

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

STODGE, INC. D/B/A POSTSCRIPT

Petitioner,

v.

ATTENTIVE MOBILE INC.,

Patent Owner.

Case IPR2024-00129
Patent No. 11,553,074

PATENT OWNER'S PRELIMINARY RESPONSE

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U.S. Patent & Trademark Office
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2005	<i>Attentive Mobile Inc., v. Stodge Inc., d/b/a/ Postscript</i> , Case No. 1:23-cv-00087-CJB, Stipulation and Order Amending Schedule For Patent Infringement Counterclaim, Dkt. 74 (D. Del. Oct. 19, 2023)
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2010	<i>Attentive Mobile Inc., v. Stodge Inc., d/b/a/ Postscript</i> , Case No. 1:23-cv-00087-CJB, Stodge Inc. d/b/a/ Postscript's Initial Invalidity Contentions (D. Del. July 27, 2023)

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2014	Eric Lambert, <i>Demystifying Text Marketing, Text-Based Support and “Double Opt-In”</i> , https://www.linkedin.com/pulse/demystifying-text-marketing-text-based-support-double-eric-lambert
2015	Michael Scheiner, <i>Attentive Gets the Message Out</i> (Feb. 27, 2020); https://crm.org/news/attentive-gets-the-message-out
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2018	2021 Glossy Awards, <i>Best Use of SMS, Attentive and Supergoop!</i>
2019	The Tech Tribune, <i>2023 Best Tech Startups in NYC</i> , https://thetechtribune.com/10-best-tech-startups-in-nyc/
2020	Attentive Reviews & Product Details, https://www.g2.com/products/attentive/reviews

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2022	PRNewswire, <i>Attentive Ranked #8 on LinkedIn's 2020 Top Startups List in the United States</i> , (Sept. 22, 2020)
2023	The Cloud 100 (Aug. 8, 2023); https://www.forbes.com/lists/cloud100/?sh=6a9a510e7d9c
2024	G2 Fastest Growing Products for 2022, https://www.g2.com/best-software-companies/2022/fastest-growing?rank=23
2025	<i>Attentive's 2022 Year to Date</i> , https://www.attentive.com/year-to-date-2022
2026	BusinessWire, <i>Attentive Named to the 2023 Deloitte Technology Fast 500™</i> (Nov. 8, 2023); https://www.businesswire.com/news/home/20231108028698/en/Attentive-Named-to-the-2023-Deloitte-Technology-Fast-500%E2%84%A2?blaid=5291542
2027	Forbes, <i>Buying Soap Was Just the Start, Now The Company Wants to Text You, Too</i> (Apr. 29, 2022); https://www.forbes.com/sites/laurendebter/2022/04/29/buying-soap-was-just-the-start-now-the-company-wants-to-text-you-too/?sh=2f7416521073
2028	Attentive, <i>Convert visitors into subscribers</i> ; https://www.attentive.com/growth
2029	Patent information for Attentive Mobile Inc., https://www.attentive.com/legal/patents
2030	Attentive Debuts Signature "Two-Tap" Sign-Up Technology Within Instagram Stories; https://www.attentive.com/blog/attentive-instagram-stories

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2031	Why SMS Marketing is The Way of The Future (plus, a spotlight on our friends at attentive®); https://www.sama-labs.com/why-sms-marketing-is-the-way-of-the-future-plus-a-spotlight-on-our-friends-at-attentive/
2032	Barry Levine, <i>Led by TapCommerce founders, startup Attentive launches SMS/MMS marketing platform</i> ; https://martech.org/led-tapcommerce-founders-startup-attentive-launches-smsmms-marketing-platform/
2033	Weetech Solution, <i>TapCommerce's founders are back with Attentive, a messaging startup that's raised \$13M</i> (Apr. 27, 2022); https://www.weetechsolution.com/blog/tapcommerce-founders-are-back-with-attentive
2034	U.S. Patent 10,366,400, <i>Reducing Un-Subscription Rates for Electronic Marketing Communications</i> , to Stephane Moreau et al., issued July 30, 2019
2035	U.S. Patent Appl., 2016/0140627 A1, <i>Generating High Quality Leads For Marketing Campaigns</i> , to Stephanie Moreau, et al., issued May 19, 2016
2036	Attentive, <i>Rethinking messaging-based customer communications</i>
2037	Attentive, <i>Text Message Marketing</i> , https://info.attentive.com/10x-revenue-email-marketing/
2038	<i>Attentive Mobile Inc., v. 317 Labs, Inc. d/b/a Emotive</i> , Case No. 1:22-cv-01163-CJB, Joint Claim Construction Brief, Dkt. 70 (D. Del. Dec. 11, 2023)
2039	User-Agent, https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/User-Agent

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2041	3GPP TS 23.040 V14.0.0 (2017-03), <i>3rd Generation Partnership Project; Technical Specification Group Core Network and Terminals; Technical realization of the Short Message Service (SMS) (Release 14)</i> ; https://www.3gpp.org/ftp/Specs/archive/23_series/23.040/23040-e00.zip
2042	File History for U.S. Patent 11,416,887

Attentive Mobile Inc. (“Patent Owner” or “Attentive”) submits this Preliminary Response to the Petition of Stodge, Inc. d/b/a Postscript (“Petitioner” or “Stodge”) seeking *inter partes* review of U.S. Patent No. 11,553,074 (“the ’074 patent”).

I. INTRODUCTION

The Board should deny institution for two reasons: (1) discretionary denial under *Fintiv* is appropriate, because the ’074 patent is challenged in a parallel litigation which is scheduled for trial before a final written decision; and (2) the petition is not likely to succeed on the merits because it improperly uses hindsight to construct three- and four-reference combinations which still do not render obvious the challenged claims.

The sole ground asserted against the independent claims relies on a hodge-podge of prior art disclosures, cherry-picked from three distinct references, and Petitioner fails to adequately articulate the resulting combination of teachings on which it relies. Even then, the cited prior art disclosures and purported combination still fail to disclose or render obvious key claim limitations. Not one of the cited references discloses a subscription service or list. Rather, the cited prior art, Khanna, discloses URLs that deeplink to web-based landing pages to display a product—not

a messaging application, like that disclosed in Oliver. None of the cited art discloses or suggests the challenged claims.

Petitioner's lack of motivation to combine and reliance on hindsight are confirmed by extensive evidence supporting secondary considerations of non-obviousness. Patent Owner's "two-tap" sign-up technology satisfied a long-felt need upon its release, received extensive industry praise, and enjoys tremendous commercial success as a direct result of implementing the patented invention. This evidence demonstrates that a person of ordinary skill in the art would not have redesigned the prior art references contrary to their independent teachings to arrive at the claimed invention.

II. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY INSTITUTION UNDER 35 U.S.C. § 314(a)

Because Congress's goal in enacting post-grant proceedings like IPRs was "to ... limit unnecessary and counterproductive litigation costs," Director Vidal has instructed the Board not to institute IPRs that would "increase, rather than limit, litigation costs." Director's Memo, *Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation* ("Guidance") at 1 (June 21, 2022).

The '074 patent is one of three patents asserted against Petitioner. Institution of a parallel IPR proceeding would needlessly increase the cost of resolving the '074

patent's validity, and the Board should exercise its discretionary authority to deny institution.

A. Factor 1: The District Court Has Not Granted A Stay

The first *Fintiv* factor asks “whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted.” *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 6 (PTAB Mar. 20, 2020) (*precedential*). Here, the undisputed answer to both questions is **no**: Petitioner acknowledges no stay has been entered or requested in the parallel litigation (Petition 75), and Petitioner has identified no evidence that one will (or even might) be. To the contrary, evidence indicates that a stay is unlikely, particularly where there are two additional patents asserted against Petitioner that are also asserted against another competitor, Emotive, in Delaware. (EX-2003 (indicating Judge Burke has historically granted only 57% of motions to stay pending a PTAB proceeding); *SenoRX Inc. v. Hologic Inc.*, No. 12-0173-CJB, 2013 WL 144255, *9 (D. Del. Jan. 11, 2013) (denying a stay because the pending IPR and reexamination did not cover all asserted claims and the parties were competitors).)

