**UNITED STATES DISTRICT COURT**

**DISTRICT OF NEVADA**

APPLICATIONS IN INTERNET TIME, LLC,

Plaintiff,

v.

SALLESFORCE.COM, INC.,

Defendant.

Case No. 3:13-CV-00628-RCJ-CLB

**ORDER**

In this patent infringement action, Defendant Salesforce, Inc. ("Salesforce") moves for summary judgment or partial summary judgment of: non-infringement of claims 1, 10, 20-21, 23-26, 30, and 40 of U.S. Patent No. 7,356,482 (the "'482 patent") and claims 13-17 of U.S. Patent No. 8,484,111 (the "'111 patent") (collectively, the "asserted claims"); non-infringement of the asserted claims by Salesforce's "Lightning" user interface and its mobile application; and invalidity of the asserted claims in view of various prior art references (Dkt. 278). Plaintiff Applications in Internet Time, LLC ("AIT") opposes these motions, and affirmatively moves for

summary judgment of no anticipation (Dkt. 270), which Salesforce opposes. The parties also request that the documents receive seal.[1]

Salesforce also moves to exclude certain opinions of AIT's technical and damages experts (Dkt. 272, 275), and AIT moves to exclude certain opinions of Salesforce's damages expert (Dkt. 268), each of which are opposed. Salesforce further moves to dismiss this action under Fed. R. Civ. P. 12(b)(1) for lack of subject matter jurisdiction (Dkt. 283), and to resolve certain discovery disputes regarding a corrected expert report (Dkt. 351), and AIT objects to the magistrate judge's order on a motion to compel (Dkt. 338).

The parties' respective motions for summary judgment were heard by the Court on March 14, 2023. The Court did not take argument regarding the Daubert motions. Dkt. 392; Dkt. 393 at 4:6–5:3. Having considered the parties' evidentiary submissions and arguments, and for the reasons set forth below, the Court (i) grants Salesforce's motions for summary judgement of non-infringement and invalidity (Dkt. 278); and (ii) denies AIT's motion for summary judgment of no anticipation (Dkt. 270).

In view of the Court granting summary judgment of non-infringement and invalidity on all asserted claims, Salesforce's partial summary judgment motion of non-infringement by the Lightning user interface and its mobile application, AIT's objections to magistrate judge's order, and Salesforce's motion regarding the supplemental expert report are rendered moot, and therefore denied. The Court finds resolution of the parties' respective motions to exclude the opinions of their respective experts is not necessary to decide the present motions, and therefore the Court denies these motions as moot as well. To the extent motions have been denied as moot, such denial

[1] The parties ask the Court to seal pleadings. (Dkt Nos. 269, 271, 273, 276, 279, 282, 293, 295, 297, 301, 306, 314, 316, 319, 322, 333, 339, 346, 352, 359, 370, 377, 389, 403, 406). The Court recognizes that the public has a great interest in the documents, but the Court grants the parties' requests to seal the pleadings due to the nature of the sealed material.

is without prejudice. As such, the parties may re-raise their respective positions on these issues in the event of a remand.

## FACTUAL BACKGROUND

### A. The Patents and Claimed Invention

AIT asserts two patents in this litigation: the '482 patent and the '111 patent. Dkt. 1. Both patents are entitled "Integrated Change Management Unit," and they contain substantially identical specifications. The application for the '482 patent was filed on March 1, 2001, and issued on April 8, 2008. The application for the '111 patent was filed on October 26, 2011, is a continuation of U.S. Pat. Appl. No. 12/098,154, which is a continuation of the application for the '482 patent, and issued on July 9, 2013.

The asserted patents describe a "server computer" with four layers or portions of a server. Dkt. 172 at 6. The first layer, called the "business content layer," contains information about the "specific business operations of concern to the end used." '482 patent at 9:56-591.[2] The second layer, called the "metadata layer," contains "information about the user interface and functions common to a variety of applications," including "tools, worklists, data entry forms, reports, documents, processes, formulas, images, tables, views, columns, and other structures and functions." *Id.* at 9:41-46. The third layer, called the "Java data management layer," "retrieves the data in the first and second layers in order to generate the functionality and user interface elements of the application." *Id.* at 15:5-9. The fourth layer, called the "change management layer," "automatically detect[s] changes that affect an application." *Id.* at 16:18-21. As reflected in the claims, the change management layer is comprised of "one or more" intelligent agents. '482 patent,

[2] For simplicity, citations are made to the specification of the '482 patent.

claims 8, 28. The specification teaches the server may "automatically mak[e] application and database changes using intelligent agent routines..." *Id.* at 7:47-53.

**B. The Asserted Claims, the Court's Claim Construction, and Evidence of the Ordinary Meaning of Certain Claim Terms**

AIT is asserting infringement of claims 1, 10, 20, 21, 23, 24, 25, 26, 30, and 40 of the '482 patent and claims 13-17 of the '111 patent. Of those, claims 1 and 21 of the '482 patent and claim 13 of the '111 patent are independent claims. All other claims depend, directly or indirectly, from one of those three claims.

With respect to the claim term automatically detecting, claim 21 of the '482 Patent requires "automatically detecting changes that affect a particular application." '482 Patent at 33:52–53. Claim 1 of the '482 patent adds an additional requirement that such "automatic" detection occur as part of the "change management layer." 482 Patent at 32:27–28 ("a change management layer for automatically detecting changes that affect an application"). Claim 13 of the '111 Patent adds an additional requirement to claim 21 of the '482 Patent requiring the software for automatic detection to be contained on a "portion" of a server. '111 Patent at 34:5–8.

I addressed the parties' disputes regarding claim construction in my claim construction opinion. Dkt. 172. The parties also agreed on the construction of a number of claim terms. Dkt. 153-4; Dkt. No. 277 at 7.

During claim construction, I found the phrase "automatically detecting changes ..." to require an "intelligent agent." As I explained in my opinion, the "patents repeatedly discuss intelligent agents as an integral component of the claimed invention." Dkt. 172 at 13.[3] I further

[3] In its briefing, Salesforce relies on Mr. Zatkovich's testimony from deposition instead of my claim construction order for this proposition. Dkt. 280 at 2. However, at the time Mr. Zatkovich testified, my claim construction order, including my finding that the specification taught "intelligent agents" were "integral components" of the claimed invention, was the law of the case.

found the specification distinguished the prior art based on the prior art's failure to contain intelligent agents. *Id.* at 13–14. As such, for the reasons previously explained, I construed "automatic detect[ing]," as it appears in all the claims, to require "detecting without human intervention through the use of one or more intelligent agents." *Id.* at 12, 24.

The shared patent specification provides various descriptions of intelligent agents. As an example, the specification states that "[a]n 'intelligent agent' is a specialized program that makes decisions and performs tasks based on predefined rules and objectives." '482 patent at 20:1-3; *See also Id.* at 10:42–45 ("An 'intelligent agent' is a specialized program that resides on a network, or at a server as an applet, and can make decisions and perform tasks based on pre-defined rules."); *Id.* at 16:22–23 ("[E]ach IA is defined by rules and constraints that focus on the selected business area."). In addition, the parties' respective experts have offered various opinions regarding the understanding of this term to a skilled artisan. *See*, e.g., Dkt. 280-6 (Zatkovich Reb. Rpt.) at ¶¶ 52, 60, 79–85, 1104–1116; Dkt. 280-8 (Zatkovich Op. Rpt.) at ¶¶ 1208–1214; Dkt. 280-1, Schmidt Reb. at ¶¶ 39–51; Dkt. 280-2 Bederson Rpt. at ¶¶ 112–121. Ultimately, I did not construe the term "intelligent agent" and the ordinary meaning of this term to a skilled artisan is therefore applicable.

Mr. Zatkovich opined the various descriptions of "intelligent agent" in the specification are consistent with the term's plain meaning as he understood it and with his opinions regarding the "deploy" function of the accused product. Dkt. 280-6 (Zatkovich Reb. Rpt.) at ¶¶ 52, 60, 80, 1110, 1570, 1574; Dkt. 280-8 (Zatkovich Op. Rpt.) at ¶¶ 818, 1209, 1212; Dkt. 297-2 (Zatkovich 8/21/2022 Tr.) at 261:16–25, 270:7-10; Dkt. 297-3 (Zatkovich 8/24/2022 Tr.) at 426:8–25, 431:18–432:3, 434:16–435:3, 437:4–13. In particular, he explained that infringement would not be avoided under the narrowest interpretation in the specification. Dkt. 297-2 (Zatkovich 8/21/2022 Tr.) at 261:16–25.

During claim construction, I further resolved the parties' dispute regarding the terms "layer" and "portion of the server." In particular, I found that the term "layer" shall be construed as "a set of functionally or logically separated software components" and that the term "portion of the server" shall be constructed as "a functionally or logically separately subset of one or more server computers." Dkt. 172 at 24.

As recognized by Salesforce, "the parties [] agreed on constructions for 'application' and 'predetermined business application.'" Dkt. No. 277 at 7 citing 277-2 (Zatkovich Op. Rpt.) ¶ 28; *See* Dkt. 153-4. The agreed construction for "application" is "a software program providing a set of end user functions for performing tasks. Dkt. 153-4. The agreed construction for "predetermined business application is "a software program that provides a predefined set of end user functions for performing tasks relating to the requirements or operations of a business." *Id.*

**C. Post-Grant Challenges to the '482 and '111 Patents in Light of Popp**

On August 17, 2015, RPX Corporation filed petitions for inter partes review ("IPR") against the asserted claims of the '482 and '111 patents arguing, among other grounds, that the claims were anticipated by U.S. Patent No. 6,249,291 ("Popp"). IPR2015-01750, Paper 1 (Petition) at 13-23 (PTAB August 17, 2015); IPR2015-01751, Paper 1 (Petition) at 16-13 (PTAB August 17, 2015). During the IPR proceedings, AIT disputed whether Popp disclosed "automatically detecting" changes—not any other element. E.g., IPR2015-01750, Paper 63 (Patent Owner Response) at 23-24 (PTAB May 20, 2016). After trial was instituted, the PTAB issued Final Written Decisions rejecting AIT's argument and finding that claims 1, 10, 20-21, 30, and 40 of the '482 patent and claims 13-17 of the '111 patent were anticipated by Popp. Dkt. 280-14 (IPR2015-01751, Paper 82 (Final Written Decision)) at 25-26 (PTAB Dec. 28, 2016); (IPR2015-01750, Paper 80 (Final Written Decision)) at 35 (PTAB Dec. 28, 2016). The PTAB further found that claims 23–26 of the '482 Patent were invalid as obvious over Popp in combination with another

publication ("Codd"). Dkt. 280-14 (IPR2015-01751, Paper 82 (Final Written Decision)) at 27–29 (PTAB Dec. 28, 2016).

On appeal before the Federal Circuit, the Court vacated and remanded the PTAB's decision because the PTAB did not apply the proper standard for determining whether Salesforce was a real party in interest. Applications in Internet Time, LLC v. RPX Corp., 897 F.3d 1336 (Fed. Cir. 2018). The PTAB's Final Written Decisions were vacated based on the procedural question regarding the identity of the real party in interest and despite having found, on the merits, that all of the asserted claims of the '482 and '111 patents were invalidated by Popp in combination with various references. IPR2015-01750, Paper 128 (Final Decision on Remand Terminating Institution) at 13-23 (PTAB October 2, 2020).

