent Owner asserts that Petitioner’s combination—which Patent Owner asserts is “wholesale substitution” of the selection regime in Margulies I and II with the selection regime in Wentink—removes using the Margulies I workflow template to select interaction recordings. *Id.* at 38 (emphasis omitted). Patent Owner adds that Petitioner provides no reason why an ordinarily skilled artisan would have selected to add the automated selection of Wentink based on business rules and also in relation to a workflow template. *Id.* at 39.

Petitioner responds that Patent Owner ignores the assertion in the Petition that it would have been obvious to replace the manual selection process in Margulies I and II with the automatic and non-random selection process disclosed in Wentink. Reply 21–22 (citing Pet. 48; Ex. 1006 ¶ 106). Petitioner adds that “the concept of replacing a time-consuming manual selection process with a faster and more efficient automated process” was well known. *Id.* at 22 (citing Ex. 1016 ¶ 28).

We are not persuaded by Patent Owner’s arguments regarding Petitioner’s combination. Petitioner persuasively explains that the modification of Margulies I and II is to the code for manual selection within the workflow template code with automated rules based on parameters defined by a user and the known benefits of replacing a manual process with an automated process. Pet. 44, 47–49; Ex. 1006 ¶¶ 106–108; Ex. 1005 ¶ 4; Ex. 1016 ¶ 28.

v. *“associating the selected interaction recordings
with the predefined evaluation form”*

Petitioner persuasively shows that Margulies I (including Margulies II) discloses the “associating” limitation. Pet. 49–51 (citing Ex. 1002, Fig. 15, 1:29–33, 19:36–41; Ex. 1003, Fig. 13, 12:27–41; Ex. 1006 ¶¶ 109–112). Margulies I discloses that when a supervisor selects a workflow item (an interaction recording), a KPI template (predefined evaluation form) is loaded in association with the interaction recording. Specifically, Margulies I discloses that workflow items may be “phone calls, e-mails, internet-based chats, voice messages, and other real-time and non-real time media interactions.” Ex. 1002, 1:29–33; *see also id.* at Fig. 15 (step 1524), 1:40–41 (disclosing finding the interaction from the database). Margulies I also

discloses that “[s]electing the specific workflow item includes loading the KPI template (step 1520)” and that “[o]nce the workflow item is selected, the workflow item is displayed/played for the supervisor to see or hear or both (step 1522).” *Id.* at Fig. 15, 19:36–41; *see also id.* at 8:11–16 (disclosing that supervisors can score workflow items using templates as described in Margulies II).

Margulies II likewise discloses loading a KPI template (a predefined evaluation form) when an interaction recording is selected and using the KPI template to evaluate the interaction recording. Ex. 1003, Fig. 13 (steps 1318 through 1334), 12:27–41. Margulies II discloses “[o]nce the specific interaction is selected, a KPI template as well as one or more of the CGI, JSP, and HTML scripts are displayed for Supervisor input (step 1326).” *Id.* at 12:34–63. Margulies further discloses how the supervisor uses the KPI template to score an interaction. *Id.* at Fig. 13, 12:34–44.

Margulies I (including Margulies II) thus discloses associating the selected interaction recordings (workflow items) with the predefined evaluation form (KPI template). Patent Owner does not raise any arguments specific to this claim limitation. *See generally* PO Resp.; Sur-reply.

vi. “displaying a graphical representation of the one or more interaction recordings and the evaluation form, wherein the evaluation form is used to evaluate the one or more interaction recordings”

Petitioner persuasively shows that Margulies I (incorporating Margulies II) alone or in combination with Wentink teaches the “displaying” limitation. Pet. 51–54 (citing Ex. 1003, 12:29–38; Ex. 1005, Fig. 3, ¶¶ 26–28; Ex. 1006 ¶¶ 113–116). Margulies II discloses that once a specific interaction is selected, “the supervisor can display or play the visual or audio interaction.” Ex. 1003, 12:31–33; *see also id.* at Fig. 13 (step 1322).