Even where no stay has been requested, the Board has found Factor 1 to favor discretionary denial where “Petitioner present[ed] no evidence that it has requested a stay [] or that a stay is likely.” *Luxshare Precision Industry v. Amphenol Corp.*,

IPR2022-00132, Paper 10 at 9 (PTAB May 3, 2022). Factor 1 weighs in favor of discretionary denial. *Samsung Elecs. Co., Ltd. v. Clear Imaging Research, LLC*, IPR2020-01399, Paper 13 at 11-12 (PTAB Feb. 3, 2021).

B. Factor 2: The District Court Trial Is Expected Before The Statutory Deadline

Factor 2—the implications of the district court and IPR schedules—also weighs for denial. *Fintiv*, IPR2020-00019, Paper 15 at 11-12, 17 (PTAB May 13, 2020) (*informative*); Guidance at 1.

Here, an IPR would overlap entirely with the district court litigation. As Petitioner admits (at 75), Judge Burke has scheduled trial against Petitioner for April 7, 2025, with final pretrial briefs due March 14, 2025. (EX-1027, 16, 18.) Furthermore, Petitioner asserted a counterclaim of patent infringement in district court, which will be decided at the same April 7, 2025 trial. (EX-2004 16-20; EX-2005 4.)

Should the Board institute, its final written decision deadline would be May 22, 2025—over a month *after* the trial against Petitioner.

While Petitioner cites a 36-month median time-to-trial in Delaware, the District's median time-to-trial in patent cases is 27 months (or 842 days). (EX-2006 2.) Thus, trial against Petitioner would be expected in May 2025, consistent with the scheduled trial date of April 7, 2025. (EX-2007 18.)

That is, applying either the scheduled trial dates or the median time-to-trial, IPR would not be complete until the parties have duplicated most of the validity efforts and expended significant resources in litigating the validity of the '074 patent on multiple fronts. If instituted, the IPR proceedings would not produce a result until *after* the Delaware trial, and the parties would spend a year expending precisely the “duplicative,” “unnecessary[,] and counterproductive litigation costs” that the AIA was designed to avoid. *Fintiv*, IPR2020-00019, Paper 11 at 5.

Accordingly, factor two heavily favors discretionary denial.

C. Factor 3: The Parties Will Have Invested Significant Resources In The Parallel Proceedings

Factor 3—the resources invested in parallel proceedings—favors denial “if, at the time of the institution decision [May 22, 2024], the district court has issued substantive orders related to the patent,” such as “claim construction orders.” *Fintiv* at 9-10, n.16 (collecting cases).

Both the parties and the Court will have invested significant resources in the claim construction process before the Board's institution decision. The two Delaware litigations have consolidated only the claim construction hearing, which took place on January 9, 2024, and after which, the parties were required to submit supplemental briefing. (EX-2008 2-3; EX-2009 1.) The court intends to issue its claim construction order within 60 days of the hearing—no later than March 9, 2024,

more than two months before the Board's institution decision. (EX-2007 13.) And at the hearing, the Court expressed its intention to release claim construction decisions on a rolling basis.

The parties have additionally invested significant resources on the merits in the parallel litigation against Petitioner over the last thirteen months. Patent Owner has exchanged not only initial infringement and invalidity contentions with Petitioner (in June 2023 and July 2023, respectively), but also multiple sets of supplemental contentions over the last nine months. (EX-2007 4.) Fact discovery is reaching its end, with both cases past the deadline for substantial completion of document productions and with the parties having served third-party subpoenas and started noticing fact witnesses for deposition. Initial expert reports will be due less than a month after the Board's institution decision. (EX-2007 5.)

In light of the overlapping schedules here and the redundant resources that *will be* wasted should IPR be instituted, this factor favors discretionary denial. *Fintiv* at 6; *NXP USA, Inc. v. Impinj, Inc.*, PGR2022-00005, Paper 20 at 7 (PTAB Aug. 25, 2022) (Board should consider “the duplicative efforts that will occur during the [] duration of [IPR]”); *Regeneron Pharmas. Inc. v. Novartis Pharma AG*, IPR2020-01317, Paper 15 at 17 (PTAB Jan. 15, 2021).

D. Factor 4: The Issues Overlap

Factor 4—the degree of overlap between the issues in the petition and those before the district court—also strongly supports denial. “[C]oncerns of inefficiency and the possibility of conflicting decisions [are] particularly strong” where “the Board [is] presented with substantially identical prior art arguments.” *Fintiv*, IPR2020-00019, Paper 11 at 12.

Here, Petitioner asserts identical prior art in the district court—Oliver, Agrawal, Molinet, and Khanna—against the ’074 patent. (EX-2010 11, 18-19.) On November 25, 2024, Petitioner filed a stipulation in IPR2023-01338 on the related ’887 patent, identifying three IPR proceedings (including this proceeding) and stipulating: “if the petitions are instituted, it will not pursue...invalidity based on the same grounds set forth in the aforementioned petitions, nor any grounds that could have reasonably been raised in the aforementioned petitions.” (IPR2023-01338, EX-1032.)

The effect of such letter is unclear, given that it was neither contained in the petition, nor filed with the district court. Furthermore, the stipulation, itself, is unclear as to whether all three petitions must be instituted in order for the stipulation to take effect or whether an institution of any one petition will result in Petitioner abandoning its overlapping invalidity claims in the parallel district court litigation.

Regardless, Petitioner's stipulation under the circumstances here carries no weight, because it does not "mitigate[]" any concerns of duplicative efforts between the district court and the Board" or "of potentially conflicting decisions." *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 at 19 (PTAB Dec. 1, 2020). For example, Petitioner seeks to take advantage of broader plain and ordinary meanings of the claim terms in this forum, while pursuing narrowing constructions at the district court, increasing the likelihood of conflicting decisions between the PTAB and Delaware district court. (*See* Section IV(C), *infra*.)

Because institution would multiply burden and create the possibility of inconsistent decisions, Factor 4 weighs in favor of discretionary denial.

E. Factor 5: Both Parties Are Parties In The Parallel Litigation

Factor 5 weighs in favor of denial because Petitioner is a defendant in the parallel litigation and, as such, will have a full, fair opportunity to litigate its invalidity contentions. *See Vizio, Inc. v. Maxell, Ltd.*, IPR2022-01459, Paper 7 at 21-22 (PTAB Apr. 11, 2023); *Nokia of Am. Corp. v. Godo Kaisha IP Bridge*, IPR2022-00755, Paper 9 at 13 (PTAB Nov. 2, 2022).

F. Factor 6: The Petition Does Not Present Compelling Evidence Of Unpatentability

Factor 6—the merits of the petition—also weighs against institution because, as detailed below, the petition fails to show even a "reasonable likelihood" that

Petitioner would prevail on any challenged claim. *See* Section VI, *infra*. The petition certainly does not pass the higher threshold of a “compelling” unpatentability challenge that could preclude discretionary denial, which requires a determination that Petitioner is “highly likely” to succeed on the merits. Guidance at 4; *Commscope Techs. v. Dali Wireless, Inc.*, IPR 2022-01242, Paper 23, 3-4 (PTAB Feb. 27, 2023).

* * *

As all six factors weigh for discretionary denial, Patent Owner respectfully requests that the Board exercise its discretion to deny institution.

III. INADEQUACY OF THE PRIOR ART & THE NEED FOR IMPROVED ENGAGEMENT OF PROMOTIONAL CUSTOMERS ON MOBILE DEVICES

With the advent of Internet-connected mobile devices, vendors acquired new ways of engaging users. (EX-2001 ¶22; EX-1001 1:26-28.) Before the '074 patent, users could open a vendor's application or website on a mobile device to select a product or subscribe to promotions. (EX-1001 1:26-28.) For example, the user could provide payment information via the vendor's application or website to complete a transaction. (*Id.* 1:28-30.)

However, these methods often involved pausing the user's current activity to redirect the user to the vendor's application or website. (*Id.* 1:30-35.) Excessive user input, e.g., clicking or tapping the screen, was necessary to complete not only

this redirection but also any transaction or subscription. (*Id.*; EX-2001 ¶22.) These methods caused delay and placed additional burden on the user, often causing the user to leave the transaction/subscription before it was complete and depriving the vendor of a customer. (EX-1001 1:35-37.)