The Court has reviewed the PTAB's findings regarding the prior art and its conclusions. The Court recognizes the PTAB's decision was vacated and does not rely on the decision itself. However, the Court has independently considered the evidence and arguments of the parties and ultimately, as indicated at the hearing, the Court concludes the PTAB reached the proper result. Dkt. 393 at 157:12–15.

**D. Description of the Accused Products**

The accused products in this case are certain functionalities of Salesforce's Salesforce1 and Force.com platforms. Dkt 280-8 (Zatkovich Op. Rpt.) ¶ 1198.

The accused products use a metadata-driven architecture in which an application is defined by metadata rather than embodied in program code, so that changing an application can be achieved by changing the metadata rather than code. *Id.* at ¶¶ 119–120. Designers and developers, however, do not enter metadata changes directly into the application that is deployed to customers, i.e., the "production" version of the application. *Id.* at ¶¶ 241–261, 305–309, 814–815. Rather, they work on a development copy of the application metadata stored in a "sandbox" or "scratch

organization." *Id.* at ¶ 266; *See also Id.* at ¶¶ 273–309, 814–815. This development version of the metadata is modified through a graphical user interface, an Integrated Development Environment (IDE), or a command line interface (CLI) tool. *Id.* at ¶¶ 242, 248, 309; *See also Id.* at ¶¶ 241–261. Rather than modify metadata associated with a production application directly, potential changes to application metadata are detected and deployed to the production application based on a comparison of the metadata in the production application with a development copy of the code. *Id.* at ¶ 263–264; *See also Id.* at ¶¶ 262–304, 541. All automated change management features in the accused products are governed by and utilize the same software functionalities, including a Universal Data Dictionary (UDD) and the Metadata API. *Id.* at ¶¶ 263–265, 315.

With respect to automated change management, the Metadata API includes a "deploy" function that detects changes to the metadata that defines an application. *Id.* at ¶¶ 812–813. Mr. Zatkovich provided a "source code analysis for the claimed layer four includ[ing] a code description and code flow chart for source code reflecting fourth-layer functionality for detecting changes to metadata." Dkt. 280-8, Zatkovich Op. at ¶ 834 (referencing "Flow D" portion of source code analysis, (Dkt 280-15, Appendix C to Zatkovich's Op. Rpt. at 20-24)). Mr. Zatkovich further explained that one step in the "deploy" function includes a "filterOutUnchangedFiles" routine where the changes are identified within the deploy function. Dkt 280-15, Appendix C to Zatkovich's Op. Rpt. at 24 ("Step 3"); Dkt. 297-2 Zatkovich 8/21/2022 Tr. at 257:3-6. With reference to his analysis of the source code of the accused products, Mr. Zatkovich further testified that this one step of the "deploy function" alone would not be considered an intelligent agent. Dkt. 297-2 (Zatkovich 8/21/2022 Tr.) at 256:21–257:2, 272:13–16.

**E. Appropriate Level of Ordinary Skill in the Art**

Salesforce's expert Dr. Benjamin Bederson opined that "a person of ordinary skill in the art as of the claimed priority date of each of the asserted patents ('POSITA') would have had at

least an undergraduate degree in electrical engineering or computer science (or equivalent field) and at least two years of computer programming experience in developing client-server systems." Dkt. 280-6 (Bederson Rpt.) ¶ 19. AIT's expert, Mr. Zatkovich, opined that "a person of ordinary skill in the art, at the time of the invention of the Asserted Patents, would be someone with a bachelor's degree in computer science or a related field (such as electrical engineering), and either (1) two or more years of industry experience and/or (2) an advanced degree in computer science or a related field." Dkt 280-8, Zatkovich Op. at ¶¶ 23-24. These two standards are generally consistent with each other, and neither party in their motion papers asserted that there was any material difference between the two standards. As such, resolution of the experts' dispute is not necessary for my opinion.

## LEGAL STANDARD

### A. Summary Judgment

Summary judgment is appropriate only where the moving party demonstrates there is no genuine dispute as to any material fact such that judgment as a matter of law is warranted. Fed. R. Civ. P. 56(a); *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). Material facts are those that might affect the outcome of the case, as defined by the framework of the underlying substantive law. *Anderson v. Liberty Lobby, Inc*., 477 U.S. 242, 248 (1986). A dispute is genuine if the evidence is such that a reasonable jury could return a verdict for either party. *Id.* The moving party bears the initial burden of informing the district court of the basis for its motion and identifying those portions of the pleadings, discovery, and affidavits that demonstrate the absence of a disputed issue of material fact. *Celotex*, 477 U.S. at 323.

In opposing the motion, the non-moving party may not rely merely on the allegations or denials in its pleadings, but must set forth "specific facts showing that there is a genuine issue for trial." *Anderson*, 477 U.S. at 248 (citing Fed. R. Civ. P. 56(e)). The court must construe the

evidence in the light most favorable to the non-moving party, making all reasonable inferences that can be drawn. *Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986); *Intel Corp. v. Hartford Accident & Indem. Co.*, 952 F.2d 1551, 1558 (9th Cir. 1991); *Eisenberg v. Ins. Co. of N. Am.*, 815 F.2d 1285, 1289 (9th Cir. 1987). "If the [non-movant's] evidence is merely colorable, or is not significantly probative, summary judgment may be granted." *Anderson*, 477 U.S. at 249-50 (internal citations omitted). "Summary judgment is as appropriate in a patent case as it is in any other case." *C.R. Bard, Inc. v. Advanced Cardiovascular Sys., Inc.*, 911 F.2d 670, 672 (Fed. Cir. 1990).

**B. Legal Standards Relevant to Infringement**

The party asserting patent infringement has the burden of proving infringement, and thus the burden of establishing that each and every limitation in the asserted claim is met. *Jazz Photo Corp. v. Int'l Trade Comm'n*, 264 F.3d 1094, 1102 (Fed. Cir. 2001). It is axiomatic that if the accused products fail to satisfy even a single limitation of the claims, they do not infringe. *Hutchins v. Zoll Med. Corp.*, 492 F.3d 1377, 1380 (Fed. Cir. 2007); *Biagro W. Sales, Inc. v. Grow More, Inc.*, 423 F.3d 1296, 1301 (Fed. Cir. 2005). While limitations can be met literally or under the doctrine of equivalents, "[t]he doctrine of equivalents applies only in exceptional cases and is not 'simply the second prong of every infringement charge, regularly available to extend protection beyond the scope of the claims." *Amgen Inc. v. Sandoz Inc.*, 923 F.3d 1023, 1029 (Fed. Cir. 2019).

**C. Legal Standards Relevant to Invalidity**

Patents are presumed valid, and the presumption may only be overcome by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 95 (2011). "The burden of establishing invalidity of a patent . . . shall rest on the party asserting such invalidity." 35 U.S.C. § 282(a).

Title 35 U.S.C. § 102 establishes the various grounds for invalidation of patents based on anticipation by prior art. "[A] claim is anticipated if each and every limitation is found either expressly or inherently in a single prior art reference." *Bristol-Myers Squibb Co. v. Ben Venue Labs., Inc.*, 246 F.3d 1368, 1378 (Fed. Cir. 2001) (alteration in original). "While anticipation is a question of fact, it may be decided on summary judgment if the record reveals no genuine dispute of material fact." *Encyclopaedia Britannica, Inc. v. Alpine Elecs. of Am., Inc.*, 609 F.3d 1345, 1349 (Fed. Cir. 2010) (internal citation omitted). Additionally, "[a] patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." Pre-AIA 35 U.S.C. § 103(a). Obviousness is a question of law with "underlying factual considerations." *Id.* (citing *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17 (1966)). An obviousness analysis requires consideration of any evidence tending to objectively show non-obviousness. *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc.*, 617 F.3d 1296, 1305 (Fed. Cir. 2010).

## ANALYSIS

### A. SalesForce Did Not Infringe the '482 and '111 patents

During claim construction, the Court construed all asserted claims to require automatically detecting changes "through the use of one or more intelligent agents." Dkt. 172 at 24.

Specifically, during prosecution, the asserted claims were ultimately allowed over the "Eager" prior art reference (U.S. Patent No. 5,960,200; Dkt. 68-9), on which the claims stood rejected, after AIT added to the claims the language requiring "automatically detecting changes." As I explained above, during claim construction I found the patents themselves discuss intelligent agents as an integral component of the claimed invention—and the process for detecting changes—

and distinguished the claimed inventions on that basis from the prior art. Dkt. 172 at 13-14. Thus, for purposes of obtaining its patents, AIT placed heavy emphasis on "automatically detecting" changes, and in particular doing so using "one or more intelligent agents." However, AIT failed to put forth evidence sufficient to raise a genuine dispute of material fact that the accused products use any such "intelligent agent" to detect changes.

### *I. AIT Failed to Raise a Genuine Dispute of Material Fact that Accused Products Detect Changes "Through One or More Intelligent Agents"*

Based on the Court's claim construction, the asserted claims all require detecting changes "through the use of one or more intelligent agents." Dkt. 172 at 24. There is no dispute that not every software program qualifies as an "intelligent agent."

As detailed above, the specification (on which both parties rely) states "[a]n 'intelligent agent' is a specialized program that makes decisions and performs tasks based on predefined rules and objectives." '482 patent at 20:1-3; *See Id.* at 10:41-48. The parties' experts acknowledged that this description was consistent with their understanding of the term "intelligent agent." Dkt 323-2 Zatkovich 8/21/2022 Tr. at 261:16-25; Dkt. 280-05, Schmidt Rebuttal Report) ¶ 338.

Turning to the operation of the accused products, as detailed above, the products include a deploy function for detecting changes made to metadata defining the user interface and functionality of an application associated with the accused products. Dkt 280-8, Zatkovich Op. at ¶¶ 121, 309; Dkt. 280-1, Schmidt Rpt. at ¶¶ 341-43.

Mr. Zatkovich, AIT's expert, analyzed the source code for the deploy function (including its various sub-routines, such as the filterOutUnchangedFiles function). Mr. Zatkovich concluded based on his analysis that the deploy function as a whole is an intelligent agent. Dkt. 297-2 (Zatkovich 8/21/2022 Tr.) at 256:21–257:2, 272:8–16; Dkt. 297-3 (Zatkovich 8/24/2022 Tr.) at 431:18–432:3; Dkt. 280-8 (Zatkovich Op. Rpt.) at ¶¶ 811–815, 818, 822–834. With respect to the

support for Mr. Zatkovich's application of the ordinary meaning of "intelligent agent," AIT relies primarily on Mr. Zatkovich's report including various paragraphs in the body of the report (Dkt. 280-8 (Zatkovich Op. Rpt.) at ¶¶ 811–815, 818, 822–834), Mr. Zatkovich's source code analysis with respect to the "deploy" function, (Dkt. 280-11 (Zatkovich Appx. C) at 20-24), his deposition testimony, as well as opinions directed to the meaning of "intelligent agent" to a skilled artisan, (Dkt. 280-8 (Zatkovich Op. Rpt.) at ¶¶ 1209, 1212).