Margulies II also discloses “[o]nce the specific interaction is selected, a KPI template as well as one or more of the CGI, JSP, and HTML scripts are displayed for Supervisor input (step 1326).” *Id.* at 12:34–36; Fig. 13 (step 1326). Margulies II explains that “a KPI metric (step 1328) and Score for KPI Metric (step 1330) are available from a drop down list for the supervisor to select.” *Id.* at 12:36–38; Fig. 13. “The supervisor is then queried (step 1322) to score additional KPI metrics (step 1336) and KPI scores (step 1338) or complete the scoring (step 1334).” *Id.* at 12:39–41; Fig. 13.

Margulies (incorporating Margulies II) alone thus discloses this limitation.

Wentink also discloses this limitation, as illustrated in Figure 3 below.

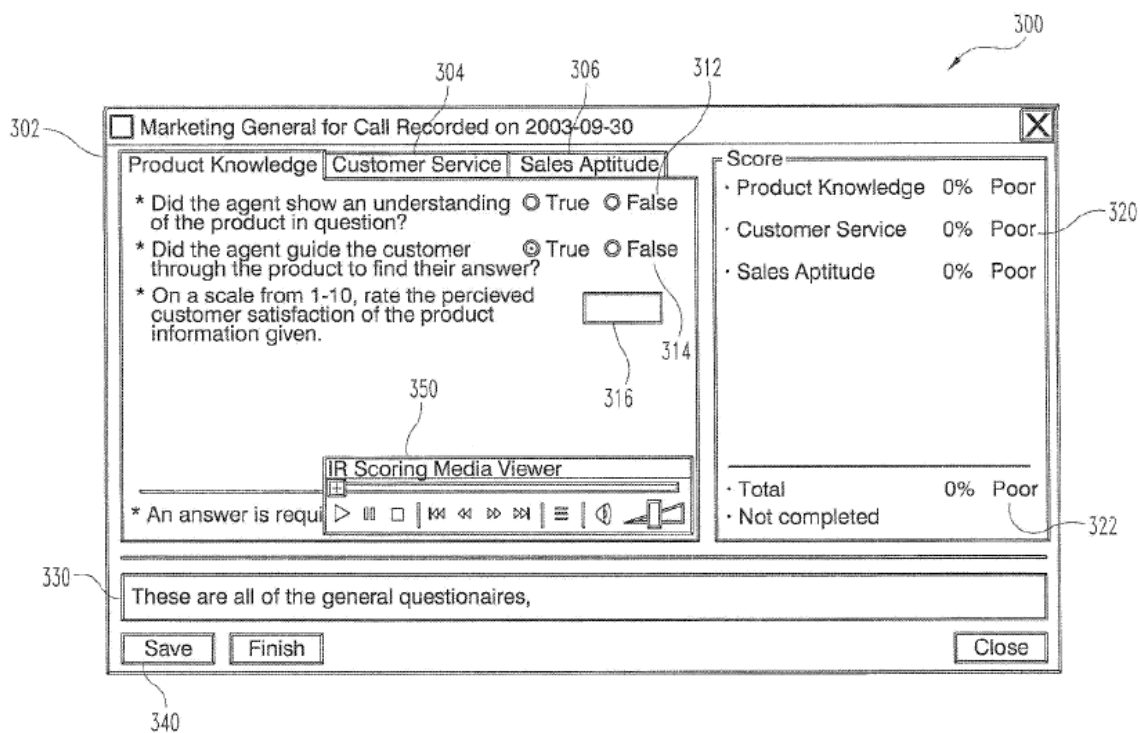


Fig. 3

Figure 3, above, illustrates a screen shot of graphical user interface in which controls for playback of a recorded communication (350) are displayed in the same window as a scoring form (300). Ex. 1005, Fig. 3,

¶¶ 12, 26, 28. Wentink discloses that, “[p]referably, the communication recording to be scored is presented to the scoring user simultaneously with the scoring form.” *Id.* ¶ 26.