Accordingly, there was a need for an improved method for transitioning a user from one interface to another interface on a mobile device to complete, for example, an enrollment. (EX-1001, 1:38-42, cl. 1.)

IV. THE '074 PATENT'S NEW TECHNOLOGY PLATFORM FOR MESSAGING-BASED SUBSCRIPTIONS FROM A MOBILE DEVICE

A. Overview

The '074 patent discloses an improved technology platform and method for completing messaging-based subscriptions, communications, and/or purchases that a user initiates from a website viewed on a mobile device. (EX-1001, 2:18-28, 1:20-25; EX-2001 §IV(A).) In particular, the challenged claims recite an improved platform and method for enrolling users in subscription services without the need to receive an additional opt-in communication. (EX-1001, cls. 1, 8, 16, 23.)

The '074 patented invention relies on a “custom-generated mobile deeplink.” (EX-1001 2:38-52.) It claims defining and sending a “uniform resource identifier (URI)” from a server to a mobile device, capable of deeplinking to a messaging application, automatically transitioning the user from a first application to the

messaging application when the user engages with a client's web-based promotional message, and automatically populating a custom message in order to send that message to a server and enroll the device in a subscription without the user having to provide any additional information. (*E.g.*, EX-1001 cls. 1, 8, 16, 23.) By implementing the URI within a subscription enrollment process in the claimed way, the '074 patent was able to increase and improve customer engagement. (EX-1001 19:65-20:3.)

For example, the '074 patent's platform may be implemented between three parties connected via a network: a click-to-text server (EX-1001, Fig. 1, 4:13-22, 4:54-66); a client server hosting a webpage (*id.*, cl. 1, 12:28-31); and a user's mobile device loading the client's webpage (*id.*). The server provides a promotional message associated with joining a subscription list. (EX-1001 4:66-5:3, 11:23-45, cl. 1.) When the user interacts with the promotion, the URI deeplinks to a messaging application, causing the device to automatically transition to a messaging application. (EX-1001 8:32-44, cl. 1.) The URI also causes the device to auto-populate a custom message based on the user data. (EX-1001 cl. 1, 8:32-44, 14:45-49.) When the user taps the send button of the messaging application, the mobile device sends the custom message to the click-to-text server. (EX-1001 2:65-3:4, cl. 1.) And upon receiving the custom message, the click-to-text server—without

receiving additional information from the mobile device—may enroll the device in the associated subscription and deliver the first installment of the associated subscription. (EX-1001 3:5-15, cl. 1.)

In this way, the patented technology platform may be used to implement a “two-tap” enrollment in a subscription service. (EX-1001, 2:33-37 cl. 1; EX-2001 ¶29.) In doing so, the platform may avoid the need for the user to interact with a vendor-specific interface through which a subscription or sign-up is traditionally made. (EX-1001, 19:56-61.) But more importantly, the process provides dynamic application deeplinking to a messaging application to facilitate a completed enrollment without the need for additional information, time, or engagement from the mobile device. (EX-1001, 19:61-65, cl. 1; EX-2001 ¶¶28-29.) By doing so, the '074 patent improved a user's experience while interacting with a client's webpage on a mobile device and increased user engagement with the client's subscription service. (EX-1001 19:65-20:3; EX-2001 ¶29.)

B. Prosecution History

During prosecution, the examiner considered the same Oliver prior art reference cited by Petitioner. (EX-1004 309 (listing Oliver on an examiner-signed information disclosure statement).) Indeed, during examination of a continuation of the '074 patent, which issued as the related U.S. Patent No. 11,416,897 (also asserted

against and challenged by Petitioner), the examiner explicitly considered the same Oliver reference but did not find it relevant enough to cite as part of any rejection. (EX-2011 232-33.) Rather, the examine merely cited Oliver “to further show the state of the art with respect to generating consumer interface and triggering of an advertisement delivery based on received user input or captured by user device sensors.” (*Id.*)

In providing a reason for allowing the '074 patent, the examiner acknowledged the existence of references which, in isolation, might disclose “deeplinks,” the “integration tags,” or “methods for subscribing a user.” (EX-1004 55.) But the examiner concluded that “[t]he known prior art fails to disclose or suggest each and every limitation together as claimed” and “the examiner cannot determine a reasonable motivation, either in the known prior art or the existing case law, to combine the known elements to render the claimed invention.” (EX-1004 55.)

C. Claim Construction

1. Petitioner's Proposed Constructions

Petitioner takes conflicting claim construction positions between the parallel proceedings, contending here that the Board need not construe any claim terms (Petition 10), while proposing at least two constructions in the district court

litigation. (*See* EX-1029 2). In particular, at the district court, Petitioner proposes an overly narrow construction of “uniform resource identifier” or “URI,” as well as “integration tag,” both of which are recited in all independent claims of the '074 patent. (*Id.*) By seeking to capitalize on a broader plain-and-ordinary understanding of these terms in this PTAB proceeding, while narrowing the very same terms in district court, Petitioner creates a likelihood of conflicting decisions and claim interpretation should both proceedings continue in parallel.

Due to Petitioner's decision not to raise these issues in its petition, Patent Owner presumes Petitioner agrees the terms of the '074 patent do not require construction, as their plain and ordinary meaning is easily understood. Patent Owner and its expert, therefore, apply the plain and ordinary meaning of all claim terms. (EX-2001 §IV(B).)

2. The printed matter doctrine does not apply to the challenged claims.

In its discussion of limitation [1e], Petitioner asserts that a portion of the limitation constitutes “printed matter that is unrelated to the technical functioning of the alleged invention.” (Petition 39.) Petitioner provides no further analysis under the printed matter doctrine and did not raise this concern in the parallel litigation.

Claim	Claim Language
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[1e]	<i>receiving, at the mobile device, from the at least one web server, and in response to sending the mobile device identifier and the request to retrieve the identifier, a first signal causing a frame to be displayed with the webpage via the web browser application, the frame including a promotional message associated with joining a subscription list</i>
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(EX-1001, cl. [1e] (emphasis added)¹.) Identical language appears in each of the independent claims. (EX-1001, cls. 8, 16, 23.)

Unlike printed matter, which is merely information content observable by a human and which plays no other role in a claim, this limitation provides necessary context and is functionally related to the inventive purpose of the claims—i.e., providing an improved technology platform and method for completing messaging-based subscriptions. *See, e.g., In re Gulack*, 703 F.2d 1381, 1385 (Fed. Cir. 1983) (finding a sequence of digits printed on a circular band limiting because the printed matter and the circularity of the band were interrelated, so as to produce a new product useful for educational and recreational math purposes); *In re Miller*, 418 F.2d 1392, 1396 (Fed. Cir. 1969) (printed numbers on the side of a cup were

¹ All emphasis added unless otherwise noted.

functional and limiting because they indicated a volumetric relationship that was defined by the claims).

“The printed matter doctrine [] raises an issue where the §101 patent-eligibility inquiry and the §102 and §103 novelty and nonobviousness inquiries overlap.” *Praxair Distrib., Inc. v. Mallinckrodt Hosp. Prods. IP Ltd.*, 890 F.3d 1024, 1032 (Fed. Cir. 2018) (citing *Mayo Collaborative Servs. V. Prometheus Labs., Inc.*, 566 U.S. 66, 90 (2012)). A printed matter analysis has two steps: first, determining whether the limitation is directed toward printed matter; and second, if it is printed matter, whether the limitation should nonetheless be given patentable weight.

First, the challenged claim limitation is not directed to printed matter. “[A] limitation is printed matter only if it claims the content of information.” *In re DiStefano*, 808 F.3d 845, 848 (Fed. Cir. 2015); *Praxair*, 890 F.3d at 1032. While this limitation recites a promotional message associated with joining a subscription list, this limitation does not claim the content—i.e., the arrangement of information—that is displayed or that makes up the promotional message. (*E.g.*, EX-1001 cls. 1, 8, 16, 23.) That is, the claims do not recite specific wording or content of the promotional message, so long as a promotional message associated with joining a subscription list is displayed. Accordingly, these limitations are not directed to printed matter.

