

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

WHATFIX INC.,
Petitioner,

v.

WALKME LTD.,
Patent Owner.

Patent No. 11,258,732

Inter Partes Review No. IPR2023-01379

PETITIONER'S REPLY TO PATENT OWNER RESPONSE

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Petitioner respectfully submits that the Board should cancel every challenged claim.

I. CLAIM CONSTRUCTION¹

A. “computer program” / “displayed user interface of the computer program”

1. Ordinary and customary meaning

The ’732 specification confirms that “computer program” is nothing more than “instructions carried out by computer(s)”: “[t]he *computer program* product may . . . hav[e] . . . *instructions* thereon for causing *a processor to carry out aspects of the present invention.*” (EX1001, 19:61-65²; EX1036, 110:10-24, EX1042, ¶15 (both experts testifying that a “computer program product” includes a “computer program”).)

The specification uses “computer program” in connection with “access[ing] other applications, including their UI elements” (EX1001, 10:11-17), accessing “different software tools for different purposes” (5:37-51), and being “loaded onto” multiple computers (21:24-32)—all reflecting the ordinary and customary meaning of “computer program.” (EX1042, ¶¶12-13.)

¹ The claim construction discussion herein is only for this proceeding.

² All emphasis added, unless otherwise noted.

Similarly, the Cambridge and Collins Dictionaries, respectively, define a “computer program” as “a set of instructions that makes a computer do a particular thing,” and “a set of instructions for a computer to perform some task.” (EX1038; EX1039; EX1042, ¶14.)

2. No rewrite of “computer program”

The Board should decline PO’s invitation to rewrite “computer program” to a “target system” “which has a functionality that is invoked through its displayed user interface” and inject unclaimed limitations. (POR, 24, 18, 35 (arguing “separate”/“single” “computer program” with “its own” user interface (UI) on a single computer device).)

First, PO does not identify any clear expressions of intent required to redefine “computer program” as it urges. (POR, 24; *Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1365-66 (Fed. Cir. 2012).) **Second**, PO sole citation does not even define “computer program” but rather describes a “target system”:

The **target system**, generally referred to as the computer program, may be a website, a web-based system, a native mobile application (e.g., executed in a protected sandbox), a desktop application (e.g., executed in a process of a non-sandbox based operating system), or the like. The **target system** may have a user interface, such as a Graphical User

Interface (GUI), that the user may utilize in order to activate the functionalities of the target system.

(POR, 24-27; EX1001, 5:6-13.) And only that “target system” is “*generally* referred to” as a “computer program.” (EX1042, ¶¶16-17.)

Third, nothing supports a “separate”/“single” computer program (POR, 35) with “its own” UI (POR, 18) on a single computer device (POR, 35) as additional limitations. And such freighting would improperly exclude ’732 embodiments (e.g., at 5:37-51 (multiple applications), 10:11-17 (accessing other UI)). *Oatey Co. v. IPS Corp.*, 514 F.3d 1271, 1277 (Fed. Cir. 2008); EX2001 of IPR2023-01368, ¶¶66, 90 (acknowledging that “computer program” includes embodiments about multiple applications and accessing other UI elements); EX1042, ¶18.)

B. “defining” / “defining an automation process” / “defining a conversation”

The Board should reject PO’s attempt to narrow “defining” to “by [a] novice[] or non-programming user[],” “via a user interface,” and “without needing to use dedicated APIs, programming languages or the like.” (POR, 27-29.) None of these terms is reflected in the claim language. To so import them would again improperly exclude embodiments in the ’732 specification. *Kaneka Corp.*, 790 F.3d at 1304. The specification’s disclosures show that “defining” broadly means “configuring”. For example, 9:4-5 describes “Chat Bot Front-End Module 130 may be *configured* to enable a User 190 to interact with a chat bot,” and 9:27-29

describes “Automation Execution Module 140 may be *configured* to execute . . . the automation process.” (EX1001, 9:4-5, 9:27-29; EX1042, ¶¶19-20.)

Moreover, the fact that the specification also describes “defining” as involving “non-trivial” tasks shows that it encompasses by a programming user and by non-UI methods. (EX1001, 5:49-61.) Thus, PO’s proposed construction conflicts with and would improperly exclude the forgoing embodiment. (EX1042, ¶¶19-2027.)

C. Order Of Elements 1[a]/1[b]/1[d]

PO proposes limiting the claims to first “defining a conversation” (element 1[a]), then “associating the conversation with the automation process” (element 1[b]), followed by “publishing the conversation” (element 1[d]).

According to PO, because the “defining” step is of “a conversation,” it must come first. (POR, 31.) But antecedent basis is used to introduce and refer to the same element—not impose an order. And PO’s *TALtech Ltd.* case is distinguishable. There, the “placing a bonding element” step must have come first because otherwise the other steps (“folding the first garment component over the bonding element” and “folding a first portion of the second garment component such that . . . [it] abuts . . . the bonding element”) could not be performed unless the first step was performed. *TALtech Ltd. v. Esquel Apparel, Inc.*, 279 F. App’x

974, 978 (Fed. Cir. 2008). Here, the conversation can be associated with the automation process, whether defined before or after. (EX1042, ¶28.)