Petitioner persuasively shows that a person of ordinary skill in the art would have been motivated to substitute the scoring interface of Margulies I (incorporating Margulies II) with the scoring interface of Wentink to allow the interaction recording to be played in a window that overlays the scoring form, making the scoring user-friendly and efficient. Pet. 53–54 (citing Ex. 1006 ¶ 116).

Patent Owner does not raise any arguments specific to this claim limitation. *See generally* PO Resp.; Sur-reply.

*vii. “receiving evaluation results of the one or more
selected interaction recordings”*

Petitioner persuasively shows that Margulies I (incorporating Margulies II) discloses the “receiving” limitation in that Margulies II discloses that, after the supervisor uses the KPI template to evaluate interactions, the scores are stored in a database. Pet. 54 (citing Ex. 1003, 12:45–48; Ex. 1006 ¶ 117); Ex. 1003, Fig. 13, 12:45–48 (“When the supervisor completes the scoring session, the scores are stored in a database (step 1346) and the supervisor is then queried on whether a specific action is required (step 1348).”). Patent Owner does not raise any arguments specific to this claim limitation. *See generally* PO Resp.; Sur-reply.

viii. “performing at least one predefined action based on the results”

Petitioner persuasively shows that Margulies I (incorporating Margulies II) discloses the “performing” limitation. Pet. 54–55 (citing Ex. 1003, 3:22–25, 18:17–25; Ex. 1006 ¶ 118). Margulies II discloses routing

subsequent call center interactions based on the evaluation results.

Ex. 1003, 3:22–25 (“The method may further comprise the steps of: storing the score in a database, and routing subsequent call center interactions based on the stored score.”), 18:18–25 (“It would be advantageous to correlate the KPI scores resulting from both customer and supervisor input with specific agents’ skills. Such skills-based data can be used to dynamically route subsequent interactions based on the historical performance of any agent.”). Patent Owner does not raise any arguments specific to this claim limitation. *See generally* PO Resp.; Sur-reply.

ix. Conclusion regarding claim 1

Petitioner has shown by a preponderance of the evidence that claim 1 is unpatentable as obvious over Margulies I and Wentink.

b. Dependent claim 2

Claim 2 depends from claim 1 and adds “wherein selecting is based on at least one of: an agent identification, an interaction duration, an interaction result, an average holding time (AHT), an audio analysis result, a customer satisfaction indicator, a time of the interaction, a metadata associated with an interaction, a KPI and a quality supervisor.” As explained above, Petitioner persuasively shows that the combination of Margulies I (incorporating Margulies II) and Wentink teaches the subject matter of claim 1. Petitioner also persuasively shows that the combination of Margulies I (incorporating Margulies II) and Wentink teaches the limitation added by claim 2. Pet. 55–57 (citing Ex. 1003, 12:4–13, 12:20–29; Ex. 1005 ¶¶ 25, 35, claim 2; Ex. 1006 ¶¶ 119–121).

Specifically, Margulies II discloses manually selecting interactions based on an agent identification or time of the interaction (date range). Ex.

1003, Fig. 13, 12:10–13 (“[T]he Supervisor uses the Supervision Manager to select specific interactions based on a plurality of search criteria including company, customer, agent and specific interaction.”), 12:20–27 (“[T]he supervisor can search (step 1304) for an interaction to score. The supervisor is then queried (step 1306) to choose an interaction or agent to score The scoring process then proceeds to the selection of a date range (step 1316) and specific interaction (step 1318). If an agent is selected, the supervisor chooses the appropriate Agent to score (step 1308) and Company (step 1312).”).