Salesforce's expert, Dr. Schmidt, opined that the "deploy" function is not an "intelligent agent." Dkt. 280-05 (Schmidt Rpt.) ¶¶ 338-54. I have reviewed and considered the evidence and I find it insufficient to raise a question of fact. In particular, Mr. Zatkovich's analysis of the "deploy" function is insufficient to support his conclusion that the "deploy" function is an intelligent agent. As such, Mr. Zatkovich's opinions are insufficient to raise a question of fact. Mr. Zatkovich opined the "deploy" function is an "intelligent agent." Dkt. 296 at 9–10. However, as urged by Salesforce, Mr. Zatkovich did not compare the deploy function to the Asserted Patents' description of an "intelligent agent." *See*, e.g., '482 patent at 20:1-3 ("An 'intelligent agent' is a specialized program that makes decisions and performs tasks based on predefined rules and objectives."); *See also id.* at 10:42–45, 16:22–23.

In these circumstances, the assertion of AIT's expert, Mr. Zatkovich, that the "automatically detecting..." limitation as construed by this Court is met by the deploy function is insufficient to defeat summary judgment. *See Arthur A. Collins, Inc. v. Northern Telecom Ltd.*, 216 F.3d 1042, 1046 (Fed. Cir. 2000) ("[I]t is well settled that an expert's unsupported conclusion on the ultimate issue of infringement is insufficient to raise a genuine issue of material fact. ... A party may not avoid that rule by simply framing the expert's conclusion as an assertion that a particular critical claim limitation is found in the accused device."). The Court has considered the portions of Mr. Zatkovich's report identified by AIT, but those passages merely describe the

deploy function's operation without specifically comparing the "deploy" function to any definition in the specification. *See*, e.g., Dkt. 280-8 (Zatkovich Op. Rpt.) at ¶¶ 811–835; Dkt. 280-11 (Zatkovich Appx. C) at 20-24.

AIT further argues that Mr. Zatkovich's opinions are supported based on Mr. Zatkovich's source code analysis. In particular, AIT argues that the fact that the "deploy" function contains rules, constraints and objectives should not be disputed in light of Mr. Zatkovich's opinions. *See* Dkt. 296 at 9–10.) Specifically, AIT's opposition asserts that Mr. Zatkovich "will be able to explain what [the 'deploy function'] is, the special functions it performs, the rules and objectives that govern its operation, [and] the fact that it is an agent that automatically detects changes." Dkt. 296 at 5 (relying on Dkt. 280-8 (Zatkovich Op.) at ¶¶ 811–834, 1208–1214). However, Mr. Zatkovich conceded at deposition that his report lacks "an explanation of how the deploy function compares" with the description of "intelligent agent" in the specification. Dkt. 297-3 (Zatkovich 8/24/2022 Tr.) at 427:15-428:7. As such, a reasonable juror could not find the source code analysis contained in Mr. Zatkovich report, *See* Dkt. 280-11 (Zatkovich Appx. C) at 20-24, to be a sufficient analysis to support Mr. Zatkovich's conclusion that the "deploy" function is an intelligent agent. I do not find AIT's arguments to the contrary persuasive.

### *II. SalesForce's Other Arguments with Respect to Intelligent Agents*

With respect to claims 1, 10, and 20 of the '482 Patent, Salesforce presents a separate argument for non-infringement. In particular, Salesforce asserts summary judgment of non-infringement is appropriate because, under the Court's construction, the "deploy" function cannot be both the "change management layer" and an "intelligent agent."

Salesforce argues that the "change management layer" is required to "use" the intelligent agent and therefore the layer itself cannot be an "intelligent agent." Salesforce's argument with respect to "change management layer" is unpersuasive. During claim construction neither party

requested a construction that required the "change management layer" to be distinct from the "intelligent agent" or to use a separate program to automatically detect changes. *See* Dkt. 153 at 7–16; Dkt. 154 at 3–12. Any such construction would be inconsistent with the claim language which recognizes that the "change management layer" may "comprise[]" one or more intelligent agents. '482 Patent at 32:59–61 (claim 8). As such, the parties' respective experts were free to apply the Court's construction and the ordinary meaning of these phrases. As detailed below, both parties' experts have applied the Court's construction of "change management layer" and the ordinary meaning of "intelligent agent" such that these terms can be, but are not required to be, co-extensive. As explained by AIT, and found by me below,

Salesforce's argument with respect to "change management layer" and "intelligent agent" is inconsistent with Salesforce's own expert testimony. Dkt. 295 at 7. As detailed below, I have found the prior art both anticipates and renders the asserted claims obviousness as a matter of law. At Salesforce's request, my findings of anticipation and obviousness rely on the same structure in the prior art for both the "change management layer" and the "intelligent agent." *See* infra, Section III.C.3.a.(vii.). Ultimately, there is nothing in the claim language or the Court's construction precluding "change management layer" and the "intelligent agent" from being co-extensive.

**B. SalesForce's Arguments with Respect to *FilerOutUnchagedFiles*, a Portion of the Deploy Function**

Salesforce further argues that Mr. Zatkovich's admissions regarding the filterOutUnchangedFiles function, a part of the deploy function, require judgment in its favor. Dkt. 280 at 13–14 (relying on Dkt 297-2 (Zatkovich 8/21/2022 Tr.) at 257:3-6 and 272:13-16). As I explained at the hearing, my opinion is based on the lack of evidence supporting AIT's position and I decline to adopt Salesforce's characterization of the evidence and the arguments from Salesforce's Daubert motion. Dkt. 393 at 153:23–154:18. In particular, Mr. Zatkovich's deposition

testimony relied on by Salesforce concerning the filterOutUnchangedFiles routine (which is part of the "deploy" function) supports the conclusion that the deploy function is "used" to automatically detect changes, even though Mr. Zatkovich has not provided sufficient support for his opinion that the "deploy" function is an "intelligent agent."

For example, Mr. Zatkovich's opinion that "Step 3" (the "filterOutUnchangedFiles" function) is where "change detecting actually happens" is not germane to my analysis. *See* Dkt. 297-2 (Zatkovich 8/21/2022 Tr.) at 257:3-6 (referencing Dkt. 280-11 (Zatkovich Appx. C) at 24). I reach that conclusion for two reasons.

First, the claimed intelligent agents are not required to only automatically detect changes. With respect to whether an "intelligent agent" or the "deploy" function must only be used to automatically detect changes (such that the "deploy" function would not be considered a "specialized" program) there is no dispute with respect to this issue. In particular, in response to Salesforce's moving papers, AIT explained that an "intelligent" agent is not required to only detect changes and the particular lines of code for detecting changes may be part of a larger program that performs multiple functions. Dkt. 296 at 8–9. AIT urged that Salesforce's arguments to the contrary were based on a dispute of fact between the parties' respective experts and inconsistent with the specification which identifies various functions performed by each intelligent agent, i.e., only a portion of the "intelligent agents" taught in the specification are for detecting changes. *Id.* In its reply brief, Salesforce represented that "whether the 'deploy' function is sufficiently 'specialized' to qualify as an 'intelligent agent' is irrelevant to Salesforce's motion for summary judgment." Dkt. 321 at 4. Salesforce further recognized in reply that summary judgment of non-infringement does not rest on any requirement that the "intelligent agent" must be "an autonomous, stand-alone, or background program." Dkt. 321 at 10 ("Salesforce's motion for summary judgment is not premised on any requirement that the 'intelligent agent' must be 'an autonomous, stand-

alone, or background program' and does not dispute that the 'intelligent agent' can be a software component within the 'change management layer.'"). As such, I cannot grant summary judgment directed to Salesforce's arguments directed to whether only a portion of the "deploy" function is used to automatically detect changes.

Second, a reasonable juror would not be required to find that "filterOutUnchangeFiles" (step 3 alone) is the only functionality used by the accused products to detect changes. Mr. Zatkovich's testimony that "filterOutUnchangedFiles" is where change detection "actually happens" and that Step 3 "alone" is not an "intelligent agent" does not lead to the conclusion that "filterOutUnchangedFiles," i.e., Step 3 is the only step used to automatically detect changes. *See* Dkt. 280-11 (Zatkovich Appx. C) at 20-24. Indeed, Mr. Zatkovich did not testify that "filterOutUnchangeFiles," Step 3, in his source code analysis, is the only code used to automatically detect changes. *See* Dkt. 297-2 (Zatkovich 8/21/2022 Tr.) at 256:16-20 (in reference to Dkt. 280- 11 (Zatkovich Appx. C) at 20-24). Instead, the parties appear to agree that various other portions of the "deploy" function, including ""compareVersions" which "[d]etermines what information / metadata (blobs) from current version was in previous version (i.e., what has not changed)" which are plainly not part of Step 3 "alone," are also used in the automatic detections of changes. Dkt.297 at 9; Dkt. 323 at 6. When Mr. Zatkovich's deposition testimony is considered in light of his description of the deploy function I cannot conclude that Step 3, "filterOutUnchangedFiles," is the only portion of the "deploy" function used to automatically detect changes.

### *I. AIT Cannot Rely on Doctrine of Equivalents to Meet the "Intelligent Agent" Requirement*

AIT's doctrine of equivalents argument does not defeat summary judgment. In its opposition brief, AIT contends that "Mr. Zatkovich's [doctrine of equivalents] opinions are merely

addressed to Salesforce's argument that an 'intelligent agent' must be implemented as 'an autonomous, stand- alone, or background program' as Salesforce's experts opined following claim construction." Dkt. 296 at 10; *See also Id.* at 12. In reply, Salesforce explained its argument does not rest on any requirement that the "intelligent agent" must be "an autonomous, stand-alone, or background program." Dkt. 321 at 10 ("Salesforce's motion for summary judgment is not premised on any requirement that the 'intelligent agent' must be 'an autonomous, stand-alone, or background program' and does not dispute that the 'intelligent agent' can be a software component within the 'change management layer.'"). As such, AIT's arguments regarding the doctrine of equivalents are irrelevant to the present motion.

Accordingly, AIT's doctrine of equivalents theory does not raise a disputed issue of material fact sufficient to withstand summary judgment of non-infringement.

### C. The '482 and '111 Patents are Anticipated by Popp and also Rendered Obvious by the Combination of Popp and Amati

Salesforce moves for summary judgment that the asserted claims of the '482 and '111 patents are invalid as anticipated or rendered obvious by Popp, alone or in combination with Amati.

#### *I. Summary of Popp*

U.S. Patent No. 6,249,291 ("Popp") is entitled "Method and Apparatus for Managing Internet Transactions." Dkt. 280-17 (Popp). The named inventors are Nicolas Popp, Bruce Ong, and Charles D'Harcourt. Popp was filed on September 23, 1995, and issued on June 19, 2001. Therefore, Popp is prior art to the '482 and '111 patents under pre-AIA 35 U.S.C. § 102(e). AIT does not dispute that Popp is prior art to both asserted patents.