Further, corresponding '732 descriptions of Figure 3 (cited by Mr. Zatkovich) confirm that there is no basis to limit the order of the claim elements. (EX1001, 21:41-46 (“the functions noted in the block *may occur out of the order noted in the figures*. For example, . . . the blocks may sometimes be *executed in the reverse order*, depending upon the functionality involved.”); EX1042, ¶¶29-31.)

D. “at least one of: a message element and a condition element”

With *SuperGuide* as its only basis, PO contends that “at least one of: a message element and a condition element” requires both a “message element” and a “condition element.” (POR, 55-56.) But “*SuperGuide* did not erect a universal rule of construction for all uses of ‘at least one of’ in all patents, however.” *Fujifilm Corp. v. Motorola Mobility LLC*, Case No. 12-cv-03587-WHO, 2015 WL 1265009, at *8 (N.D. Cal. Mar. 19, 2015) (citing *SuperGuide Corp. v. DirectTV Enters.*, 358 F.3d 870, 887 (Fed. Cir. 2004)). Unlike in *SuperGuide* where “[e]very disclosed embodiment teaches that the user *must chose a value* for each designated category,” the '732 allows the user to choose a message element without a condition element, and vice versa. (EX1001, 15:52-16:6, Figs. 5A, 5B

(showing “Add Message Button 552” separate from “Add Condition Button 556”), Figs. 7A, 7B (showing only message elements); EX1036, 74:15-19; EX1042, ¶32.)

II. GROUND 1: THE CHALLENGED CLAIMS ARE UNPATENTABLE OVER SYMONS-WILLIAMS

A. “defining an automation process” (Elements 1[pre]/11[pre]/18[pre])

Because PO’s construction of “defining an automation process” is wrong, PO’s argument that Symons-Williams does not teach 1[pre]/11[pre]/18[pre] is wrong. Even if correct, PO does not dispute that, in order for Symons’ RPA to automatically generate an email signature, its automation process must have been defined. (EX1042, ¶¶32-33.) Instead, it disputes Williams’ teachings and whether there was a reasonable expectation of success. Each argument fails.

1. Williams teaches “defining”

William’s “*draft[ing]*, *creat[ing]*, and amend[ing] rules and policy changes” is more than just updating as PO incorrectly urges—it is also “defining.” (POR, 44; EX1011, 4.) And this defining being “outside of the RPA product using normal conversational text” encompasses the user defining the automation process using a UI, thereby meeting PO’s construction. (POR, 44 (citing EX1011, 4).) The RPA bot being “program[med],” “buil[t],” or “*taught* to drive applications like a human does through the graphical user interface (GUI)” further shows “defining an automation process.” (EX1011, 2, 4, Fig. 1; EX1042, ¶¶35-40, 42-45.)

2. Reasonable expectation of success

As the Petition explained, Symons and Williams disclose similar features (chat bot and automation process), Symons provides a suggestion for multiple automation processes, and Williams adds its teaching multiple automation processes. (Petition, 13-15; EX1006, 2 (“*at this moment*, you can only use me to create a new Cronos signature”).) Given the existing overlap between them along with evidence successfully combining a chat bot with multiple automation processes (*e.g.*, EX1031, EX1026, EX1030), a POSITA would have reasonably expected the combination to succeed. (EX1042, ¶¶41.) PO is thus wrong. (EX2001, ¶202.)

**B. “defining a conversation to be implemented by a natural language interface, wherein the conversation is configured to obtain from the user one or more values to one or more parameters”
(Elements 1[a]/11[a]/18[a])**

PO is wrong that “defining a conversation” must be by a non-programmer. (POR, 4, 35; Section I.B.) And Petition pages 15-18 presented that Symons-Williams teaches “to obtain from the user one or more values to one or more parameters.” (POR, 45.) The only thing left is PO’s flawed argument that Symons does not teach a “natural language interface” or natural language processing (NLP).

1. Symons teaches a “natural language interface”

PO agrees that Symons discloses a chatbot, but argues that it is not a “natural language interface.” (POR, 46-47.) Wrong. The Symons Article explicitly discloses a “natural language interface”: “[c]hatbots enable . . . a more intuitive *natural way to interact* with their customers” and “the chatbot collects all the necessary information in a *friendly, interactive manner*.” (EX1004, 2; EX1009, 2.) Baetens confirmed: “the team . . . implemented the chatbot as *an interface for a natural language conversation* with the user.” (EX1010, ¶8; EX1042, ¶¶46-50.)