Moreover, as discussed above in connection with the “selecting” limitation of claim 1, it would have been obvious to modify the manual selection process of Margulies I (incorporating Margulies II) with an automated selection process as disclosed in Wentink. *See supra* Section II.D.5.a.iv. Wentink discloses that the interactions to be scored may include certain attributes such as agent. Ex. 1005 ¶ 35. Wentink also discloses using a set of business rules to automatically select a subset of communication recordings for evaluation. *Id.* at Fig. 2, ¶ 25. Petitioner persuasively shows that a person of ordinary skill in the art would have been motivated to automate the Margulies I and II selection process using the teachings of Wentink by defining the business rules based on a specific agent. Ex. 1005 ¶¶ 24, 25, claim 2; Ex. 1006 ¶ 121.

Patent Owner argues that “the plain and ordinary meaning of the term ‘at least one of’ followed by a list of items connected with the conjunctive ‘and’ is that at least one of *each* of the listed items is required.” PO Resp. 40 (citing *SuperGuide Corp. v. DirectTV Enters., Inc.*, 358 F.3d 870, 886 (Fed. Cir. 2004)). Patent Owner thus argues that Petitioner’s showing is deficient

because Petitioner has presented evidence as to only two of the listed items—agent identification and interaction duration. PO Resp. 40–41.

Petitioner responds that the *SuperGuide* decision “was heavily influenced by the specification, which recited that ‘[e]very disclosed embodiment teaches that the user must choose a value for each designated category.’” Reply 23 (citing *SuperGuide*, 358 F.3d at 887). Petitioner explains that, here, the ’872 patent discloses that “any applicable criteria may be used for selecting interactions for evaluation” and does not describe selecting based on each of the criteria listed in claim 2. *Id.* at 23–24. Petitioner adds that even if the list in claim 2 is conjunctive, the prior art teaches each listed category. *Id.* at 25–27.

We agree with Petitioner that this case is distinguishable from *SuperGuide* because there, the Federal Circuit concluded that “nothing in the specification rebuts the presumption that the [patentee] intended the plain and ordinary meaning” of the “at least one of” language. *See SuperGuide*, 358 F.3d at 887. Here, claim 2 is directed to what criteria the selecting of interactions is based on, and the ’872 patent specification discloses that *any* of the criteria listed in the claim (as well as others) can be used for such selection:

As described herein, *any applicable criteria* may be used for selecting interactions for evaluation, e.g., a breaching of a KPI, call type (for example, support, sales, per product, campaign, or other types), predefined words or terms used during an interaction (that may be detected by word spotting techniques), duration of a call, screen events, e.g., events associated with a screen used by the relevant agent, seniority of the agent associated with an interaction, historical performance of the agent, a quota related to the agent *or* the quality manager etc.

Ex. 1001, 11:17–26 (emphases added). Patent Owner does not identify any description in the specification requiring use of *each* of the criteria listed in claim 2. *See* PO Resp. 40–41; *see generally* Sur-reply.

For the above reasons, Petitioner shows by a preponderance of the evidence that claim 2 is unpatentable as obvious over Margulies I and Wentink.

c. Dependent claim 4

Claim 4 depends from claim 1 and adds “wherein the quality task defines at least one call type, at least one KPI and at least one agent.” As explained above, Petitioner persuasively shows that the combination of Margulies I and Wentink teaches the subject matter of claim 1. Petitioner also persuasively shows that the combination of Margulies I and Wentink teaches the limitation added by claim 4. Pet. 57–60 (citing Ex. 1002, 1:29–33, 5:33–39, 5:45–49, 5:61–63, 5:65–6:9; Ex. 1005 ¶¶ 4, 5, 8, 33; Ex. 1006 ¶¶ 122–129).

Margulies I discloses “defining one or more routing rules for [a] workflow item, which may be based on preference as identified by a supervisor.” Ex. 1002, 5:45–49. Margulies I also discloses routing of a workflow item based on skill-oriented triggers and work item preferences. *Id.* at 6:1–9. Also, in solving the problem of “a supervisor skilled in sales [being] totally unqualified to score a dispute resolution communication,” Wentink discloses matching the attributes of a recording with those of a scoring user and “assigning recordings to users having the requisite skills to analyze the communication.” Ex. 1005 ¶¶ 4, 5. According to Wentink, “the skills may include numerous areas of expertise, such as sales, tech support, dispute resolution, customer support, languages spoken, or the like.” *Id.*

¶ 33. Petitioner provides persuasive, uncontroverted testimony that, in light of these disclosures, it would have been obvious to modify the Margulies I’s workflow template (quality task) to route interaction recordings to supervisor scorers based on the type of call (e.g., sales, dispute resolution, or customer support) that matches the supervisor’s attributes. Ex. 1006 ¶¶ 123, 125.