Second, even if the Board were to find that these limitations are directed to printed matter, the limitations are functionally related to the claim as a whole and are deserving of patentable weight. Printed matter is given such weight if the claimed information content has a functional or structural relation to the substrate—i.e., if the printed material is “interrelated with the rest of the claim.” *Praxair*, 890 F.3d at 1032.

Praxair is instructive, as the Court found that at least one claim contained such a functional relationship, whereas another did not. *Compare Praxair*, 890 F.3d at 1032 *with id.* at 1035. For example, independent claim 7 of the patent-in-issue in *Praxair* was found to contain a printed matter limitation, requiring that a medical provider make a “recommendation” that treatment be discontinued. *Praxair*, 890 F.3d at 1029. However, this same limitation was found to be deserving of patentable weight within the context of dependent claim 9, because claim 9 required a medical provider to take a specific action—discontinuing treatment—as a result of the recommendation limitation. *Id.* at 1035. The Court and the parties agreed that by interrelating the claimed information with the concrete step of discontinuing treatment, the printed matter had a functional relationship to the rest of the claim and was deserving of patentable weight. *Id.*

Here, the initial step of displaying a promotional message associated with joining a subscription list is a necessary functional step that precedes generating “a text message with a...pre-populated message body containing a request to join the subscription list” and “subscrib[ing]” a mobile device “to the subscription list,” such that “an installment of a subscription associated with the subscription list” may be delivered and received. (See EX-1001 cls. 1, 8, 16, 23.) Because the challenged claims are directed to providing an improved system and method for enrolling users in a messaging-based subscription service, these limitations are necessary to limit the context within which the invention is functional. For example, where the method or system is implemented without inclusion of a promotional message associated with joining a subscription list, the latter limitations lack the context necessary to understand their functional steps. That is, limitation [1e] (and corresponding limitations in the other independent claims) are “interrelated with the rest of the claim” and should be afforded patentable weight. *Praxair*, 890 F.3d at 1035.

D. Level of Ordinary Skill in the Art

A POSITA at the time of the invention of the '074 patent (May 2017) would have had a bachelor's degree in an accredited program of computer science, computer engineering, electrical engineering, or a similar discipline, and have 2-3 years of practical work or research experience in mobile and web application

programming. More advanced degrees and/or training in a related discipline can compensate for shorter work experience. (EX-2001 §IV(C).)

V. OVERVIEW OF THE PRIOR ART²

Petitioner relies on a cobbled-together compilation of prior art references much like those the examiner found to be deficient during the prosecution history. Specifically, in Ground 1, Petitioner alleges that elements of the claimed invention were known in the prior art and that a POSITA would have been motivated to combine the teachings of Oliver, Agrawal, and Khanna. (Petition 19.) However, these references are implemented in distinct advertising mediums and environments, employ very different and unrelated techniques, and pursue discrete goals.

A. Overview of Oliver

Oliver is directed to “creating a passive entity” associated with a promotion that, when scanned or read, generates a prepopulated message on a user’s communication device. (EX-1011 [0002]; EX-2001 § V(A).)

² Petitioner’s Ground 2 relies on Ground 1’s three-reference combination as allegedly rendering obvious the independent claims. Because Petitioner has not shown a reasonable likelihood of success as to Ground 1, all grounds fail for similar reasons, and there is no need to address the additional prior art raised in Ground 2.

Oliver defines these “passive entities” as “images, codes, tags, or any other unique identifiers that may be encoded with uniquely identifying information and codes” and uses this term interchangeably with “generated sign.” (EX-1001 Abstract, [0033].) Petitioner describes this passive entity as “essentially anything with which a mobile device can interact.” (Petition 20.) But the cited disclosures of Oliver do not support such a broad assertion and Petitioner provides no supporting explanation. (EX-1011 Abstract, [0007], [0033], [0035], [0027]-[0029].)

For example, Oliver teaches that once generated, “sign” may be used in certain media types with which a mobile device may not be able to interact, including radio or satellite. (EX-1011 [0034].) Oliver explains that some passive entities may require the user to input information contained in the passive entity into their own mobile device to “activate” the passive entity—indicating that direct interaction between those entities and the device is impossible. (EX- 1011 Abstract, [0007], [0033]; EX-2001 ¶39.)

Disclosed examples of a “passive entity” include a QR code, near-field communication (NFC) tag, radio frequency identification (RFID) tag, or short message service (SMS) message. (EX-1011 Abstract, [0003].) Oliver explains that users “activat[e]” a passive entity by scanning, reading, or otherwise inputting the unique information contained in the passive entity into a device operated by the user

or by merely being present near a passive entity while equipped with a passive entity receiver. (EX-1011 [0007].)

Oliver recognized that while many businesses relied on the use of passive entities on promotional displays and items, such entities were limited to a “one-way trip” for the user to a digital location designed/created by the business having the promotion and that the business may never know that anyone had taken an action to activate one of their passive entities. (EX-1011 [0003]-[0006].)

Accordingly, Oliver discloses a “lead generation tool” used to create a passive entity (e.g., QR code or sign). (EX-1011 [0007].) Upon activating this passive entity or entering the information obtained from this entity into a user device, the user is prompted to send a message to obtain a link to a reward (e.g., information, discount code, etc.) (EX-1011 [0007], [0026], [0041]-[0042].) After receiving the user's message, Oliver teaches that the link returned to the user may be a “shortened URL that leads to/generates the reward, a tap-to-call link, a URL leading to a webpage with a chat feature,” etc. (EX-1011 [0041].) That is, the user must engage a third time by tapping the reward link to request and obtain the reward via their web browser. (EX-1011 [0042]-[0043]; EX-2001 ¶41.) Oliver describes these reward links as “trackable,” such that a user's information—contained within the reward link—may be saved to a database “for metrics purposes and reporting.” (EX-1011

[0043]; see also *id.* [0039].) In this way, Oliver's lead generation tool resolved the identified problem of businesses not knowing when a user had activated one of its passive entities. (See EX-1011 [0003]-[0006].)

B. Overview of Agrawal

Agrawal sought to provide an improved technique for determining whether advertising activity associated with clickable, web-based links was legitimate or not. (EX-1005 Title, Abstract, 1:18-39, 1:62-2:3; EX-2001 §V(B).)

Agrawal explains that many on-line advertising systems provide advertising links (also referred to by Agrawal as "impressions") to users when they visit certain webpages. (EX-1005 1:18-20.) When a user clicks the link, the user's web browser is often directed to a particular webpage belong to the advertiser that is associated with the advertising link. (EX-1005 1:20-25.) Fees for advertising are often calculated on a per-impression or per-click basis. (EX-1005 1:27-39.)

But Agrawal acknowledges that "[t]hese types of fee approaches are vulnerable to attacks where malicious individuals inflate a company's advertising link click count or impression count," thereby resulting in inaccurate advertising fees. (EX-1005 1:39-42, 1:51-58.) This may be accomplished through individuals physically clicking on links or programs (e.g., "click-bots or impression-bots") automatically generating page views and/or clicks. (EX-1005 1:42-50.)

Agrawal therefore discloses a method for “detecting illegitimate advertising-related activity” and assuring accurate advertising-related charges by: obtaining a first set of information when access to a document is requested—i.e., when an “advertisement query request” is generated (EX-1005 5:45-6:46); obtaining a second set of information when a link is clicked—i.e., when an “advertisement click request” is generated (*id.* 6:47-7:44); and evaluating the obtained information. (EX-1005 1:62-2:40.) Agrawal discloses two different methods of detecting activity. First, detection may be based on a comparison of the two sets of information. (EX-1005 7:45-7:62.) A discrepancy may indicate illegitimate advertising activity, whereas a match may indicate legitimate activity. (EX-1005 7:63-8:12.)

Second, detection may be based on a distribution of the obtained information, where legitimate information is collected over a period of time for both ad query requests and ad click requests to generate and store a distribution of that information. (EX-1005 9:29-40.) A second distribution is then collected at predetermined intervals and compared to the stored distribution. (EX-1005 9:40-47.) A match within a certain threshold indicates legitimate advertising activity, whereas a non-match indicates illegitimate activity was present during the time period. (EX-1005 9:47-55.)