2. The claims do not require NLP

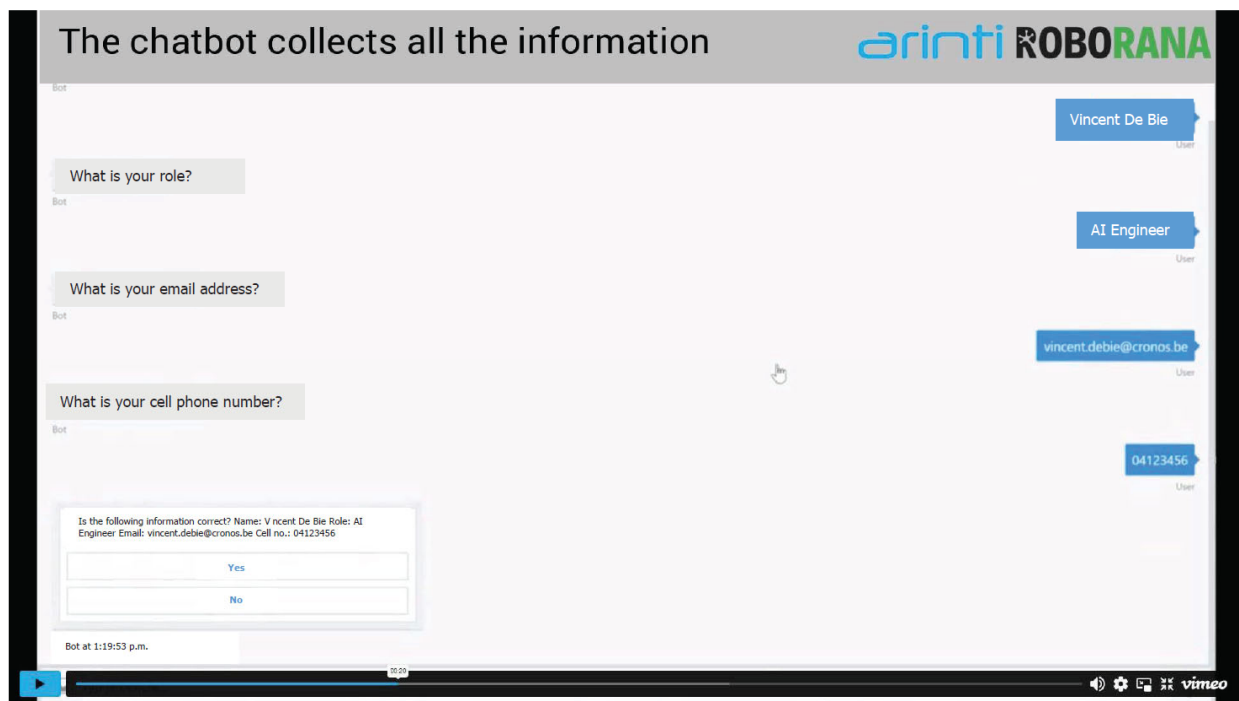
PO argues that “the claimed ‘natural language interface’ must rely on natural language processing.” (POR, 46.) Nowhere do the claims recite “natural language processing.” (EX1042, ¶¶51-55.)

The terms “natural language interface” (claimed) and “natural language processing” (not claimed) also have different meanings. As Dr. Beigi testified, “natural language processing” means “[y]ou spoke with me and I processed that [natural] language, . . . and I responded to it using again natural language. What natural language processing in the computer science sense is to mimic that kind of processing using machinery or a software.” (EX2003, 63:15-64:17; EX1001, 10:38-43 (“*processing* of the user’s interaction with the chat bot, such as using *Natural Language Processing (NLP)*”).) In contrast, a “*natural language*

interface is an interface that *allows you to do natural language communication* with the software.” (EX2003, 63:15-64:17; EX1001, 5:6-8 (“The chat bot may implement a **natural language interface** such as a text-based **conversation**, an oral **conversation**, or the like.”), 16:10-12.) Mr. Zatkovich does not dispute. (EX2001, ¶158 (citing EX2003, 63:15-64:17); EX1042, ¶¶51-55.)

3. Symons teaches NLP even under PO’s construction

Nevertheless, after Symons’ chatbot collects the user’s information, it asks: “[i]s the following information correct?” (below).



(EX1006, 6.) It then presents two different scenarios: the user’s input is: (1) “Nee” (No) (left column below); or (2) “Ja” (Yes) (right column below). The chatbot’s actions that follow differ between the different scenarios, corresponding to understanding—*i.e., processing*—the input. (EX1042, ¶¶56-59.)

 (EX1033, 0:27 (chatbot receives “Gsm- nr” input, understands the input, and asks “Wat is uw gsm-nummer?”))	
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Furthermore, none of PO’s evidence defining “chatbot” is associated with Symons/Baetens. (POR, 48-49.) EX2007 is a post-dated article about a “bot[] [where] **only** buttons are used”—that is not Symons. (EX2007, 1; *contra* EX1040, 1 (“[t]here are two main approaches to natural language processing: **rule[]-based NLP** and machine-learning-based NLP.”); EX1042, ¶48.)

Consistent with the ’732, EX2008 describes older chatbots that “worked well for specific questions and answers on which they had been trained.” (POR, 49; EX2008, 2-3.) A POSITA would have expected a chatbot that handles specific questions to use NLP as it would respond with appropriate answers. (EX1042, ¶¶49-50.)