The parties dispute the teachings of Popp and whether they meet the limitations of the claims. First, Mr. Zatkovich opined Popp does not relate to dynamically generating applications. Dkt. 280-6, Zatkovich Reb. at ¶ 224. His explanation of Popp is as follows. "Popp relates to a

technique for providing Web-based, remote access to an existing, conventional corporate application such as an 'Automobile Shopper' application." *Id.* Otherwise put, Popp "uses a Web-based front-end as a replacement for a conventional local user interface." *Id.* For the same reason, "Popp's application 214 is a static computer program written in a conventional programming language, rather than a dynamically generated application." *Id.* at ¶ 228. As such, "Popp purports to provide a limited improvement over existing Web-based applications from the early 1990's." *Id.* at ¶ 225. Second, Popp's application does not change. *Id.* at ¶ 229. Instead, "the only aspect of these Web pages that can change over time is the data that is displayed ... the user interface and functionality of the underlying application remain the same." *Id.* at ¶ 231.

### *II. Summary of Amati*

"A Framework for Filtering News and Managing Distributed Data" ("Amati") is an academic paper authored by Gianni Amati, Daniela D'Aloisi, Vittorio Giannini, and Flavio Ubaldini. Dkt. 280-18 (Amati). Amati was published in the Journal of Universal Computer Science on August 28, 1997, and thus is prior art to the '482 and '111 patents under pre-AIA 35 U.S.C. § 102(b). AIT does not dispute that Amati is prior art to both patents.

Amati discloses an "ABIS (Agent Based Information System)" that "has been designed to assist users in retrieving information in repositories, archives and databases accessible through the network." *Id.* at 1015. Amati states the ABIS system "follows the software agent metaphor," wherein an "agent is an intelligent entity designed to act on behalf of a user." *Id.* The reference further explains the ABIS agent is "not only an intelligent support program, but an entity capable of acting autonomously, facing unexpected events and cultivating a trustful relationship with the user." *Id.* Amati teaches when the ABIS "agent autonomously navigates the network looking for relevant documents," the agent "is driven by a Preference Profile that describes the current user

interest" and "takes into account the Situation Set, where the whole interaction history is memorized and further used for predicting the user's choices." *Id.*

### *III. Popp Anticipates Claims 1, 10, 20-21, 23-26, 30, and 40 of the '482 Patent and also Renders them Obvious in Combination with Amati*

The Court finds that Popp both anticipates claims 1, 10, 20-21, 23-26, 30, and 40 of the '482 patent, and renders them obvious in combination with Amati, as a matter of law. Dr. Bederson, Salesforce's expert, opined that each limitation of the asserted '482 patent claims is disclosed by Popp, and in some instances was also rendered obvious by Popp in view of Amati. Dkt. 280-6 (Bederson Rpt.) ¶¶ 398-428. Mr. Zatkovich, AIT's expert, opined that Popp does not disclose various limitations of the asserted claims. Dkt. 280-6, Zatkovich Reb. ¶¶ 239-294 (addressing anticipation), ¶¶ 1151-1158, 1184. Having considered the evidence submitted by the parties, I conclude AIT has failed to raise a dispute of material fact that would preclude granting of summary judgment.

a. Claim 1

1. Popp discloses "A system for providing a dynamically generated application having one or more functions and one or more user interface elements; comprising:"

Salesforce relies on Dr. Bederson's opinion in support of its motion for this limitation. Dkt. 280 at 22. Dr. Bederson opined that Popp discloses that "the present invention is used with an application on the server side of the connection to dynamically generate Web pages" which "contain application information and provide the ability for the user to specify input." Dkt. 280-2, Bederson Rpt. 399. Salesforce further relies on Mr. Zatkovich's deposition testimony where he

stated that Popp "dynamically generate[s] a Web page" and that Popp's Web page is an "application." Dkt. 280 at 22 (relying on Dkt. 280-5, Zatkovich 8/24/2022 Tr. at 583:10-584:22).

AIT relies on Mr. Zatkovich's testimony in opposition to Salesforce's motion for this limitation. Dkt. 297 at 24 (relying on Dkt. 280-6, Zatkovich Reb. ¶ 240). Mr. Zatkovich opined "Popp's web pages ... are not 'dynamically generated' as the claims recites." Dkt. 280-6, Zatkovich Reb. ¶ 240. He further opined that "Popp's web pages provide access to a static application (application 214) with a fixed function and a fixed user interface." *Id.*

Based on Mr. Zatkovich's admission and Dr. Bederson's testimony, I find AIT has failed to raise a genuine dispute of fact and a skilled artisan would find that Popp disclosed its "Web page" is a "dynamically generated application."

2. Popp discloses "a server computer;"

Salesforce relies on Dr. Bederson's testimony in support of its motion for this limitation. Dkt. 280 at 22 (relying on Dkt. 280-2, Bederson Rpt. ¶ 400). Dr. Bederson opined that Popp discloses an "internal application" that generates Web pages whose contents "can contain data retrieved from a[] . . . database server 318." Dkt. 280-2, Bederson Rpt. ¶ 400.

AIT did not dispute the presence of this limitation in its responsive papers.

Thus, I find AIT has failed to raise a genuine dispute of fact and a skilled artisan would find Popp's "database server 318" is a "server computer."

3. Popp discloses "one or more client computers connected to the server computer over a computer network;"

Salesforce relies on Dr. Bederson's testimony in support of its motion. Dkt. 280 at 22 (citing Dkt. 280-2, Bederson Rpt. ¶ 401). Dr. Bederson opined Popp discloses this limitation, including because Popp teaches that "an Automobile Shopper's application . . . provides a series

of screens (i.e., Web pages) based on user-input that are designed to facilitate the selection and purchase of an automobile." Dkt. 280-2, Bederson Rpt. ¶ 401.

AIT did not separately dispute the presence of this limitation in its responsive papers.

Thus, there is no genuine dispute that Popp discloses this limitation.

4. Popp discloses "a first layer associated with the server computer containing information about the unique aspects of a particular application;"

Salesforce relies on Dr. Bederson's testimony in support of its motion. Dkt. 280 at 22 (relying on Dkt. 280-2, Bederson Rpt. at ¶ 402). Dr. Bederson opined that Popp discloses this limitation because Popp teaches an "internal application" that generates Web pages whose contents "can contain data retrieved from . . . database server 318." Dkt. 280-2, Bederson Rpt. ¶ 402. Dr. Bederson further opined "Popp discloses that "an Automobile Shopper's application ... provides a series of screens (i.e., Web pages) based on user-input that are designed to facilitate the selection and purchase of an automobile." *Id.* Dr. Bederson explained the "application . . . fetches all the data from the database," such as "all of the models of cars that are within the price range and type specifications." *Id.*

In opposition, AIT argues that Dr. Bederson's opinions are conclusory such that a reasonable juror would not be required to accept such opinions as true. Dkt. 297 at 25, 27. In particular, AIT argues Dr. Bederson failed to "identify or explain" why the data he identified, "all the models of cars within a price range," would be considered information "about" a particular "aspect" of an "application." Dkt. 297 at 27 ("[W]ith respect to the first layer, Dr. Bederson fails to identify or explain how the data he identified as 'unique information' is data 'about' an 'aspect' of an 'application.'" *See* Ex. 2 (Bederson Op.) at ¶ 402) (relying on Dkt. 280-2, Bederson Rep. at ¶ 402)). I do not find Dr. Bederson's opinion with respect to this limitation conclusory.

In addition, AIT relies on Mr. Zatkovich's opinions in opposition to Salesforce's motion. Dkt. 297 at 24-45 (relying on Dkt. 280-6, Zatkovich Reb. at ¶¶ 242-244). Mr. Zatkovich opined that Popp's database "contains merely the data on which a conventional application operates," which would not be considered "information about unique aspects" of the application itself. Dkt. 280-6, Zatkovich Reb. at ¶ 242. He further opined the data, models of cars within a price range, is not "information about the unique aspects of a particular application" and is "merely data stored by the application," and such data does not define any aspect of the application user interface or application functionality. *Id.* AIT has further relied on Mr. Zatkovich's testimony regarding the plain meaning of the claim limitation at issue and the manner in which Mr. Zatkovich understood the claim language in its Daubert opposition. Dkt. 295-1 at 15 (relying on Dkt. 295-2, Zatkovich 8/24/2022 Tr. at 588:15–23, 589:2–4, 593:14–18); *See also* Dkt. 295-2, Zatkovich 8/24/2022 Tr. at 654:4–25.

Salesforce urges that there is no evidence suggesting to a person of ordinary skill in the art that the term "aspects" as used in the asserted patents should be limited to exclude data. AIT does not dispute that the "information" required by the claim may include "data." Indeed, asserted dependent claim 23 of the '482 patent requires that "the first layer comprises ... data," confirming that the claimed "first layer" information is sufficiently broad to encompass "data." *Littelfuse, Inc. v. Mersen USA EP Corp*., 29 F. 4th 1376, 1380 (Fed. Cir. 2022) ("[A]n independent claim is broader than a claim that depends from it, so if a dependent claim reads on a particular embodiment of the claimed invention, the corresponding independent claim must cover that embodiment as well."). As such, I find there is nothing in the claim language itself that would permit a reasonable juror to conclude that Popp does not disclose this limitation. With respect to Salesforce's Daubert motion, the parties also relied on additional materials including the opinions of Mr. Zatkovich in

his report and at his deposition with respect to this limitation. I have considered Mr. Zatkovich's opinions and found them insufficient to raise a disputed question of material fact.

> 5. Popp discloses "a third layer associated with the server computer that retrieves the data in the first and second layer in order to generate the functionality and user interface elements of the application; and"

Salesforce relies on Dr. Bederson's testimony in support of its motion with respect to this limitation. Dkt. 280 at 24 (citing Dkt. 280-2, Bederson Rpt., ¶ 405). Dr. Bederson opined Popp discloses this limitation, including because Popp teaches that "the Automobile Shopper application provides an example of the use of dynamic pages." Dkt. 280-2, Bederson Rpt. ¶ 405. Dr. Bederson concluded "the internal application (third layer) dynamically generates functionality and a user interface for an Automobile Shopper web page (application) using the object tree that defines the web page's user interface (second layer) that is populated with data from the database (first layer)." *Id.*

AIT relies on Mr. Zatkovich's opinions in opposition to Salesforce's motion. Dkt. 297 at 25 (citing Dkt. 280-6, Zatkovich Reb. ¶ 251). Mr. Zatkovich opined that Popp does not disclose this limitation. He explained "Dr. Bederson appears to be mapping the claimed 'third layer' to Popp's 'scriptedControl object.'" Dkt. 280-6, Zatkovich Reb. ¶ 251. He further opined "the scriptedControl object does not 'generate the functionality and user interface elements of the application' as claimed. Rather, the scriptedControl object is involved in the generation of HTML code for a static application with a fixed functionality and user interface." *Id.* Mr. Zatkovich further opined that "a control object such as the scriptedControl object is just a programming construct that implements a static functionality and user interface by creating the appropriate Web page." *Id.*

AIT further argued that a reasonable juror would not be required to accept Dr. Bederson's opinions regarding the "third layer" because they are conclusory. Dkt. 297 at 27. AIT argues, with respect to the "third layer," Dr. Bederson references an "internal application" that appears nowhere in Popp and simply calls it a "third layer," without identifying the "internal application," or providing analysis. *Id.* (citing Dkt. 280-2, Bederson Rpt. at ¶ 405).