Agrawal teaches that based on this evaluation, advertising fees may be adjusted to ensure accuracy. (EX-1005 8:59-60, 9:56-58.)

C. Overview of Khanna

Khanna discloses a method and system for launching an application from a webpage to display a product landing page. (EX-1034, Title, Abstract, cl. 1; EX-2001 §V(C).) Specifically, Khanna discloses specialized “content items”—i.e., data provided over a network which contains two “data elements.” (EX-1034 [0029], [0005], cl. 1.) The first data element identifies an application, and the second data element identifies a product. (EX-1034 [0005], cl. 1.)

Khanna notes that its method allows publishers or advertisers to create content items that “deep-link directly to the content within their applications.” (EX-1034 [0025].) Khanna defines “deep-linking” as “making a hyperlink that points to a specific content (e.g., a webpage or image) on a destination website, instead of that website’s main or home page.” (EX-1034 [0030].) When a user selects the content item, the method checks to see if the specified application is installed, transmits a request containing the first data element to a server to install the application, and launches the application with the second data element as an input, such that the first content displayed by the application relates to the product. (EX-1034 Abstract, cl. 1, [0026]-[0027]; EX-2001 ¶¶53-56.)

Users may be presented with multiple applications capable of handling the landing page, allowing them to select their preferred application. (EX-1034 [0063].) Users may also be presented with a single option and required to input their permission to launch the application. (*Id.*) Thus, Khanna discloses a method for launching an application from a webpage to display a product's landing page. (EX-1034, Title, Abstract, cl. 1.)

The '074 patent acknowledges known prior art methods similar to Khanna—e.g., methods which “allow a user to open a vendor's application or a vendor's website on a mobile device,” where the user had the option of completing a transaction. (EX-1001 1:26-30.) The '074 patent explains that the disadvantage of such methods is that they typically involve further user input (clicks or screen taps) to provide information or payment to complete the transaction. (EX-1001 1:30-35.) “This time-consuming and burdensome process results in many users leaving the purchase before the transaction is complete.” (EX-1001 1:35-37.)

**VI. THE BOARD SHOULD DENY INSTITUTION BECAUSE
PETITIONER IS NOT REASONABLY LIKELY TO PREVAIL ON
ANY CLAIM**

The Board should deny institution because the petition fails to show a reasonable likelihood of success on any claim. “In an *inter partes* review, the burden of persuasion is on the petitioner. . . . Failure to prove the matter as required by the

applicable standard means that the party with the burden of persuasion loses on that point—thus, if the fact trier of the issue is left uncertain, the party with the burden loses.” *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378-79 (Fed. Cir. 2015); *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (Petitioner has the “burden from the onset to show with particularity why the patent it challenges is unpatentable.”).

The petition presents two grounds—both based on at least three references:

Ground 1	Section 103(a)	Obvious over Oliver in view of Agrawal and Khanna	Claims 1-30
Ground 2	Section 103(a)	Obvious over Ground 1 in further view of Molinet	Claims 1-30

Petitioner’s grounds—both of which rely on Ground 1’s three-reference combination of Oliver, Agrawal, and Khanna as allegedly rendering obvious independent claims 1, 8, 16, and 23—suffer from two critical deficiencies. First, Petitioner cherry-picks disclosures from three incompatible prior art references, while failing to adequately articulate how or why a POSITA would be motivated to overcome those incompatibilities and combine the chosen disclosures. Second, even if a POSITA were to combine the three references’ teachings, Petitioner’s combination fails to disclose key limitations of the challenged claims.

**A. Petitioner Does Not Articulate Sufficient Motivation to Combine
The Teachings of Oliver, Agrawal, and Khanna**

Petitioner's combination of three different methods, implemented in dissimilar environments with unrelated goals, is unsupported by any rationale sufficiently demonstrating a POSITA's motivation to combine these references. (EX-2001 §VI(A).)

“[A] patent composed of several elements *is not proved obvious by merely demonstrating that each of its elements was, independently, known in the prior art*....[I]t can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.” *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). Petitioner must put forward some “explanation as to how or why the references would be combined to arrive at the claimed invention...[otherwise] hindsight bias [becomes] the thread that stitches together prior art patches into something that is the claimed invention.” *Metalcraft of Mayville, Inc. v. The Toro Co.*, 848 F.3d 1358, 1367 (Fed. Cir. 2017) (citation omitted). Hindsight reconstruction of the claimed invention must be carefully guarded against. *KSR*, 550 U.S. at 418.

Petitioner attempts to address the prior art combination and alleged motivation to combine up front, at Section III(C). But this analysis is generic and high-level and fails to address why a POSITA would have been motivated to combine particular

teachings of the references in a way that practices each limitation of the challenged claims.

Oliver and Agrawal. Petitioner first argues that “it was obvious to implement Oliver’s method using the system of Agrawal,” because “Oliver’s method would have appealed to businesses seeking a streamlined method for acquiring the contact information of potential customers, and for acquiring the potential customer’s consent to receive marketing communications and proof of possession of the mobile device.” (Petition 19.) However, Oliver does not disclose acquiring consent to receive marketing communications or proof of possession of a mobile device. (EX-2001 ¶¶60-64.) Rather, Oliver discloses a method for creating passive entities (e.g., QR codes) that facilitate a one-time transaction between the business and the user. (E.g., EX-1011 [0008] (returning a single response to the user containing the promotional reward), [0030] (describing the method “for providing a promotional reward to a user [] via a response message, in accordance with the disclosed principles”).)

Oliver explains that by activating a passive entity (e.g., scanning a QR code or inputting information on their phone), a user may obtain a link to a “promotional reward.” (E.g., EX-1011 [0039]-[0043].) After a user scans a QR code and sends a message to the web service, Oliver discloses that the web service creates a trackable

reward hyperlink to send back to the user. (EX-1011 [0039]-[0040].) Oliver teaches that the link might lead to or generate the reward, be a tap-to-call link, lead to a webpage, or open an email message. (EX-1011 [0041].) The user receives the reward only upon tapping the link (i.e., engaging a third time with a user device). (EX-1011 [0042].) Oliver even discloses a token that may be marked as “used” in order to limit users to one-time rewards. (EX-1011 [0043], [0047].) Petitioner admits this—arguing that Agrawal would help serve Oliver’s “express desire to...impose limits on the user’s access to promotions.” (Petition 20-21.) But Oliver cannot do both—i.e., allegedly motivate the combination of teachings in order to both obtain consent for future transactions *and* impose limits to disallow future transactions. (*Compare* Petition 19 *with id.* 20-21.)

That is, Oliver discloses a method for a one-time transactional exchange in which the user scans a passive entity, sends a message in order to receive a responsive link (or “lead”) to a reward, and taps the link to obtain the reward. Because Oliver does not teach acquiring consent to receive marketing communications or proof of possession of the mobile device, a POSITA would not be motivated, based on Petitioner’s alleged benefits, to implement Oliver’s method.

Petitioner further argues that a POSITA would have implemented “Oliver’s ads by using a Web advertising system such as Agrawal’s” by implementing Oliver’s

“concept of mobile app deeplinks...as links...in Agrawal’s web ads.” (Petition 20.) But Oliver does not use the term “mobile app deeplinks,” and Petitioner does not explain its assertion that Oliver discloses such deeplinks. (*See id.*) Oliver discloses a method implemented using passive entities—e.g., QR codes, Near-Field Communication (NFC) tags, Radio Frequency Identification (RFID) tags, and Short Message Service (SMS) messages “used on promotional displays and items as a means to navigate a consumer to a particular place in the digital world.” (EX-1011 [0003].) Whereas Oliver discloses encoding information into these passive entities, Agrawal discloses hyperlink or URL-based advertisements. (*Compare* EX-1011 [0027]-[0029] *with* EX-1005 Abstract, Fig. 4, 3:46-58, 8:13-37.) That is, Oliver and Agrawal disclose wholly different operating environments. (EX-2001 ¶¶65-66.)