**C. “associating the conversation with the automation process”
(Elements 1[b]/11[b]/18[b])**

PO challenges whether Symons-Williams teaches “associating the conversation with the automation process.” (POR, 39, 42.) But the Petition presented that Symons’ “chatbot collects . . . information. This information gets passed on to the RPA robot,” where “[t]he chatbot triggers the RPA bot.” (Petition, 16-18.) Without the “associat[ion],” the chatbot would not be able to pass the information to the RPA bot or trigger it. (EX1042, ¶60.)

**D. “utilize the displayed user interface of a computer program”
(Elements 1[c]/11[c]/18[c])**

Because PO’s construction is wrong, PO’s argument that Symons-Williams does not teach elements 1[c]/11[c]/18[c] is wrong. (POR, 51-52; Section I.A.) Further, claims 1/11/18 do not require utilizing the displayed UI of *only* a single computer program. (EX1042, ¶61.)

Nevertheless, Symons teaches a single RPA software (desktop application) that is a separate computer program with its own UI (GUI of Symons’ RPA (EX1006)) on a single device (Symons’ computer). (EX1042, ¶¶62-63.)

**E. “publishing the conversation to be accessible to a user via a
natural language interface” (Elements 1[d]/11[d]/18[d])**

PO mischaracterizes the claim language. The claim requires the conversation “to be accessible to a user”—not “to the chatbot.” (POR, 38-39.)

Regardless, the chatbot is responding to the user, thereby the conversation is accessible to the user and the chatbot. (EX1042, ¶64.)

F. The Claimed Order Of The “defining”, “associating”, And “publishing” Steps

PO’s construction of the claimed order of steps fails, and so do its arguments that Symons-Williams does not teach the order. (Section I.C; EX1042, ¶¶65-68.) PO otherwise fails to rebut Petitioner’s showing. (Petition, 37-43.)

G. The Board Should Reject PO’s Mischaracterizations Of Symons/Baetens

First, PO attempts to discredit the Symons Video by arguing that the “internals” are not known. (POR, 34, 42, 50.) But the Symons and Baetens Articles provide the requisite details to show that Symons teaches the claims. As PO acknowledges, the claims broadly require “defining the conversation,” “associating the conversation with the automation process,” and “publishing the conversation.”³ (POR, 17-18.) The *type* of RPA and chatbot tools, *how* Symons built the automation, *how* the chatbot triggers the RPA bot, and *differences* between Symons’ RPA and a simple program are not details required by the

³ The Board should reject PO’s attacks on Dr. Beigi’s opinions in an unrelated proceeding. (POR, 41.)

claims, and are in fact, details missing from the '732 specification. (POR, 3, 33, 37.) (EX1042, ¶¶71-72.)

Second, Baetens' "we can't share much about the results of our joint effort (yet)" does not mean the chatbot-RPA had not been developed or that Baetens was intentionally hiding it for that reason. (POR, 3, 33-34.) Companies do not share developed product details for many reasons, including to delay competition, as Mr. Zatkovich explains. (EX1036, 24:22-26:4.) PO had the opportunity to depose Baetens (and Symons) to understand his comment but failed to do so. (EX1036, 94:17-95:7.) And the same holds for Mr. Zatkovich's unsupported contentions (the Symons Video was put together very quickly, the Arinti chatbot was not publicly available, etc.). (EX2001, ¶180; EX1042, ¶¶69-72.)

Third, Mr. Zatkovich's attempt to prove that the Symons Video was hardcoded fails. He provides no evidence that his computer program "gathered all the same information in the same manner" as the Symons Video. (EX2001, ¶182.) He admits that he does not know whether his computer program is the same as Symons, and a side-by-side comparison shows there is no "match" between them. (EX2001, ¶¶144; EX1042, ¶¶73-81.)

Symons

Is the following information correct? Name: Vincent De Bie Role: AI Engineer Email: vincent.debie@cronos.be Cell no.: 04123456

Yes

No

Bot

No

User

Mr. Zatkovich's Program

vincent.debie@cronos.be Phone: 04123456 Do you want to change anything? (yes/no)

Yes

No

Bot

Yes

User

H. “wherein the conversation flow defines an order between conversation elements, wherein the conversation elements comprise at least a question element and an action element” (Claims 2/12/19)

First, PO’s argument that Symons does not disclose an order between conversation elements fails. (POR, 53-54.) Regardless, Symons’ chatbot asks questions having the same order as the input fields for the associated email signature generation process. (Petition, 22-23.) (EX1042, ¶¶82-83.)

Second, the claim recites “the automation process is configured to be invoked in response to a *conversation of a user with a natural language interface.*” (EX1001, 22:16-19.) Thus, PO is incorrect that an action element must invoke the automation process. (POR, 54.) Further, claim 2 does not require *separate* conversation flows. (EX1042, ¶¶84-86.)

Third, contrary to PO’s arguments (POR, 54-55), Williams discloses determining a conversation flow: “chatbots can engage in natural language dialog with the caller and *discern, through a series of interactions, the nature of the call and then capture information* required to further handle the request.” (EX1011, 3; EX1042, ¶87.)

Fourth, contrary to POR at 55, the information for a letterhead may not be the same as for an email signature. (EX1042, ¶¶88-89.)