In reply, Salesforce argues that Mr. Zatkovich's opinions are no different from his opinions regarding "dynamically generating" addressed above in the preamble and should be rejected for the same reason. Dkt. 323 at 12–13. I agree. Mr. Zatkovich's opinions are insufficient to raise a question of fact in the face of Dr. Bederson's opinions which I do not find so conclusory that they would not be accepted as true by a reasonable finder of fact. As such, for the reasons stated above regarding "dynamically generating," I find there is no genuine dispute of fact that Popp discloses this limitation.

6. Popp discloses "a change management layer for automatically detecting changes that affect an application,"

Both parties moved for summary judgment with respect to this limitation under both anticipation and obviousness. I address the evidence and the parties' respective arguments below.

**A. Anticipation**

Salesforce relied on the opinions of Dr. Bederson in support of its motion with respect to this limitation. Dkt. 280 at 25 (citing Bederson Rpt. ¶ 407). Dr. Bederson opined "Popp discloses and anticipates the[] claims under AIT's interpretation[4] of 'a change management layer' and

[4] Dr. Bederson referred to the interpretation of the claims he used for anticipation as "AIT's interpretation." I have used that terminology here as well to avoid confusion. The interpretation can be more accurately characterized as Dr. Bederson's anticipation interpretation since it is the interpretation used by Dr. Bederson for purposes of anticipation.

'automatically detecting changes that affect a particular application.'" Dkt. 280-2, Bederson Rpt. ¶ 407.[5] For anticipation, with respect to "intelligent agent" and "changes that affect," Dr. Bederson explained the interpretation of the claim language he used for anticipation encompasses "any software ... capable of automatically detecting changes." *See* Dkt. 280-2, Bederson Rpt. at ¶154, ¶153, ¶167 ("Under AIT's interpretation, any software ... capable of automatically detecting changes qualifies as an 'intelligent agent,' removing all meaning from that requirement."), ¶277 ("... Under AIT's interpretation, any software ... capable of automatically detecting changes qualifies as an 'intelligent agent,' removing all meaning from that requirement.").

Dr. Bederson opined that Popp's "inputControl 664" can detect if "the client may have modified field 632 to specify a new name." Dkt. 280-2, Bederson Rpt. ¶ 407 (citing Popp at 22:37-48). Under his recitation of AIT's interpretation, Dr. Bederson opined inputControl 664 would be considered an "intelligent agent" and modifying a field to specify a "new name" would be a "change that affects" an application. Dkt. 280-2, Bederson Rpt. ¶ 407. With respect to anticipation by Popp, Dr. Bederson further opined that Popp's "input Control 664" would be considered both a "change management layer" and an "intelligent agent." *Id.*

In its moving papers, Salesforce further relies on the absence of contrary opinions of Mr. Zatkovich directed to whether Popp discloses an "intelligent agent" and its Daubert motion with respect to "changes that affect" an application.

To the extent Salesforce relied on its Daubert arguments with respect to this limitation, AIT relied on its opposition to Salesforce's Daubert motion in opposition. *See* Dkt. 295-1 at 20-24. AIT's response further relies on its motion for summary judgment of no anticipation and the

[5] Dr. Bederson also offered opinions regarding this limitation under what he deemed the "correct" or proper application of this limitation to a person of ordinary skill in the art. Those opinions are addressed below in obviousness.

evidence and argument relied on therein. Dkt. 270. In moving for summary judgment in its favor, AIT argued that Dr. Bederson's opinions directed to "AIT's interpretation" were insufficient to raise a question of fact. *Id.* AIT relied on Mr. Zatkovich's opinions in support of its motion and in opposition to Salesforce's motion. *Id.* Mr. Zatkovich opined:

> Second, "changes in field 632" are not "changes that affect an application." Rather, field 632 includes data such as an employee's name. Object inputControl 664 simply "pushes and pulls data." Such data does not "affect an application," but rather is the data on which the application operates. The application itself is entirely unaffected by a change of an employee's name in the database, for example.
>
> Third, Dr. Bederson's statement that "changes in field 632 ... affect[] ... the information in the Web page objects (second layer)" is confusing if not incorrect. ... To the extent Dr. Bederson refers to what he opined is the "second layer," i.e., objects 216 and HTML elements, Popp does not teach that changes in field 632 affect in any way those objects and elements. Rather, as already explained, changes in field 632 are changes in the data that Popp's application operates on.

Dkt. 280-6 Zatkovich Reb. ¶¶ 255–256, 281.

In response to Salesforce's Daubert motion, AIT relied on Mr. Zatkovich's explanation regarding the difference between changes that "affect" an application itself and changes to data "input" into an application. Dkt. 295 at 15 (relying on Dkt. 297-3, Zatkovich 8/24/2022 Tr. at 593:14–18, 594:20–24, 595:5–8, 595:16–18, 595:25–596:3). Mr. Zatkovich did not offer opinions directed to whether "inputControl 664" is an "intelligent agent." He also does not dispute that under what Dr. Bederson called "AIT's interpretation," Popp discloses an "intelligent agent" for detecting "changes that affect" an application.

In opposition to Salesforce's motion and in support of its own, AIT further relied on Dr. Bederson's testimony and argued it was insufficient to raise a question of fact supporting anticipation and judgment should be granted in AIT's favor. Dkt. 297 at 22-23. AIT relied on Dr.

Bederson's various opinions regarding the ordinary meaning of "changes that affect" an application. Dkt. 154-2 (Bederson Decl.) at ¶ 109; Dkt. 297-9 Bederson Tr. at 69:15–70:2. In addition, AIT relies on Dr. Bederson's belief that the ordinary meaning of "affect" requires a certain materiality element and his opinion that changes "must 'affect' the business with sufficient materiality" to require the change to be incorporated into the application. Dkt. 154-2, Bederson Decl. at ¶ 125. AIT further argues Dr. Bederson's opinions failed to evidence how a skilled artisan would apply "intelligent agent" and the claim language requires changes that "affect" an application. Dkt. 297 at 23 (relying on Dkt. 282-2 Bederson Op. at ¶¶ 224, 278; Dkt. 154-2 (Bederson Decl.) at ¶¶ 109, 131 (explaining understanding of AIT's interpretation of "changes that affect" an application "encompass[es] any changes of any type ...."); Dkt. 125:4-127:5. To the extent AIT's motion for summary judgment is denied, AIT argues that its summary judgment motion at least raises a question of fact. Dkt. 297.

In opposition to AIT's motion, Salesforce urged under "AIT's infringement theories, an 'intelligent agent' can be virtually any software program, and changes that 'affect' an application include changes to the application itself, then those interpretations should apply for invalidity as well, and Dr. Bederson should be free to explain that the claims are anticipated as a result." Dkt. 298 at 2. Salesforce further argued "Mr. Zatkovich in his expert report applied an unduly broad interpretation to 'intelligent agent' and 'changes that affect' in an effort to show infringement where there is none." *Id.* at 10.

In reply, AIT did not dispute the admissibility of Dr. Bederson's opinions. Instead, AIT argued that such opinions were insufficient to support a conclusion of invalidity in the absence of additional evidence, such as testimony from AIT's experts or a comparison of a prior art reference to the accused products, demonstrating that the interpretation applied by Dr. Bederson for anticipation was necessary for infringement. Dkt. 312 at 11-14 (relying on TiVo, Inc. v. EchoStar

Communications Corp., 516 F.3d 1290, 1311 (Fed. Cir. 2008) and 01 Communique Lab., Inc. v. Citrix Sys., Inc., 889 F.3d 735, 741-42 (Fed. Cir. 2018)).

With respect to AIT's motion, the Court denies AIT's motion for summary judgment of no anticipation with respect to "intelligent agent" and "changes that affect." Ultimately, Dr. Bederson's opinions are admissible and an analysis of these aspects of the claim language and the Court's construction in the alternative (assuming infringement) is an acceptable methodology often used in expert invalidity reports. *01 Communique Lab., Inc. v. Citrix Sys., Inc*., 889 F.3d 735, 741-42 (Fed. Cir. 2018) (finding "nothing improper about this argument" in the alternative); *Stryker Corp. v. Zimmer, Inc*., 782 F.3d 649, 658 n.4 (Fed. Cir. 2015) (vacated on other grounds by *Halo Elecs., Inc. v. Pulse Elecs., Inc*., 579 U.S. 93 (2016)) ("[N]othing precludes [defendant] from arguing for a narrower application of the limitation on the infringement context, while also arguing, in the alternative, that—if the district court were to disagree—the patent claim would be so broad as to be invalid.").

Having determined that Dr. Bederson's opinions are admissible, I turn to Salesforce's motion. With respect to Salesforce's motion, I find as a matter of law "inputControl 664" is an intelligent agent that automatically detects changes that affect an application, at least under what Dr. Bederson identified as "AIT's interpretation" of "intelligent agent" and "changes that affect." Dkt. 280-2, Bederson Rpt. ¶ 407 (citing Popp at 22:37-48). Mr. Zatkovich does not dispute that Popp discloses an "inputControl 664" that can detect if "the client may have modified field 632 to specify a new name." A skilled artisan would find the detection of a name entered in a field to be a change that affects an application under at least Dr. Bederson's understanding of AIT's interpretation. *Id.* I further find Mr. Zatkovich's opinion that the identified changes in Popp are to "the data on which the application operates" and not the application itself (which he opines remains

unchanged) insufficient to raise a dispute of fact regarding the application of the ordinary meaning of this term. Dkt 280-6, Zatkovich Rbt. Rpt. ¶ 253-257.

The Court does not need to address Salesforce's Daubert arguments directed to whether Mr. Zatkovich's opinions regarding "changes that affect an application" are admissible. Instead, a skilled artisan would find the claim language broad enough to encompass any "changes" related to an application, such as the change of an employee's name in a database. As detailed above, I find that the mere fact that such information is data that the application operates on is insufficient to raise a question of fact with respect to whether changes in such data "affect" an application.

Having considered the evidence and the arguments of the parties, I find there is no genuine dispute of fact that Popp's "inputControl 664" is a "change management layer" and "intelligent agent" for automatically detecting changes as a matter of law. Accordingly, Popp discloses the claim limitation "a change management layer for automatically detecting changes that affect an application" as a matter of law.

**B. Obviousness**

Salesforce's obviousness argument with respect to this limitation is addressed to the portion of this limitation requiring an "intelligent agent."

Salesforce relies largely on Dr. Bederson's testimony in support of its motion. Dkt. 280 (citing Dkt. 280-2, Bederson Rpt. ¶¶ 26-427). Dr. Bederson opined Amati discloses an "intelligent agent." Dkt. 280-2, Bederson Rpt. ¶ 426. He further opined Amati's "ABIS (Agent Based Information System)" includes "[a]n agent [that] is an intelligent entity designed to act on behalf of a user" by "agent autonomously navigat[ing] the network looking for relevant documents." *Id.* (citing Dkt 280-18 (Amati) at 1015).