Dr. Malek explains:

For example, Agrawal’s web-based environment relies on web-based protocols to achieve its intended purpose. (*See* EX-1005 1:19-26; *see also* Section V(B), *supra*.) Agrawal discloses a method of verifying advertising activity by collecting and comparing information obtained via the client’s web browser, which exchanges information with a server via the Hyper Text Transfer Protocol (HTTP). (EX-1005 6:30-43, 6:14-18; *see also id.* 5:29-6:67, Fig. 3.) In contrast to Agrawal, Oliver’s method for activating a passive entity in order to send an SMS message does not involve a web browser or an exchange of information

with a server. (*See generally* EX-1011; *e.g., id.* cl. 1; Section V(A), *supra.*) Oliver teaches that activation of a passive entity will open the SMS client on the mobile device—which does not result in an HTTP request. (EX-1011 [0005]-[0006], [0026]-[0029]; EX-2001 ¶67.) That is, unlike Agrawal, which explicitly relies on web-based protocols, Oliver is explicitly reliant on distinct phone-based messaging protocols.

(EX-2001 ¶67; *see also id.* ¶¶68-72.)

Petitioner concedes that even a difference in the mobile device operating system might result in distinct protocols that make it impossible to implement specific teachings (e.g., deeplinking) without causing an error. (Petition 69 (“[D]ifferent operating environments may not use or allow all deeplinking protocols.”).) And yet, Petitioner does not address how a POSITA would implement Oliver’s teachings within Agrawal’s distinct operating environment or whether the resulting combination would even be capable of continuing to practice either reference’s teachings. *Pers. Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 994 (Fed. Cir. 2017) (overturning a decision where “the Board nowhere clearly explained, or cited evidence showing, how the combination of the two references was supposed to work”). Indeed, as will be discussed further below in limitation-specific detail, the resulting combination would render Agrawal non-functional, failing to disclose or render obvious the claimed limitations. (*See* Section VI(B)(2)(ii), *infra.*)

Accordingly, a POSITA would not be motivated to combine the teachings of Oliver and Agrawal.

Agrawal and Khanna. The majority of Petitioner's argument that one would "augment" Agrawal's system with Khanna's teachings (Petition 21) again fails to provide an actual rationale for combining the teachings, instead relying only on "the common origin of the patents and the natural technological relationship between the two references"—i.e., the fact that "[b]oth references are intended for use with web-based advertising." (Petition 21-22.) But a "cursory assertion that the references are drawn from the same broadly characterized field" is insufficient to meet Petitioner's burden. *Securus Techs., Inc. v. Global Tel*Link Corp.*, IPR2015-00155, Paper 30 at 17 (PTAB Apr. 7, 2016).

The only motivation Petitioner actually proposes is that a POSITA would have allegedly desired Khanna's method because it "[a]llow[s] publishers or advertisers to create content items that deep-link directly to the content within their applications." (Petition 22.) However, this could not possibly serve as the rationale for assembling the combination of teachings on which Petitioner relies, because in Petitioner's proposed combination, Khanna's method is not used to "deep-link directly to the content within [advertisers'] applications." (*Compare id.* 22 with *id.* 42-44.) Rather, Petitioner argues that one would have used Khanna's method to

deep-link from a web browser to a pre-populated text message in a messaging application (i.e., an application that does not belong to the advertiser). (Petition 42-44.) That is, Petitioner provides no motivation for a POSITA to combine the particular teachings of Agrawal and Khanna to practice the challenged claim's limitation. (EX-2001 ¶¶74-76.)

Petitioner's limitation-specific analysis of the asserted combination provides nothing further than a cross-reference back to its generalized discussion of motivation to combine. (Petition 41.) In addressing how Khanna's teachings would be used, specifically, Petitioner merely concludes without explanation without any discussion whatsoever of why one might combine Oliver and Khanna that "[i]n the combination, the second application is a text messaging application, as taught by Oliver." (Petition 43.)

First, as discussed above, Agrawal does not disclose an operating environment supporting applications; therefore, a POSITA would not have found Khanna's teachings of transitioning users from a webpage to an application relevant to Agrawal's system and method. (EX-2001 ¶79.)

Second, Khanna does not teach or suggest opening a messaging application at all—rather, Khanna's technique is limited to launching an advertiser's application that may be directed to product landing pages. (EX-1034 [0030]; EX-2001 ¶77.) In

fact, Khanna specifically teaches launching a vendor-specific shopping application (EX-1034 [0015], [0027], [0045]-[0046])—one of the prior art techniques explicitly criticized by the '074 patent. (EX-1001 1:26-37.) If a POSITA were to modify Khanna's method to achieve Petitioner's proposed result (for which Petitioner provides no motivation), the advantages Khanna sought to achieve by linking directly to an advertiser's specialized application would be nullified. (EX-2001 ¶78; EX-1034 [0015].)

The Asserted Combination. Petitioner's single-sentence analysis under *KSR* falls well short of acknowledging and addressing the critical distinctions between the references. (Petition 23.) First, Oliver's technique—i.e., activating a passive entity to trigger a one-time transaction in which the user must engage with a trackable reward link—is not being used for its known function in Petitioner's proposed combination. (EX-2001 ¶80.) Instead, as explained above, Petitioner relies on a greatly modified application of Oliver's teachings to web-based links to allow for multiple transactions, without explaining or supporting a POSITA's motivation and ability to make those modifications. Second, Khanna is not being used for its known function in Petitioner's proposed combination. (EX-2001 ¶¶80-81.) As explained above, Khanna teaches redirecting a user from a webpage to the product landing page of a particular advertiser's application—not a messaging

application or pre-populated text message. Yet Petitioner concludes, without support, that the resulting combination would transition a user to a messaging application. Third, as discussed immediately above, Petitioner's purported benefits are not correct or would be impossible in the resulting combination; thus, it is not clear in what way Agrawal is being improved. (EX-2001 ¶81; Petition 23.) Thus, Petitioner's sole *KSR* rationale is unsupported.

Finally, Petitioner's generic argument that a POSITA would combine the functionalities of all three references into a single server (Petition 22-23), merely because each of the references "provides functionality with a server," is plainly insufficient motivation. *See KSR*, 550 U.S. at 415-421; *Securus*, IPR2015-00155, Paper 30 at 17. Furthermore, Petitioner's argument still does not address the distinctions between the Oliver's and Agrawal's operating environments or Petitioner's lack of discussion regarding how or why a POSITA would modify Khanna's teachings to achieve the purported combination. (EX-2001 ¶¶81-82.) Reliance on "isolated teachings of the prior art without considering the over-all context within which those teachings are presented" is improper and should be considered when determining the use of impermissible hindsight. *In re Mercier*, 515 F.2d 1161, 1166 (CCPA 1975); *see generally In re Whiton*, 420 F.2d 1082 (C.C.P.A.

1970) (finding no evidence to support the assertion that a POSITA would have thought to combine the known prior art elements).

When Petitioner's failure to show motivation to combine is considered against the backdrop of the references' many distinctions, it is clear that Petitioner's generic assertion that a POSITA would have combined functionalities of all three references into a single server uses impermissible hindsight bias to select and combine the references. *KSR*, 550 U.S. at 418; Ashley A. Bolt, *Combating Hindsight Reconstruction in Patent Prosecution*, 64 EMORY LAW J. 1137, 1158 (2015) (citing *KSR Int'l Co.*, 550 U.S. at 418) ("[I]f the reasoning [to combine] is not clearly presented in a sensible manner, or if the reasoning is merely conclusory, this suggests the use of impermissible hindsight in the selection and combination of the references. If the combination cannot be explained, it seems likely that, in truth, the combination was derived using the applicant's specification as a roadmap.").

As will be explained within the context of specific limitations below, the petition merely assumes—based on Petitioner's deficient, high-level reasons for combining the references—that a POSITA would have combined specific teachings in specific ways to practice the claimed limitations. This generic analysis is insufficient to meet Petitioner's burden under Section 103 to articulate a POSITA's motivation to combine the teachings of Oliver, Agrawal, and Khanna. *KSR*, 550

U.S. at 418 (noting there must be “a reason” for a skilled artisan “to combine *the elements* in the way the claimed new invention does”).

B. Grounds 1-2: The Combination of Oliver, Agrawal, and Khanna Does Not Render Obvious Any Independent Claim

Despite cherry-picking disclosures from three references, Petitioner still fails to demonstrate that the Ground 1 combination renders obvious key limitations of the independent claims. (EX-2001 §VI(B).) For example, the combination does not render obvious (1) a subscription service or list, or (2) a uniform resource identifier (URI) that deeplinks to and causes the mobile device to switch from rendering the web browser application to rendering a text messaging application. (EX-1001 cls. 1, 8, 16, 23.)