I. “wherein the conversation elements comprise at least one of a message element and a condition element” (Claims 3/13)

Because PO’s construction for claims 3/13 is wrong, PO’s rebuttal is wrong. (Section I.D.) Regardless, Williams’ “chatbot[] engage[s] in natural language dialog with the caller *[(message element)]* . . . [and] then trigger[s] a robot” to “perform actions based upon . . . conditional logic *[(condition element)]*.” (EX1011, 5.) And Symons says “Hi, at this moment you can only use me to create a new Cronos signature” (message element) and “[i]s the following information correct?” (condition element). (EX1006, 2, 7; EX1033, 0:30; EX1042, ¶¶90-91.)

J. “wherein the conversation element comprise a second action element associated with a second automation process” (Claims 4/14)

PO does not dispute that Williams teaches a “second action element associated with a second automation process” (POR, 57-58), but instead argues that Symons-Williams does not teach a single chatbot-RPA to handle multiple

requests. (POR, 57.) There is no such requirement for claims 4/14. (EX1042, ¶¶92-93.)

Moreover, Williams discloses “[t]hese chatbots can engage in natural language dialog with the caller *[(single conversation thread)]* and discern, through a series of interactions, the nature of the call *[(multiple requests)]* and then capture information further required to handle the request. The chatbot will then trigger a robot *[(single chatbot-RPA)]*.” (Petition, 18-20, 23 (quoting EX1011, 3)⁴; EX1011, 3, 5 (describing multiple requests (“obtaining travel and expense and payment status, updating our backend systems, and closing the inquiry”), and multiple automation processes (“RPA operations,” “robots,” “robotic work dispatching,” “assignment of tasks to robots for execution”)); EX1042, ¶¶92-93.)

K. “wherein the automation process is configured to execute a new functionality of the computer program” (Claim 9)

PO’s attacks on whether Symons *alone* discloses “execut[ing] a new functionality” does not respond to Petitioner’s obviousness theory. (POR, 58; Petition, 27-29.) And the Petition presented an (unrebutted) motivation to combine. (Petition, 15, 23-24, 28-29; ¶¶95-97.)

⁴ Contrary to PO’s assertions, Williams provided more than broad generalizations and definitions. (POR, 33; EX1042, ¶37.)

L. PO Does Not Dispute That Symons-Williams Teaches Claim 10

PO presents no separate argument for claim 10.

III. GROUND 2: THE CHALLENGED CLAIMS ARE UNPATENTABLE OVER SYMONS-WILLIAMS AND BEN-ITZHAK

A. Ben-Itzhak Is Analogous Art

Ben-Itzhak and claims 6/16/21 are directed to same field of endeavor. Like claim 6's "natural language interface configured to generate and provide the user with a link, wherein interaction with the link is configured to cause execution of the automation process," Ben-Itzhak's personalized content recommendation involves "a Uniform Resource Locator (URL) link may be provided by the conversation agent to the user as a message or response to the one or more user messages in the active conversation. . . . [T]he user may interact with the provided URL link." (EX1034, [0018]; EX1042, ¶97.)

Ben-Itzhak is also reasonably pertinent to the '732 problems. The '732 problems include "enabl[ing] [a] third-party messaging service to invoke the automation process in a simple manner and without relying on coding or on dedicated APIs." (EX1001, 6:26-31.) Ben-Itzhak similarly recognizes using "a link to a different interactive communication platform [(third-party)]" where the "link [is] associated with the personalized content recommendation to access and consume the recommended content." (EX1034, [0018]; EX1042, ¶¶98-99.)

B. Motivation To Combine

PO’s mischaracterizes the Petition: “generating and providing a link”—not generating personalized recommendations—results in shorter deployment times, lower upfront costs, and lower operational benefits. (POR, 75; Petition, 34.) A creative POSITA (*KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007)) would not have understood Symons solely “to gather information to generate an email signature” according to PO. (EX1042, ¶100.)

C. “interaction with the link is configured to cause execution of the automation process” (Claims 6/16/21)

Mr. Zatkovich is wrong that Symons-Williams does not disclose interaction causing execution of an automation process. (EX2001, ¶¶ 271-275.) As the Petition explained, Symons-Williams teaches the chatbot triggering the RPA bot without using an API, and Williams teaches interacting without using an API via a website (link). (Petition, 33-34; EX1042, ¶¶101-105.)

IV. GROUND 3: THE CHALLENGED CLAIMS ARE UNPATENTABLE OVER ALLEN

A. “defining a conversation to be implemented by a natural language interface” (Elements 1[a]/11[a]/18[a])

1. Allen teaches “defining a conversation”

PO argues that Allen is silent on how a conversation is generated. (POR, 65.) Not so. Allen discloses the “*user* ‘teach[ing]’ task steps . . . represented in terms of the ontology and user’s intentions,” and identifying the “ontological

properties” and “input parameters by recognizing user statements which require one.” (EX1014, Abstract, 3:48-56.) “Natural language sentences obtained from the user are thereby mapped to the task-specific ontology,” establishing that the user provides the system with the conversation questions during training. (EX1014, 7:14-15; EX1042, ¶¶106-110.)