Dr. Bederson further opined that a person of ordinary skill in the art would have been motivated to combine Popp and Amati to find the claimed inventions obvious. Dkt. 280-2,

Bederson Rpt. ¶ 427. Dr. Bederson opined that it would have been obvious to incorporate Amati's teaching regarding an "ABIS" agent into Popp such that Popp's "inputControl 664," which for example detects if "the client may have modified field 632 to specify a new name," is an ABIS agent as taught in Amati. *Id.* ¶ 427 (citing Popp at 22:37-43). Thus, for obviousness, Dr. Bederson explains that Popp's "inputControl 664," which meets the "intelligent agent" and "change management layer" for anticipation, would be replaced with an ABIS agent. *Id.* Dr. Bederson opined that "the combination would enhance the ease with which users would receive information" and that it "would result in improved quality of content with less effort," particularly because "Amati explains that its 'ABIS' intelligent agent 'minimizes user's effort in selecting the huge amount of available documents." Dkt 280-2 (Bederson Report) ¶¶ 226-27 (quoting Amati at Abstract).

Salesforce further urges that a skilled artisan would find Popp and Amati directed to analogous art, the field of information processing, as a matter of law. Dkt. 280 at 25 (relying on Dkt. 280-13 (Popp) at Abstract; Dkt. 280-14 (Amati) at 1007). Dr. Bederson opined a person of ordinary skill in the art would be motivated to combine Popp with Amati because an intelligent agent such as the ABIS agent is "capable of acting autonomously, facing unexpected events and cultivating a trustful relationship with the user." Dkt. 280-2, Bederson Rpt. ¶ 235 (citing Amati at 1015). Further, Dr. Bederson opined a person of ordinary skill in the art would have found that such a combination would be reasonably expected to succeed and yield the predictable result of Popp's inputControl detecting and reacting to changes based on the criteria described in Amati, such as the user's "Preference Profile that describes the current user interest." Dkt 280-2, Bederson Rpt. ¶ 427.

AIT argues that Dr. Bederson's opinions on obviousness are conclusory and insufficient to grant judgment in Salesforce's favor. Dkt. 297-1 at 28 (criticizing Dr. Bederson's opinions for not

"explaining why a skilled artisan would add the specific 'intelligent agent' of Amati to Popp or providing any analysis or evidence of the particular benefits of the "ABIS" agent or why it would benefit Popp) (citing Dkt. 280-2, Bederson Op. at ¶ 427). In addition, AIT relies on the opinions of Mr. Zatkovich. Dkt. 297-1 at 28-29 (relying on Dkt. 280-6, Zatkovich Rbt. Rpt. ¶¶ 1151-1158, 1184). Mr. Zatkovich did not dispute that Amati discloses an "intelligent agent." AIT argues Mr. Zatkovich's opinions are inconsistent with a finding that it would have been obvious as a matter of law to combine Popp and Amati to render the Asserted Claims obvious for a number of reasons. First, Mr. Zatkovich opines that if Amati's intelligent agent function was to "retrieve information, specifically documents, from external archives and databases," there was no need to add that type of "intelligent agent" to Popp. Dkt. 280-6, Zatkovich Rbt. Rpt. at ¶¶ 1153–55.

Second, Mr. Zatkovich opined that Popp is related to "developing and managing transactions on the Internet," and Amati is related to the different "field of searching and navigating open data repositories on a network." Dkt. 280-6, Zatkovich Reb. Rpt. at ¶¶ 1152, 1184. With respect to the art, AIT argues that Salesforce wrongly assumes a reasonable juror must find that Popp and Amati are analogous art. Dkt. 297 at 29 (relying on Dkt. 280-6, Bederson Rbt. Rpt. at ¶¶ 1152, 1184).

Third, AIT relies on Mr. Zatkovich's opinions directed to various aspects of the particular Popp/Amati combination. Dkt. 280-6, Zatkovich Reb. Rpt. at ¶¶ 1151–1158. Mr. Zatkovich opined that "a person would not look to Amati to solve problems in Popp's field," that Amati's intelligent agent "does not disclose any type of changes made to data to input fields," that Amati's "ABIS" "would serve no purpose in Popp," that Popp has "no need to incorporate Amati's intelligent agent" because Popp already detects data changes using "inputControl 664" without any problem. *Id.* Mr. Zatkovich further explained there would be no expectation of success because "Amati would not be capable of performing any functionality involved in Popp." *Id.* at ¶ 1156.

I have considered AIT's evidence and arguments and ultimately find them unpersuasive. In particular, as I explained at the summary judgment hearing, Popp automatically detects changes based upon input by an end user. Amati's teaching regarding an "intelligent agent" would be beneficial in this environment. Mr. Zatkovich fails to explain why Amati's intelligent agent would not be naturally used to search a network for changes, detect changes that would affect not only functionality of the program but would detect and implement, for example, display of text on a website.

Having considered the evidence and the arguments of the parties, I find there is no genuine dispute of fact that it would have been obvious to replace Popp's "inputControl 664," the "change management layer" and "intelligent agent" for automatically detecting changes disclosed in Popp, with Amati's ABIS Agent thereby arriving at the claimed invention. Accordingly, I find to the extent an "intelligent agent" is not disclosed in Popp, it would have been obvious to combine Popp and Amati and arrive at the claimed invention, as a matter of law.

7. Popp discloses "each client computer further comprising a browser application being executed by each client computer, wherein a user interface and functionality for the particular application is distributed to the browser application and dynamically generated when the client computer connects to the server computer"

Salesforce relies on Dr. Bederson's testimony in support of its motion with respect to this limitation. Dkt. 280 at 26 (citing Bederson Rpt. ¶ 408). Dr. Bederson opined Popp discloses this limitation, including at least because Popp teaches that clients connect to the server via HTTP and

the server responds with the requested information as a Web page. Dkt. 280-2 (citing Dkt 280-17 (Popp) at 1:43-54, 3:53-61).

AIT relies on Mr. Zatkovich's opinions in opposition to Salesforce's motion. Dkt 297 at 25 (citing Zatkovich Rbt. Rpt. ¶¶ 259-260). Mr. Zatkovich opined that Popp does not teach a Java applet and it would not necessarily be present. Dkt. 280-6, Zatkovich Rbt. Rpt. ¶ 259. Mr. Zatkovich further opined that "Popp's Web pages provide access to a static application (application 214) with fixed functionality and a fixed user interface." *Id.* at ¶ 260.

In reply, Salesforce argued that the disagreement between the parties' experts "does not create a genuine dispute of material because Mr. Zatkovich admits that the Web page distributed in Popp includes the user interface and functionality." Dkt. 323 at 16 (relying on Dkt. 285-9 (Zatkovich 8/24/2022 Tr.) at 583:15-18 ("[Y]ou don't dispute, right, that Popp's Web page includes functionality, do you? A. No, I don't dispute that."); Dkt. 285-10 (Zatkovich Rbt. Rpt. ¶ 251 (admitting that the HTML code" for "the appropriate Web page" contains "functionality and user interface")). I agree with Salesforce. I further agree with Salesforce that Mr. Zatkovich's opinion that Popp's Web page is "a static application (application 214) with fixed functionality and a fixed user interface" (Dkt 297 at 25), which has been addressed above in the context of the "dynamically generated application" claim language, fails to raise a question of fact with respect to this limitation.

In sum, Salesforce has demonstrated both that claim 1 of the '482 patent is anticipated by Popp, and also that claim 1 is rendered obvious by the combination of Popp and Amati. No reasonable jury could reach a contrary conclusion.

b. Claim 10

Claim 10 is dependent on claim 1 and adds a limitation for a "a builder module for permitting a user to build a user interface for a particular application using the second layer."

Salesforce relies on Dr. Bederson's testimony in support of its motion with respect to this limitation. Dkt. 280 at 26-27 (relying on Ex. 2 (Bederson Rpt.) ¶ 410.) Dr. Bederson opined Popp discloses this claim "because Popp's system includes a builder module for permitting a user to build a particular Web page (application), including its UI, using the shared object tree components or modules (second layer)." Dkt. 280-2 (Bederson Rpt.) ¶ 410 (quoting Dkt. 280-17 (Popp) at -8:3242 ("Development of an internal application can be efficient and flexible . . . . Developers have the ability to incorporate pre-existing modules into the internal application. Modules are self-contained to facilitate module maintenance and interaction.")). In its moving papers, Salesforce also cited Mr. Zatkovich's opinions, Dkt. 280 at 27 (citing Dkt. 280-6, Zatkovich Rpt. ¶ 262-263) and stated, "Mr. Zatkovich does not have any additional validity arguments for this claim."

AIT relies on Mr. Zatkovich's testimony in opposition to Salesforce's motion with respect to this limitation. Dkt. 297 at 25-26. Mr. Zatkovich opined that Popp does not disclose a "builder module," as required by claims 10 and 30 of the '482 patent, because "Popp's conventional development techniques do not meet the 'builder module' limitations." Dkt. 280-6, Zatkovich Rbt. Rpt. ¶ 262). AIT further urged that Dr. Bederson's contrary opinion is conclusory and unexplained. In reply, Salesforce stated:

> Mr. Zatkovich's reason for reaching that conclusion was because claims 10 and 30 require "using the second layer" and "developers would implement Popp's object class hierarchy in a conventional object-oriented programming language and not as the claimed 'second layer.'" Ex. 6 (Zatkovich Rbt. Rpt.) ¶ 262. Mr. Zatkovich has since agreed that Popp does, in fact, disclose the claimed "second layer." Ex. 5 (Zatkovich 8/21/2022 Tr.) at 580:22-581:4. Thus, Mr. Zatkovich no longer has a basis to contest Popp's disclosure of claims 10 and 30 of the '482 patent.

Dkt. 323 at 16–17.

Having considered the evidence and arguments of the parties, I find Mr. Zatkovich's opinion is insufficient to withstand summary judgment in the face of Dr. Bederson's testimony to

the contrary. *Enzo Biochem, Inc. v. Applera Corp*., 599 F.3d 1325, 1337 (Fed. Cir. 2010) ("[M]ere denials or conclusory statements are insufficient to survive summary judgment.") (quotation omitted).

c. Claim 20

Claim 20 is dependent on claim 1 and adds a limitation: "wherein the first and second layers are distributed across one or more server computers."

Salesforce relies on Dr. Bederson's testimony in support of its motion with respect to this limitation. Dkt. 280 at 27 (citing Bederson Rpt. ¶ 412). Dr. Bederson opined Popp discloses this claim, including because Popp teaches that database 224 (first layer) and Web page objects 216 (second layer) within application 214 can be distributed across one or more server computers in server domain 208. Dkt. 280-2 Bederson Rpt. Dkt. ¶ 412 (citing Popp at FIG. 2; 7:32-35).