Petitioner's Ground 2 only contemplates adding a fourth reference, Molinet, within the context of dependent claims 4-5 and 11-12 (Petition 70-72); therefore, Ground 2 fails to render obvious the independent claims for the same reasons as Ground 1.

1. The combination fails to disclose or render obvious a subscription service and related limitations.

None of Petitioner's cited references, nor their combination, discloses or renders obvious the claimed limitations relating to a subscription service or list:

Claim Limitation	Claim Language
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Cl. [1e]; see also cl. [8e], [16d], [23d]	<i>receiving, at the mobile device, from the at least one web server, and in response to sending the mobile device identifier and the request to retrieve the identifier, a first signal causing a frame to be displayed with the webpage via the web browser application, the frame including a promotional message associated with joining a subscription list</i>
Cl. [1g]; see also cl. [8g], [16f], [23f]	<i>receiving, from the at least one web server and in response to at least one of (1) the integration tag executing or (2) the indication of the first user interaction, a uniform resource identifier (URI) that deeplinks to and causes the mobile device to automatically (1) switch from rendering the web browser application to rendering a text messaging application and (2) generate a text message with a pre-populated phone number and a pre-populated message body containing a request to join the subscription list;</i>
Cl. [1h]; see also cl. [8h], [16g-h], [23g-h]	<i>sending the text message including the message body prepopulated with the request to join the subscription list in response to a second user interaction with the text messaging application such that the mobile device is subscribed to the subscription list in response to the text message being sent to the pre-populated phone number;</i>

Cl. [1i]; <i>see also</i> cl. [8i], [16i], [23i]	<i>receiving an installment of a subscription associated with the subscription list without sending an opt-in communication after sending the text message containing the pre-populated message body.</i>
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As noted above, Petitioner makes a single-sentence argument that limitation [1e]/[8e]/[16d]/[23d] (and only that limitation) contains “printed matter” and is, therefore, non-limiting. (Petition 39.) For the reasons discussed above, unlike printed matter, which is merely information content observable by a human and which plays no other role in a claim, this limitation provides necessary context and is functionally related to the inventive purpose of the claims. (*See* Section IV(C)(2), *supra*.) Accordingly, it is limiting. Regardless of the Board’s finding on this matter, however, the prior art further fails to render obvious the other subscription-related limitations.

i. The prior art does not disclose or render obvious a promotional message associated with joining a subscription list.

As to limitation [1e] (and identical limitations in all independent claims), Petitioner asserts that Oliver discloses multiple types of “promotional information” and that “it would have been obvious to say this in the ad to induce the user to sign up.” (Petition 39-40.) But even if Petitioner’s characterization of Oliver is true, Agrawal discloses only webpage-based promotional links that transfer a user to

another webpage and Oliver discloses only a one-time promotional transaction; therefore, neither reference discloses or renders obvious a subscription list, let alone displaying a promotional message associated with joining one. (EX-2001 §VI(B)(1).)

Agrawal is directed to a method for verifying activity associated with webpage-based advertising links, illustrated in the figure below:

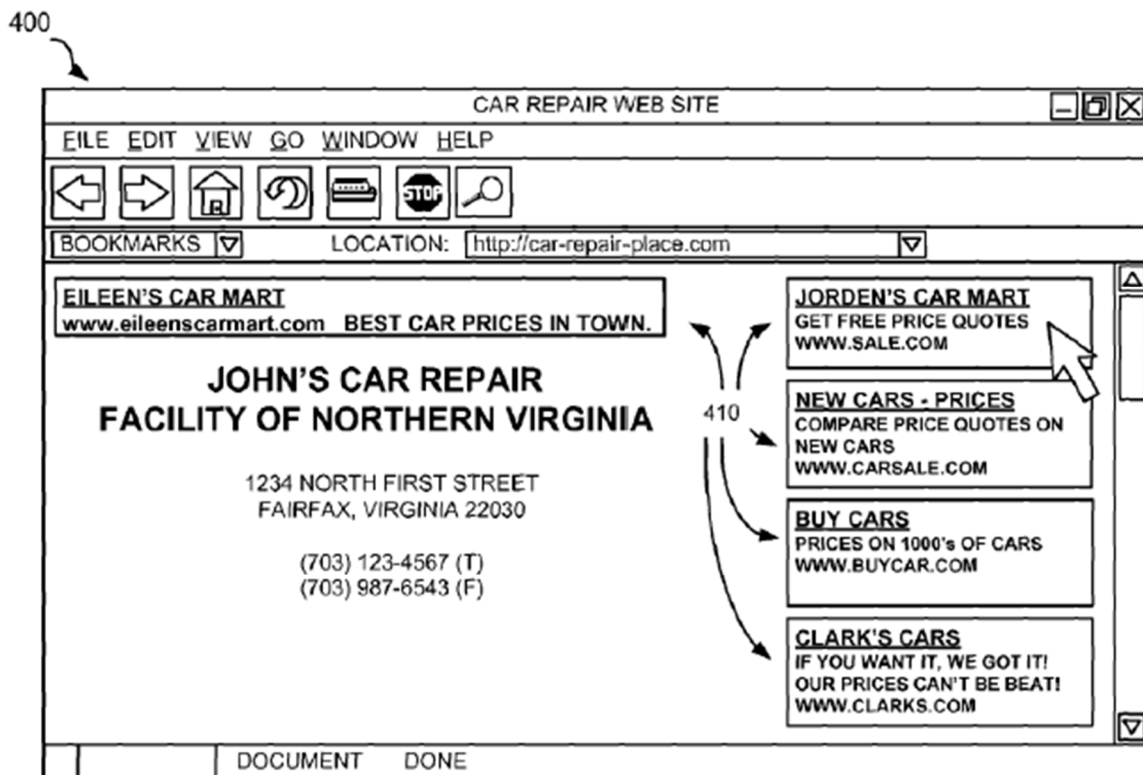


FIG. 4

(EX-1005 Fig. 4.) While some of the text associated with these links could be characterized as invitations—e.g., to “Get free price quotes” or “Compare price quotes”—these phrases are unrelated to joining a subscription list, and interaction

with the link will merely transfer the user to the linked webpage, rather than result in any kind of subscription or text message. As Agrawal contains no disclosure of or relevance to a subscription, Agrawal itself does not motivate the modification of these advertising links to display a promotional message associated with joining a subscription list. (EX-2001 ¶¶86-89.)

Oliver also does not disclose a subscription list, installments of a subscription, or a promotional message associated with joining one. Oliver discloses the use of “passive entities” “associated with a promotion,” the activation of which may result in promotional information being provided to a user. (EX-1011 Abstract, Fig. 1, Fig. 4, Figs. 7-8.) Oliver describes “the promotional information” as “i.e., a reply message.” (EX-1011 [0025].) Specifically, a user first engages with a passive entity (e.g., scanning a QR code or inputting information into their device), after which, the user is prompted to engage a second time to send an SMS message to a web application. (E.g., EX-1011 Fig. 4.) Oliver teaches that the web application then creates and sends a responsive message containing one or more trackable links to the reward(s). (EX-1011, Fig. 5.) The user is then required to engage a third time by tapping one of those links to be transferred to a webpage containing the promotional information or reward—e.g., a discount code, virtual tour, etc. (EX-1011 Fig. 6, [0025].)

Following this one-time response, Oliver does not disclose any further SMS messages. (*See generally* EX-1011.) In fact, Oliver teaches that to receive another message with promotional information or a reward, the user would have to activate the passive entity and repeat Oliver's process again. (*See* EX-1011 [0045]; EX-2001 ¶¶90.) This facilitates Oliver's explicit goal of enabling businesses to track interactions with their passive entities. (EX-1011 [0003]-[0006].) Oliver even discloses a "Use Token," which may be used to "ensure that a given reward *is only accessed once* for every scan." (EX-1011 [0045].)