As for PO’s assertions that the conversation *must* be user defined, the specification did not make such statements and neither did the Board. (POR, 65-66 (citing DI, 3-4 and EX1001, 8:49-55 (“the user *may* define for a conversation flow”), 11:27-38 (“The *automation process may* also be defined by a user”).)

2. Allen teaches “a conversation implemented by a natural language interface”

PO’s argument that Allen’s displays are not a “natural language interface” because they are used only for training is incorrect. (POR, 49, 52-53.) Allen discloses a “method for learning and *executing executable tasks* using language . . . comprising: . . . providing software running on said computational device and supported *GUI-based interaction with said user*; . . . wherein said software includes a *natural dialog-based interface* whereby said user can communicate with said software using natural dialog-based language.” (EX1014, 18:38-49.) And several other disclosures support the same. (EX1014, Abstract (“system . . . perform[s] . . . tasks that the user usually would *perform using the device’s*

graphical user interface (GUI).’); also 1:50-52; 15:24-40.) PO has no real response. (EX1042, ¶¶111-115.)

Moreover, PO’s reliance on Allen’s Figure 6 is misplaced. (POR, 7, 62, 64.) The question in Figure 6 (“What is the name of the book you are looking for?”) is different from the question (“What is the title of the book?”) of the 12:62-13:1 conversation. PO agreed in the ’664 IPR. (POR for IPR2023-01368, 55-56 (“FIG. 6 . . . is separate from the conversation used to obtain the input of ‘I would like to buy a book,’ and occurs in a different interface”).) Further, the Petition did not rely on Figure 6 because it relates to training. (EX1014, 10:25-30 (“observing the user’s actions in *teaching* the step”).) And PO’s assertions that Dr. Beigi stated that Figure 6 is not a “natural language interface” is false. (POR, 68 (citing EX2003, 60:24-61:3, 61:59-60, 257:6-24).) The questions that PO asked included “a form where you fill in name, address, telephone number” that are not questions about Figure 6. (EX1042, ¶¶116-119.)

**B. “associating the conversation with the automation process”
(Elements 1[b]/19[b]/29[c])**

PO incorrectly alleges that the price and delivery date are not part of the conversation. (POR, 65.) Allen discloses “the *system* [] obtain[s] price and delivery date information, then *provide[s] this information back to the user.*” (EX1014, 13:2-5; EX1042, ¶¶120-121.)

**C. “utilize a displayed user interface of a computer program”
(Elements 1[c]/11[c]/18[c])**

PO again mischaracterizes the Petition, which never cited Allen Figure 7. (POR, 40-42.) Nevertheless, Allen teaches “utiliz[ing] a displayed user interface” for training and executing the automation process. (EX1014, 4:66-51, 6:61-65, 12:11-61); Section IV.A; EX1042, ¶¶122-124.)

D. Claims 2/12/19

PO repeats its wrong arguments for claims 2/12/19. (POR, 65; Section IV.A; EX1042, ¶¶127-132.)

E. “wherein the conversation elements comprise at least one of a message element and a condition element” (Claims 3/13)

PO pretends that the Petition mapped the same conversation element in Allen to both the “message element” and the “condition element.” (POR, 70.) As the Petition explained, Allen “provid[ing] [the price and delivery date] information back to the user” is a “message element,” and “ask[ing] whether the user wishes to complete the transaction” is a “condition element.” (Petition, 44.) And contrary to PO’s assertions, both elements are “in a conversation.” (POR, 70; EX1042, ¶¶134-137.)

F. “conversation elements comprise a second action element associated with a second automation process,” (Claims 4/14) And A “plurality of conversations” (Claims 5/15)

PO’s only dispute is whether the same passage in Allen can satisfy both sets of claims. (POR, 70-71.) However, there are no such restrictions in the claim, and

a conversation can be both associated with a second automation process (claims 4/14) and be part of a plurality of conversations (claims 5/15). (EX1042, ¶¶138-141.)

G. “wherein the automation process is configured to execute a new functionality of the computer program” (Claim 9)

PO’s sole argument for claim 9 is that “a new functionality of the computer program” requires a new automation process. (POR, 71.) Just as the ’732 patent’s step of “inputting data to a field in the displayed user interface” is a “functionality,” Allen’s “new step” is a new functionality. (EX1001, Claim 10; EX1014, 8:17-25; EX1042, ¶¶142-143.)

V. GROUND 4: ALLEN AND BEN-ITZHAK

PO’s rebuttal for claims 6/16/21 misses the mark. As the Petition explained, Ben-Itzhak teaches that providing personalized recommendations “result[s] in positive engagement by the user,” and interacting with a link helps the user consume content associated with the webpages. (Petition, 55-56.) A POSITA would have understood that buying a book may benefit from “positive engagement by the user.” And as Dr. Beigi explained, Allen’s transferring of information “using HTML, XHTML, CSS, and/or scripts” in a web-based environment indicates using a link, and interacting with a website (link) causes execution of its book buying automation process. (EX1014, 3:26-31; EX1042, ¶¶144-149.)