AIT did not separately dispute the presence of this limitation in its responsive papers. As such, I find no dispute of material fact with respect to whether this limitation is disclosed.

d. Claim 21

Claim 21 of the '482 Patent is an independent claim. In its moving papers, Salesforce stated "Popp discloses the elements of independent claim 21 of the '482 patent for the same reasons given above in the context of claim 1 of the '482 patent." Dkt. 280 at 27. In its opposition, AIT did not identify any differences in the claim language or claim scope when considering the validity of claim 21 of the '482 patent in light of claim 1 of the '482 patent. As such, I find there is no genuine dispute of fact that Popp discloses claim 21 of the '482 patent for the same reasons that Popp discloses claim 1 of the '482 Patent.

e. Claims 23-26

Claims 23-26 are dependent claims of the '482 Patent.

Claim 23 recites: "The method of claim 21, wherein the first layer 65 comprises a business content database having data about one or more different predetermined business applications."

Claim 24 recites: "The method of claim 23, wherein the data further comprises one or more of business knowledge, logical designs, physical designs, physical structures and relationships associated with the predetermined business application."

Claim 25 recites: "The method of claim 23, wherein the second layer comprises a metadata database comprising data about the structures and functions associated with any application."

Claim 26 recites: "The method of claim 25, wherein the metadata data base further comprises data about the user interface including one or more of tools, worklists, data entry forms, reports, documents, processes, formulas and images."

In its moving papers Salesforce stated, "Popp discloses claims 23-26 of the '482 patent for the same reasons given below in the context of claim 14-17 of the '111 patent." Dkt. 280 at 27. In its opposition, AIT argued:

> Salesforce's invalidity expert, Dr. Bederson, did not provide opinions regarding the validity of claims 23–26 over Popp. Ex. 2 (Bederson Op.) at ¶¶ 172, 398, 424; *See also Id.* at ¶¶ 398–435. Nor are those claims duplicative of claims 14–17 of the '111 Patent. Claims 23–24 of the '482 Patent explicitly require a specific "business content database," which is not found in claims 14–15 of the '111 Patent. Similarly, claims 25–26 of the '482 Patent require a "metadata database" not required by claims 16–17 of the '111 Patent.

Dkt. 297 at 26.

AIT requested judgment in its favor based on this lack of evidence. *Id.*

In reply, Salesforce argued that "AIT provides no explanation of any substantive difference between" claims 14-17 of the '111 patent and claims 23-26 of the '482 patent, and "never affirmatively alleges that Popp does not disclose these claim limitations." Dkt. 323 at 17. I find claims 23-26 of the '482 patent are substantively identical to claims 14-17 of the '111 patent. The

only differences between these two sets of claims identified by AIT are the "business content database" (claim 23) and "metadata database" (claims 25-26), but claims 14-17 of the '111 patent already require "information associated with one or more predetermined business applications" (claim 14), "business knowledge" (claim 15), and "metadata" (claims 16-17). As such, Dr. Bederson's opinions with respect to Claims 14-17 of the '111 Patent are sufficient to compel a finding that Popp discloses the limitations of claims 23-26 of the '482 patent.

In light of the lack of the lack of substantive difference between these two sets of claims, AIT's failure to raise a dispute of fact with respect to whether the limitations of claims 14-17 of the '111 Patent are disclosed in Popp (detailed below) compels a finding that the limitations of claims 23-26 of the '482 patent are also disclosed in Popp.[6]

f. Claim 30 and 40

Claim 30 is dependent on claim 21 of the '482 Patent and adds a limitation: "permitting a user to build a user interface for a particular application using the second layer."

Claim 40 is dependent on claim 21 of the '482 Patent and adds a limitation: "distributing the first and second layers across one or more server computers."

In its moving papers, Salesforce stated "Popp discloses claims 30 and 40 of the '482 patent for the same reasons given below in the context of claim 10 and 20 of the '[482] patent." Dkt. 280 at 27. In its opposition, AIT did not raise any arguments in addition to the arguments it made with respect to claims 30 and 40 in light of claims 10 and 20 of the '482 patent. As such, I find there is no genuine dispute of fact that Popp discloses claims 30 and 40 of the '482 patent for the same

[6] After filing its motion, Salesforce filed a motion to submit a supplemental expert report of Dr. Bederson to include opinions addressed to these claims. However, that evidence was not in Salesforce's moving papers, and it would not be appropriate to rely on such evidence without providing AIT an opportunity to respond to the opinions contained therein. Regardless, as I find the claims anticipated and obvious based on Dr. Bederson's operative report there is no need to rule with respect to that motion.

reasons given above in the context of claims 10 and 20 of the '482 patent.

### *IV. Popp Anticipates Claims 13-17 of the '111 Patent and also Renders them Obvious in Combination with Amati*

Popp anticipates claims 13-17 of the '111 patent and also renders them obvious in combination with Amati.

#### a. Claim 13

Claim 13 is an independent claim. In its moving papers, Salesforce stated that "Popp discloses the elements of claim 13 of the '111 patent for the same reasons given above in the context of claim 1 of the '482 patent." Dkt. 280 at 28.

In its opposition, AIT did not identify any differences in the claim language or claim scope when considering the validity of claim 13 of the '111 patent in light of claim 1 of the '482 patent. As such, I find there is no genuine dispute of fact that Popp discloses claim 13 of the '111 patent of the '482 patent for the same reasons that Popp discloses claim 1 of the '482 patent.

#### b. Claim 14

Claim 14 is dependent on claim 13 of the '111 patent and adds a limitation: "wherein the information of the first portion of the server includes information associated with one or more predetermined business applications."

Salesforce relies on Dr. Bederson's testimony in support of its motion with respect to this limitation. Dkt. 280 at 28 (citing Bederson Rpt. ¶ 1055). Dr. Bederson opined Popp discloses this claim limitation because Popp teaches that the database "[d]ata source 630 can be, for example, an enterprise's corporate database." Dkt. 280-2, Bederson Rpt. ¶ 1055 (citing (Popp) at 7:66-67, 22:64-65).

AIT did not separately dispute the presence of this limitation in its responsive papers or at oral argument. As such, I find no dispute of material fact with respect to whether this limitation is disclosed.

c. Claim 15

Claim 15 is dependent on claim 13 of the '111 patent and adds a limitation: "wherein the information of the first portion of the server includes at least one of business knowledge, logical designs, physical designs, physical structures, and relationships associated with one or more predetermined business applications."

Salesforce relies on Dr. Bederson's testimony in support of its motion with respect to this limitation. Dkt. 280 at 28 (citing Bederson Rpt. ¶ 1057). Dr. Bederson opined Popp discloses this limitation, including because Popp discloses that "[d]ata source 630 can be, for example, an enterprise's corporate database." Dkt. 280-2, Bederson Rpt. ¶ 1057 (citing Popp at 19:35-38, 22:37-48, 22:64-65). Salesforce further argued Mr. Zatkovich retracted the opinions in his report with respect to claim 15. Dkt. 280 at 28.

AIT relies on Mr. Zatkovich's opinions in opposition to Salesforce' motion with respect to this limitation. Dkt. 297 at 26 (relying on Zatkovich Rbt. ¶ 285-87). In particular, Mr. Zatkovich opined that the contents of the corporate database, such as employee names, "are merely user data, not 'business knowledge'" and that "'business knowledge' can be metadata that defines a business application." Dkt. 280-6, Zatkovich Rbt. Rpt. ¶ 285-87. In reply, Salesforce argued:

> AIT asserts that Mr. Zatkovich "did not retract" his validity opinion for claim 15 (Opp. at 26), but that assertion cannot be squared with Mr. Zatkovich's deposition testimony. Compare Ex. 6 (Zatkovich Rbt. Rpt.) ¶ 286 ("[E]mployee names are merely user data, not 'business knowledge.'") with Ex. 19 (Zatkovich 8/24/2022 Tr.) at 501:17-20 ("Q. So you agree that in the actual claims, business knowledge can be data or metadata? A. Yes."). AIT cannot explain away this contradiction between Mr. Zatkovich's expert report and his admission in deposition, and Mr. Zatkovich's deposition

> testimony thus establishes that claim 15 of the '111 patent cannot survive summary judgment. *See* Cleveland, 526 U.S. at 806. Dkt. 297 at 28.

Ultimately, I agree with Salesforce that there appears to be a contradiction between Mr. Zatkovich's deposition testimony and the opinions expressed in Mr. Zatkovich's expert report. As such, I find no dispute of material fact with respect to whether this limitation is disclosed.

d. Claim 16

Claim 16 is dependent on claim 13 of the '111 patent and adds a limitation: "the information of the second portion of the server includes metadata representative of structures and functions associated with a plurality of applications."

Salesforce relies on Dr. Bederson's testimony in support of its motion with respect to this limitation. Dkt. 280 at 28 (citing Bederson Rpt. ¶ 1059). Dr. Bederson opined Popp teaches "Web page objects (i.e., the second portion) include associations, which bind HTML elements that define structure and functions of an application to locations in a Web page." Dkt. 280-2, Bederson Rpt. ¶ 1059 (citing (Popp) at 16:48-17:52). He further opined "[a]n association [that] provides binding information to bind, for example, variables, objects, Web page definitions, and scripts to one another." *Id.*

Salesforce further addressed Mr. Zatkovich's opinions with respect to this limitation. Dkt. 280 at 28. Salesforce argued that Mr. Zatkovich retracted his opinion that Dr. Bederson was "mixing and matching different portions of Popp to meet the limitations of claim 16," Dkt. 280-6 (Zatkovich Reb. Rpt.) ¶ 290), and that, therefore, his opinion could not raise a question of fact. Dkt. 280 at 28. Salesforce relies on Mr. Zatkovich's statement at deposition that "the metadata itself in Popp does not include [certain] associations" and his further testimony that "[c]laim 16 doesn't say that the metadata must include the associations." Dkt. 285-9 (Zatkovich 8/24/2022 Tr.) at 598:13-599:7.

In opposition to Salesforce's motion with respect to this limitation, AIT relies on the opinions of Mr. Zatkovich. Dkt. 297 at 26. Mr. Zatkovich opined that Dr. Bederson's statement that "Web page objects (i.e., the second portion) include associations, which bind HTML elements that define structure and functions of an application to locations in a Web page" was incorrect. Dkt. 280-6 (Zatkovich Reb. Rpt.) ¶ 290. Mr. Zatkovich further opined Dr. Bederson was "mixing and matching" different portions of Popp to reach his conclusion that this limitation was satisfied and that such opinions were not retracted.

In reply, Salesforce argued Mr. Zatkovich's opinions regarding "mixing and matching" in his report are irrelevant in light of Mr. Zatkovich's deposition testimony. Dkt. 323 at 17. Having reviewed the relied-on evidence, I conclude there is no dispute of material fact that this limitation is satisfied.

e. Claim 17

Claim 17 is dependent on claim 13 of the '111 patent and adds a limitation: "wherein the information of the second portion of the server includes metadata representative of user interface elements including at least one of tools, worklists, data entry points, reports, documents, processes, formulas, and images."

Salesforce relies on Dr. Bederson's testimony in support of its motion with respect to this limitation. Dkt. 280 at 29 (citing Dkt. 280-2, Bederson Rpt. ¶ 1061). Dr. Bederson opined Popp discloses this limitation because Popp discloses "associations" as part of the second layer which are metadata about Web page objects. Dkt. 280-2, Bederson Rpt. ¶ 1061 (citing Popp at 20:21-27). AIT did not separately dispute the presence of this limitation in its responsive papers. As such, I find no dispute of material fact with respect to whether this limitation is disclosed.