Moreover, Margulies I discloses that workflow template (quality task) defines at least one KPI and at least one agent to whom a workflow item may be routed. Ex. 1002, 5:33–39 (disclosing that “the workflow template defines one or more trigger points”), 5:61–63 (disclosing that “[t]he trigger point may be a key performance indicator trigger”); 5:65–6:9. Also, Wentink discloses that experienced agents may act as scoring supervisors to evaluate caller interactions during downtime. Ex. 1005 ¶ 4 (“Additionally, communication recording[s] may be routed to supervisors or experienced agents during downtime in order to increase productivity and efficiency.”). Petitioner persuasively shows that it would have been obvious to modify Margulies I’s workflow template used for supervisor review of workflow items to include additional routing of workflow items to a specifically defined agent. Pet. 60 (citing Ex. 1005 ¶ 4; Ex. 1006 ¶ 129). Moreover, as discussed above in connection with the “selecting” limitation of claim 1, it would have been obvious to modify the manual selection process of Margulies I (incorporating Margulies II) with an automated selection process as disclosed in Wentink. *See supra* Section II.D.5.a.iv.

Patent Owner does not raise any arguments specific to claim 4. *See generally* PO Resp.; Sur-reply.

For the reasons explained above, Petitioner shows by a preponderance of the evidence that claim 4 is unpatentable as obvious over Margulies I and Wentink.

d. Dependent claims 5 and 6

Claim 5 depends from claim 1 and adds “wherein the one or more selected interaction recordings are selected according to a predefined quota, said quota related to a number of evaluations to be performed by a quality supervisor during a predefined period of time.” Claim 6 depends from claim 5 and adds “wherein said quota defines a maximum number of interaction recordings related to a specific agent in a call center.”

Petitioner asserts that Wentink discloses the limitation added by claim 5. Pet. 61–63. Specifically, Petitioner asserts that Wentink discloses distributing interaction recordings according to a scorer’s “forecast workload” and that a person of ordinary skill in the art “would understand from this disclosure that the scoring user’s ‘forecast workload’ *must* refer to a predefined number of evaluations to be performed by the scoring user during a preset time.” Pet. 61–62 (emphasis added). Petitioner explains that “the *only* way to determine whether or not to send an evaluation to a scoring user for scoring based on workload is if the system takes into account the maximum number of evaluations the scoring user can perform in a set period of time, and whether that maximum has been reached for the present time period.” *Id.* at 62 (citing Ex. 1006 ¶ 132) (emphasis added). Petitioner further asserts that while Wentink’s disclosure concerns how call interaction recordings are *distributed*, a person of ordinary skill in the art would have found it obvious to modify Wentink’s business rules to *select* recordings based on workload. *Id.* at 63.

In our Institution Decision, we concluded that Petitioner did not sufficiently show or explain why a person of ordinary skill in the art would have understood that Wentink’s “forecast workload” *must* refer to the quota recited in claim 5—a predicate to Petitioner’s showing of obviousness as framed in the Petition. Inst. Dec. 23. We gave as an example that Petitioner does not sufficiently show or explain why an ordinarily skilled artisan would have understood from Wentink’s teaching of distributing recordings based on forecast workload that a maximum number of evaluations for a particular time period must be taken into account. *Id.*

Patent Owner points to our preliminary findings, and argues that the “forecast workload” disclosed in Wentink is not necessarily the claimed quota. PO Resp. 42. According to Patent Owner, Wentink’s forecast workload “could be an amount of work the supervisor expects to have to perform in the future, having nothing to do with a number of evaluations to be performed over a predefined period of time.” PO Resp. 42.