VI. GROUND 5: KRISHNAN-RADHAKRISHNAN

A. Radhakrishnan Is Analogous Art

Radhakrishnan and the '732 are directed to the same field of endeavor. The '732 relates to executing an automation process (PO admits (POR, 9, 77)) that “simulate[s] [a] sequence of interactions with the displayed user interface of the computer program.” (EX1001, Claim 1.) Similarly, Radhakrishnan relates to “interactions of a robotic process automation module with a user interface of an application to *simulate user operations with [a] user device*.” (EX1018, Abstract.) PO’s attempt to narrow Radhakrishnan’s field of endeavor to one specific example is improper. *In re Deminski*, 796 F.2d 436 (Fed. Cir. 1986) (EX1042, ¶¶150-151.)

Further, both the '732 and Radhakrishnan problems pertain to an automation process performing user tasks to improve the user experience. (EX1001, 8:4-6 (“simplif[ying] the end-user experience by collecting data from him and executing a predefined automation flow.”); EX1018, 1:7-9 (“computer systems are relied upon to complete various tasks and increase user and/or process efficiency.”); EX1042, ¶152.)

B. “defining an automation process” (Elements 1[pre]/11[pre]/18[pre])

PO’s sole rebuttal does not address Petitioner’s obviousness theory, which combines Krishnan and Radhakrishnan. (POR, 78 (citing EX2001, ¶¶467-488

(arguing that Krishnan alone does not teach the claimed “automation process”).)

And its expert’s “operation record” argument fails because it does not affect that Radhakrishnan’s RPA utilizes a displayed UI. (EX1018, 11:52-60; EX2001, ¶¶471; EX1042, ¶¶153-154.)

C. “natural language interface” (Elements 1[a]/19[a]/29[b])

Mr. Zatkovich’s argument that Krishnan does not teach a “natural language interface” because its input for destination 130 is a button input should be rejected. (EX2001, ¶¶474-477.) Krishnan teaches receiving the input for destination 130 via typed words. (EX1016, 11:4-6 (“the user typ[es] in ‘Europe’”); EX1042, ¶¶155-158.)

D. “automation process [that] is configured to utilize a displayed user interface” (Elements 1[c]/11[c]/18[c])

First, PO is wrong that Krishnan uses only a backend system and teaches away from utilizing a displayed UI. (POR, 76.) Krishnan at 2:33-35 (cited by PO) states “one or more backend databases *or other information processing systems*” and “other information processing systems” encompasses non-backend databases. Additionally, in Krishnan, the “chat bot may respond to customer input by retrieving *[(backend database)]* and providing the requested information, requesting additional input or information from the user *[(chat bot)]*, or performing an action *[(automation process)]* and providing the user with status updates about the progress of the action.” (EX1016, 2:40-44.) It would have been obvious for

the automation process to use a displayed UI. (Petition, 66-67.) Thus, a backend database and a displayed UI can be used together. (EX1042, ¶¶161-162.)

Second, PO argues that Radhakrishnan’s displayed UI is only for operations of the user, not the RPA, because of Radhakrishnan’s “within a virtual environment.” (POR, 79-80.) A “virtual environment” refers to whether the interactions are computer simulated, not whether they are displayed. And Radhakrishnan states that “the RPA module interacts directly with *a presentation layer [(displayed UI)]* of the application *within a virtual environment.*” (EX1018, 11:41-47; *also* 5:49-50 (“bots” are “trained to mimic user activity *directly with a UI*”), 5:10-12, 6:29-34; EX1042, ¶¶163-166.)

E. “whereby the parameterized automation process is invoked automatically by the natural language interface” (Elements 1[e]/11[e]/18[e])

PO’s only response is to improperly isolate Krishnan and Radhakrishnan and argue that Radhakrishnan’s automation process is not invoked in response to a user input. (POR, 80.) Petitioner relies on *Krishnan* for its disclosures of “invok[ing] automatically by the natural language interface.” (Petition, 60; EX1042, ¶¶167-168.)

F. Motivation To Combine

As the Petition explained, a POSITA would have been motivated to combine Krishnan’s teachings of a chat bot and automation process with Radhakrishnan’s

teachings of an automation process that utilizes a displayed UI. (Petition, 65-73.) PO's rebuttal—that the combination would only improve Radhakrishnan's error detection and not Krishnan's flight booking task— misses the obviousness theory and relies on bodily incorporation. (POR, 76, 81; *In re Keller*, 642 F.2d 413, 425 (C.C.P.A. 1981).) It makes no difference whether Krishnan's applies its teaching to booking a flight as one example, or whether Radhakrishnan applies its teachings of RPA to error detection as another example. (EX1042, ¶¶169-170.)

And Mr. Zatkovich's rebuttal (that Krishnan's use of a backend database makes the combination more costly and less efficient) also misses the obviousness theory. (EX2001, ¶439.) The combination does not replace Krishnan's database or access it with a displayed UI. It is the automation process that is tied to the displayed UI, and Radhakrishnan teaches and confirms the motivation of using RPA and interacting with a displayed UI.⁵ (EX1018, 6:21-25 (“reduces the amount of computing resources”), 6:38-42 (describing RPA and its interaction with the displayed UI as reducing waiting time), 6:25-29; EX1042, ¶¶171-175.)