## *V.* AIT's Arguments Addressed to the Credibility of Dr. Bederson

In opposition to Salesforce's motion, AIT argues that "[a] reasonable juror is not required to credit Dr. Bederson's testimony." Dkt. 297 at 27-28. In particular, AIT argued (and it is undisputed) that Dr. Bederson copied his substantive opinions on Popp from a declaration submitted by a different expert, Dr. Schmidt, from an ex parte reexamination ("XPR") proceeding before the United States Patent and Trademark Office. *Id.* (relying on compare Dkt. 297-4 (Schmidt XPR Decl.) at ¶¶ 90–116 with Dkt. 280-2 (Bederson Rpt.) ¶ 19 (Bederson Op.) at ¶¶ 399–423). AIT argued that Dr. Bederson's testimony that he performed "an independent analysis" (Dkt. 297-9 (Bederson Tr.) at 15:8–20, 16:21–25), is not required to be accepted as true. Dkt. 297 at 28. Instead, AIT argued given the nature of the opinions, it defies credibility for Dr. Bederson to have formed the identical opinions of Dr. Schmidt from the XPR proceeding without speaking to him. *Id.* (citing Dkt. 297-9 (Bederson Tr.) at 17:11–17).

AIT further urged that a reasonable jury could question the credibility of Dr. Bederson's invalidity opinions with respect to Popp given the time he spent on his reports, the numerous opinions offered, and his inability to answer certain questions at deposition. AIT argued:

> The evidence further shows that Dr. Bederson barely reviewed the opinions he offered before asserting that the Asserted Claims were invalid for hundreds of reasons. In this dispute alone, over the last seven years, Dr. Bederson has submitted over 1,000 pages of opinions including three claim construction declarations, a declaration of invalidity to the patent office, and an 800-page invalidity report. Ex. I (Bederson Tr.) at 25:5–20; Dkt. 68-1 (October 2015 Bederson Decl.); Dkt. 154-2 (April 2021 Bederson Decl.); Dkt. 159-3 (May 2021 Bederson Decl.); Ex. 2 (Bederson Op.). Despite this, Dr. Bederson explained he spent only approximately 250 hours on all of his reports and declarations over the last seven years, working solely with Salesforce's attorneys. Ex. I (Bederson Tr.) at 23:19–24:6, 25:5–20, 28:25–29:15. Dr. Bederson could not estimate the percentage of the report that he wrote, the amount of time he spent preparing his invalidity report in this matter, or when he began preparing his invalidity report. *Id.* at 26:8–28:16; 145:1–146:2, 247:7–249:11.

Dkt. 297 at 28-29.

In reply, Salesforce argued:

> AIT criticizes Dr. Bederson for allegedly adopting the opinions of another Salesforce expert, Dr. Schmidt, regarding Popp and spending "only" about 250 hours working on this case. Opp. at 27-58. But as even AIT admits, "Dr. Bederson stated that he performed an independent analysis" of the claim limitations. *Id.* at 28 n. 7. After independently reviewing Dr. Schmidt's analysis regarding Popp, Dr. Bederson agreed with Dr. Schmidt's positions and therefore decided not to gratuitously rewrite them. Dkt. 297-9 (Bederson 9/1/2022 Tr.) at 15:10-20.

Dkt. 323 at 18.

Salesforce relies on case law demonstrating that simply asserting that a movant's witness is "not to be believed" is insufficient to survive summary judgment. *See TypeRight Keyboard Corp. v. Microsoft Corp.*, 374 F.3d 1151, 1158-59 (Fed. Cir. 2004) ("Summary judgment should not be denied simply because the opposing party asserts that the movant's witnesses are not to be believed. However, summary judgment is not appropriate where the opposing party offers specific facts that call into question the credibility of the movants witnesses."). Consistent with that decision and Salesforce's argument, I find that AIT's arguments and evidence are insufficient to deny summary judgment in Salesforce's favor with respect to Popp.

## *VI.* Objective Indicia of Non-Obviousness Cannot Sustain Validity of the '482 or '111 Patents

AIT argues that there is objective evidence that supports the non-obviousness of the asserted claims. However, secondary considerations are only applicable to obviousness, not anticipation, and therefore do not affect the Court's finding that the asserted claims are anticipated by Popp. *Cohesive Techs., Inc. v. Waters Corp.*, 543 F.3d 1351, 1364 (Fed. Cir. 2008) ("[S]econdary considerations are not an element of a claim of anticipation."). An obviousness analysis requires consideration of any evidence tending to objectively show non-obviousness.

*Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc.*, 617 F.3d 1296, 1305 (Fed. Cir. 2010). AIT argues:

> [T]here is no dispute that the Accused Products have been enormously commercially successful. Ex. 6 (Zatkovich Reb.) at ¶ 1512. Salesforce argues "commercial success" can be ignored because there is no evidence of a "nexus" between Salesforce's success and the patented inventions. Mot. at 30. Yet, Mr. Zatkovich opined after an exhaustive review of the evidence that the patented inventions are "an important aspect" of the Accused Products' success. *Id.* at ¶ 1513; *See also Id.* at ¶¶ 1514–26. Mr. Zatkovich's opinion is supported by 25 pages of evidence where Mr. Zatkovich considered Salesforce's witness testimony, Salesforce's documentary production, Salesforce's admissions in this action, the Asserted Patents, and the status of prior art. *See* Ex. 8 (Zatkovich Op.) at ¶¶ 396–438 (discussing "Benefits of the Patented Invention"); Ex. 6 (Zatkovich Reb.) at ¶ 1514 (referencing "Benefits of the Patented Invention"), at ¶¶ 1593–95 ("Stated Problem and Claimed Solution"). Mr. Zatkovich's opinion cannot be ignored merely because Dr. Bederson disagrees with Mr. Zatkovich. *See* Ex. 6 (Zatkovich Reb.) at ¶¶ 1513–26 (rebutting Dr. Bederson's opinions).

Dkt. 297 at 29-30.

AIT's evidence regarding the accused products cannot support non-obviousness because I have found the accused products do not infringe. Therefore, the evidence relied on by AIT with respect to commercial success is irrelevant.

Second, AIT argues:

> Mr. Zatkovich's opinions that the technological advantages of the patented inventions objectively support non-obviousness. Ex. 6 (Zatkovich Reb.) at ¶¶ 1527–30. Further, as explained by Mr. Zatkovich, Salesforce's repeated public and internal statements "praising the patented architecture and the benefits" achieved by Salesforce through its practice of the patented invention "strongly supports non-obviousness." *Id.* at ¶¶ 1531–48. Mr. Zatkovich's opinions are supported by the Patents-in-Suit, deposition testimony, and documentary evidence. *Id.* at ¶¶ 1527–48.

Dkt. 297 at 30.

AIT's evidence regarding the technical advantages provided over and above existing technologies and the praise it received is again tied to the accused products, which I have found do not infringe. As such, the evidence relied on by AIT is not objective evidence of non-obviousness of the asserted claims.

Third, AIT relies on Mr. Zatkovich's opinion that "[w]here, as here, a primary reference is not alleged to have a problem or need for improvement, objectively a skilled artisan would be less likely to modify a reference merely for the purposes of complexity." Dkt. 296 at 30 (relying on Ex. 6 (Zatkovich Reb.) at ¶¶ 1549–51).

Mr. Zatkovich's opinions directed to the lack of need for improvement in Popp is the only objective evidence of non-obviousness offered by AIT that appears unrelated to the accused products. However, as argued by Salesforce, objective evidence of non-obviousness cannot overcome a strong obviousness case. *See* In*tercontinental Great Brands LLC v. Kellogg N.A. Co*., 869 F.3d 1336, 1347 (Fed. Cr. 2017) (affirming grant of summary judgment on obviousness notwithstanding patentee's arguments based on secondary considerations); *Ohio Willow Wood Co. v. Alps South, LLC*, 735 F.3d 1333, at 1344 (Fed. Cir. 2013) ("[W]here a claimed invention represents no more than the predictable use of prior art elements according to established functions, as here, evidence of secondary indicia are frequently deemed inadequate to establish non-obviousness.); *Western Union Co. v. MoneyGram Payment Sys., Inc*., 626 F.3d 1361, 1373 (Fed. Cir. 2010) ("[W]eak secondary considerations generally do not overcome a strong prima facie case of obviousness."); *Tyco Healthcare Grp. LP v. Mutual Pharm. Co*., 642 F.3d 1370, 1377 (Fed. Cir. 2011) (affirming summary judgment where the "district court acknowledged the product's commercial success but properly found that the evidence as a whole did not overcome [defendant's] strong prima facie case of obviousness."). I find this is such a case when considering

the limited relevant objective evidence of non-obviousness unrelated to the accused product is insufficient to overcome the strong case of obviousness.

## CONCLUSION

For the above reasons, the Court finds that there is no genuine dispute of material fact and grants summary judgment as to the following:

- Salesforce does not infringe claims 1, 10, 20-21, 23-26, 30, and 40 of the '482 patent.
- Salesforce does not infringe claims 13-17 of the '111 patent.
- Claims 1, 10, 20-21, 23-26, 30, and 40 of the '482 patent are anticipated by the Popp prior art reference.
- Claims 13-17 of the '111 patent are anticipated by the Popp prior art reference.
- Claims 1, 10, 20-21, 23-26, 30, and 40 of the '482 patent are rendered obvious by the Popp prior art reference in view of the Amati prior art reference.
- Claims 13-17 of the '111 patent are rendered obvious by the Popp prior art reference in view of the Amati prior art reference.

Accordingly, the Court **GRANTS** Salesforce's Motion for Summary Judgment (Dkt. 278) and **DENIES** AIT's Motion for Summary Judgment of No Anticipation (Dkt. 270).

The Court further **DENIES** as moot the parties' Joint Motion to Extend Time, (Dkt. 263), Joint Motion to Withdraw Motions to Strike and to Vacate the Court's Order Regarding Motions to Strike, (Dkt. 264), Joint Stipulation Regarding Case Narrowing, (Dkt. 265), Motion to Exclude Testimony, (Dkt. Nos. 268, 272, 275), Motion to Dismiss, (Dkt. 281), Motion for Hearing, (Dkt. 324), Objection/Appeal to Magistrate Judge Order, (Dkt. 338), Motion to Resolve Discovery Dispute, (Dkt. 351), Motion for Leave to File Reply, (Dkt. 358), Unopposed Motion to Continue the Trial Date, (Dkt. 388).

The Court further **GRANTS** ***nunc pro tunc,*** the parties' Motions to Seal pleadings, (Dkt. Nos. 269, 271, 273, 276, 279, 282, 293, 295, 297, 301, 306, 314, 316, 319, 322, 333, 339, 346, 352, 359, 370, 377, 389, 403, 406).

The clerk of the Court shall close this case.

IT IS SO ORDERED.

Dated this 12th day of September 2023.

ROBERT C. JONES
United States District Judge