In Reply, Petitioner cites to a dictionary entry defining “workload” as “the amount of work assigned to or expected from a worker in a specified time period.” Reply 27–28 (citing Ex. 1018). Petitioner also argues that the term “forecast” includes a time element and that a person of ordinary skill in the art would have understood that, in the context of a call center, a “forecast” inherently incorporates an element of time. *Id.* at 28. Petitioner also asserts that if we find that Wentink does not expressly disclose selecting interactions according to a predefined quota, it would have been obvious to incorporate the forecast workload described in Wentink to the selection process. *Id.* at 29.

Patent Owner responds that while forecasting a workload involves identifying how much work *probably* will be completed in a time period, setting a quota identifies how much work *must* be completed. Sur-reply 21–22. Thus, according to Patent Owner, Wentink’s disclosure of a forecast workload does not disclose the claimed quota. Patent Owner also argues that Petitioner improperly relies on a new obviousness rationale and supporting expert testimony for the first time in its Reply. Sur-reply 22–23.

We determine that Petitioner fails to establish the unpatentability of claim 5 (and also claim 6, which depends from claim 5). In the Petition, Petitioner asserts that “Wentink teaches that the interaction recordings are distributed for scoring according to the scorer’s forecast workload (‘predefined quota’) over a period of time scheduled specifically for scoring (‘during the predefined period of time’).” Pet. 61. Petitioner asserts that a person of ordinary skill in the art would have understood that “the scoring user’s ‘forecast workload’ *must* refer to a predefined number of evaluations to be performed by the scoring user during a present time.” *Id.* at 62 (emphasis added). We are not persuaded that Petitioner has made the required showing.

Wentink does not expressly disclose distributing recordings according to a predefined quota. Rather, Wentink discloses distributing the recordings based on workload, including a forecast workload. *See* Ex. 1005 ¶¶ 6 (“[T]he system distributes recordings to the selected scoring users based upon availability or work load.”), 31 (“[F]lag 406 may be replaced by the user’s current or forecast workload or the schedule of the user, either showing time scheduled for work or time scheduled specifically for scoring.”), 36 (“[I]f a recording requires immediate scoring[,], then a user

who is currently available for scoring or who has a light work load must be selected . . .”). Distributing recordings according to a forecast workload does not necessarily encompass the claimed quota, as Petitioner asserts. Rather, we agree with Patent Owner that a forecast workload involves identifying how much work *may* or *probably will* be completed while a quota involves identifying how much work *must* be completed. *See* Sur-reply 21–22. Claim 5 requires that quota be “related to a number of evaluations *to be* performed . . . during a predefined period of time.” Petitioner’s assertions that Wentink’s disclosure *must* be read as disclosing distributing recordings according to the claimed quota are unpersuasive.

For the foregoing reasons, Petitioner has not shown by a preponderance of the evidence that claims 5 and 6 are unpatentable as obvious over Margulies I and Wentink.

III. CONCLUSION⁶

The table below summarizes our conclusions as to the challenged claims.

⁶ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this Decision, we draw Patent Owner’s attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. *See* 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. *See* 37 C.F.R. § 42.8(a)(3), (b)(2).

Claims	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not shown Unpatentable
1, 2, 4–6	103	Margulies I (incorporating Margulies II, Ezerzer), Wentink	1, 2, 4	5, 6
Overall Outcome			1, 2, 4	5, 6

IV. ORDER

Accordingly, it is

ORDERED that, based on a preponderance of the evidence, claims 1, 2, and 4 of U.S. Patent No. 8,553,872 B2 have been shown to be unpatentable;

ORDERED that, based on a preponderance of the evidence, claims 5 and 6 of U.S. Patent No. 8,553,872 B2 have not been shown to be unpatentable;

FURTHER ORDERED that that, because this is a final written decision, parties to this proceeding seeking judicial review of our decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2020-00245
Patent 8,553,872 B2

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