⁵ PO is incorrect that motivation must appear in the reference (Krishnan) itself. (POR, 80-81); *Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1276 (Fed. Cir. 2004).

- G. “wherein the automation process is configured to execute a new functionality of the computer program” (Claim 9) And “wherein the functionality of the computer program comprises inputting data to a field in the displayed user interface” (Claim 10)**

Mr. Zatkovich’s argument that “Radhakrishnan does not perform *any tasks at all*” run contrary to the reference’s disclosure of “[RPA] [b]ots . . . *completing tasks*”. (EX2001, ¶496; EX1018, 6:6-8; EX1042, ¶176.) And his repeat “operation record” argument fails again, as does the POR’s vague statement of missing claimed features. (EX2001, ¶502; Section VI.B; EX1042, ¶¶176-177; POR, 82.)

- H. PO Does Not Dispute That Krishnan-Radhakrishnan Teaches Claims 2-5, 12-15, 19, And 20**

PO does not separately challenges these claims. (Sections VI.A-VI.F.)

VII. LEVEL OF ORDINARY SKILL IN THE ART

- A. Petitioner’s POSITA Level Is Proper**

The record shows that the key aspects of the art—chatbots, RPAs and their combinations—were well known by 2017, and thus point to Petitioner’s higher POSITA level. (Petition, 5-6.) Arya describes chatbots in 1994/1995 that used NLP, Ferscht describes RPAs in 2012, and Allen and LeClair showed the combination in 2007 and 2015, respectively. (EX1032, 3; EX1028, 4; EX1014; EX1031, 4, 12-13; EX1042, ¶¶178-179.)

PO instead resorts to mischaracterizing the art. PO’s cited statements (POR, 21) from Symons and Baetens refer to the RoboRana-Arinti collaboration, not the

chatbot-RPA combination, as being new. (EX1004, 1 (“*[w]e decided to join forces with Arinti*, specialized in chatbot and AI technologies within the Cronos Group, to explore the possibilities to combine RPA bots with chatbots.”); EX1009, 2 (“*[a]s soon as we’ve heard about our new colleagues at RoboRana*, we’ve been figuring out how to combine these technologies”).) And Symons’ “evolving rapidly” statement refers to the general “technology landscape”—not the chatbot-RPA combination. (EX1004, 1; EX1042, ¶¶180-181.)

As for Symons’ experience, instead of taking the opportunity to find out from Symons himself, PO improperly assumes (unlike its expert) that Symons’ experience before his job at RoboRana does not count. (POR, 21; EX1036, 16:7-25; EX1042, ¶182.)

B. The Board Should Reject PO’s Proposed POSITA level

The evidence does not support PO’s proposed POSITA level (as discussed above), and it is unclear what “some education, formal or informal” or “some” work experience means. (POR, 22; EX2001, ¶43; EX1042, ¶¶183-184.)

In any event, the parties do not dispute that the outcome would be the same regardless of which POSITA level the Board adopts. (POR, 23; EX1042, ¶184.)

VIII. THE BOARD SHOULD GIVE LITTLE/NO WEIGHT TO MR. ZATKOVICH'S OPINIONS

First, PO relies on Mr. Zatkovich's opinions to support its narrowing of the claims, but he did not consider any dictionary definitions despite admitting that he knew he should. (EX1036, 15:9-13.)

Second, Mr. Zatkovich frequently contradicts his own testimony. For example, he argues that the "natural language interface" must be implemented on the "target system" / "computer program" (EX2001, ¶118), but takes a different position in paragraph 50 of his declaration. (*See also* EX2006, 6 compared with EX1036, 120:13-21.)

Third, Mr. Zatkovich alleges that the Symons "video was put together very quickly" and that "the Arinti chatbot . . . was not publicly available at the time." (EX2001, ¶144.) But he did not support his assumptions, and when asked, admitted that "it's possible" that other assumptions could have been made. (EX1036, 125:7-16.)

IX. CONCLUSION

Petitioner respectfully requests cancellation of the challenged claims.

IPR2023-01379

Dated: October 17, 2024

Respectfully submitted,

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Certification of Word Count (37 C.F.R. § 42.24)

I hereby certify that this PETITIONER’S REPLY TO PATENT OWNER RESPONSE has 5,599 words (as counted by the “Word Count” feature of the Microsoft Word™ word-processing system), exclusive of “a table of contents, a table of authorities, a listing of facts which are admitted, denied, or cannot be admitted or denied, a certificate of service or word count, or appendix of exhibits.”

Dated: October 17, 2024

By /s/ Jean Nguyen

Jean Nguyen

Certificate of Service (37 C.F.R. § 42.6(e)(4))

I hereby certify that the attached PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE was served on the below date on the Patent Owner via e-mail (by consent) to the following counsel of record for the Patent Owner:

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