A POSITA would not, therefore, be motivated based on Oliver's teachings to modify either Agrawal's advertising link or Oliver's passive entity to display promotional material associated with joining a subscription list when Oliver teaches providing the exact opposite—a limited, one-time transaction. (EX-1011 [0045]; EX-2001 ¶¶90-93.)

Accordingly, the cited prior art does not render obvious displaying a promotional message associated with joining a subscription list—or any of the subscription-based limitations. *See In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984) (finding that where a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification); *In re Ratti*, 270 F.2d 810, 813

(CCPA 1959) (finding that where a combination “would require a substantial reconstruction and redesign” of a reference or change the principle of the prior art’s operation, such a combination is likely a result of hindsight bias).

Petitioner’s reliance on the fact that Oliver discloses a variety of “promotional information” and that it would have been obvious to identify rewards being offered to induce the user to sign up still does not provide a reason that one would display a promotional message associated with joining a subscription list, specifically. (*See* Petition 39-40.) Indeed, because Oliver only provides a one-time delivery of promotional information, as discussed above, a POSITA would not wish to confuse the user by displaying a promotional message associated with joining a subscription list. (EX-1011 [0045]; EX-2001 ¶92.) Petitioner provides no other explanation for why the cited prior art would render this limitation obvious.

ii. The prior art does not disclose or render obvious a pre-populated message body containing a request to join a subscription list.

Petitioner’s analysis of this limitation merely concludes—without support or explanation—that “[i]t would be further obvious for the pre-populated message body to contain a request to join the subscription list.” (Petition 48.) Petitioner cross-references it’s “reasons set forth under claim limitation [1e].” (*Id.*) However, Petitioner’s analysis under limitation [1e] addresses only why it would have

allegedly been obvious to display a promotional message associated with joining a subscription list (which would not have been obvious). (*See* Petition 39-40.) That is, Petitioner fails to provide even a single reason or rationale as to why a POSITA would have been motivated to then incorporate a request to join a subscription list into a pre-populated text message body. Petitioner fails to meet its burden.

For the same reasons discussed immediately above, neither Agrawal nor Oliver disclose a subscription. (Section VI(B)(1)(i), *supra*.) Agrawal does not use or disclose text messaging at all. It would not have been obvious to pre-populate a text message body with a request to join a subscription list. (*See* Section VI(B)(1)(i), *supra*; EX-2001 ¶¶94-95.)

**iii. The prior art does not disclose or render obvious
subscribing a mobile device to a subscription list
based on receiving a text message.**

Petitioner repeatedly uses the word “subscribe” to describe the process in Oliver by which a user activates a passive entity and receives a one-time reward message (*see, e.g.*, Petition 49), but as discussed above, Oliver does not disclose a subscription service or list. (EX-2001 ¶¶96-100; Section VI(B)(1)(i), *supra*.) Petitioner identifies Oliver's disclosure of a sweepstakes or contest as exemplary (Petition 49), but the fact that the reward message is related to a sweepstakes or

contest does not inherently disclose or suggest a change to Oliver's one-time delivery of the reward. (EX-2001 ¶96.)

Petitioner also asserts that “[i]t would be obvious that in response to a text message containing a request about a product or service...that the mobile device be in fact subscribed to the subscription list in order to facilitate ‘targeted marketing’ as taught by Oliver.” (Petition 49.) Petitioner provides no rationale to support this obviousness conclusion, other than citing its expert's testimony, which merely repeats the same conclusory sentence (EX-1002 ¶156) and which is, therefore, entitled to little weight.

While Oliver briefly mentions that existing prior art lacked a method for logging responding consumer contact information for use in “targeted marketing efforts” (EX-1011 [0006]) this description of the prior art still does not necessarily disclose a subscription list or subscribing a mobile device to a subscription list, such that it will receive an installment of a subscription. (EX-2001 ¶¶97-100.) For example, Oliver discloses an exemplary “targeted marketing effort” in which a sales agent—only after confirming that a number is not included in a “do not call list”—may follow up with a particular user by calling them. (EX-1011 [0056].) But this does not indicate that the number has been subscribed to a subscription list. (*See id.*) The mere capability that a sales agent *could* use the stored phone number to follow-

up *only if* the user does not appear on a do not call list does not necessarily mean that the user has been subscribed to a subscription.

Accordingly, contrary to Petitioner's assertion (Petition 49), it would not be obvious—based only on the fact that a message is received requesting a coupon or information associated with a product—to then subscribe the user's mobile device to an undisclosed subscription.

iv. The prior art does not disclose or render obvious an installment of a subscription associated with a subscription list.

Petitioner's sole assertion for this limitation states that a POSITA "would recognize that [Oliver's] reply message *could be* used to deliver an installment of a subscription." (Petition 50.) Petitioner's speculation that such a message could be used to implement the claimed method does not satisfy its burden to show why it would have been obvious to modify the prior art teachings to actually practice the claimed limitation. Again, Petitioner cites its expert, who merely repeats the same speculative assertion. (*See id.*)

While the '074 patent enables the use of "two-tap signup" across a variety of transactions, the challenged claims specifically recite the application of this two-tap signup method within the context of a subscription, enabling the ability to enroll a user without the need for further opt-in communications. (*E.g.*, EX-1001 10:6-10,

6:27-57, Figs. 2A-2D.) During prosecution of a related patent, which claims priority to the same provisional application that led to the '074 patent, the examiner specifically noted that none of the prior art “alone or if combined, teach or suggest every limitation of the claims of the present invention, *and particularly the interaction of the tag and user causing an enrollment with a de minimis amount of information having been provided.*” (EX-2042 41.)

Oliver's disclosure of a method in which the user must engage twice to receive the responsive message (by activating an entity and sending a message) and a third time to obtain the one-time reward/promotional information (by clicking the returned link) does not disclose receiving or delivering an installment of a subscription associated with a subscription list without any further opt-in communication. (EX-1001 cls. 1, 8, 16, 23; EX-2001 ¶¶101-103.) Petitioner offers no argument or explanation as to why this limitation would have been obvious, nor would it have been based on Oliver's contrary disclosures discussed above. (*See* Section VI(B)(1)(i), *supra.*)

Accordingly, the cited prior art does not render obvious the subscription limitations.

- 2. The combination fails to disclose or render obvious sending or receiving, from a server, a URI that causes the mobile device to automatically switch from a web browser to a text messaging application.**

Petitioner's combination of prior art fails to disclose or render obvious sending or receiving, from a server, a URI that deeplinks to and causes the mobile device to automatically transition from a web browser application to a text messaging application and generate a pre-populated text message. (EX-2001 §VI(C).)

Claim Limitation	Claim Language
Cl. [1g]; see also [8g], [16f], [23f].	<i>receiving, from the at least one web server and in response to at least one of (1) the integration tag executing or (2) the indication of the first user interaction, a uniform resource identifier (URI) that deeplinks to and causes the mobile device to automatically (1) switch from rendering the web browser application to rendering a text messaging application and (2) generate a text message with a pre-populated phone number and a pre-populated message body containing a request to join the subscription list;</i>

Petitioner concedes that Agrawal does not teach mobile app deeplinking. (Petition 41.) Petitioner therefore relies on two alternative arguments with respect to this limitation: (1) that Khanna teaches deeplinking and “Khanna would have been obvious to use for the reasons provided above” (Petition 41-43); or (2) that it would have been obvious “to cause a user click on an advertising link in Agrawal (i.e., a

promotional message) to switch from rendering the web browser application to rendering a text messaging application, as taught by Oliver, for the reasons provided above.” (Petition 44.) But no combination of the cited teachings renders obvious this limitation, and Petitioner fails to satisfy its burden to show that a POSITA would have been motivated to combine (or modify) such teachings.

i. The cited combination of Agrawal's and Khanna's teachings does not render obvious this limitation.

Khanna does not disclose or render obvious transitioning to a text messaging application, and a POSITA would not have been motivated to modify its teachings and/or combine its teachings with Agrawal.

Petitioner characterizes Khanna as generally disclosing an alleged URI that deeplinks to any application different from the first application (Petition 41-42), but Khanna discloses only a specific URL that deeplinks to a product landing page in the associated advertiser's application. (EX-1034 [0030]; EX-2001 ¶¶107-111.) As explained in detail above, Khanna discloses specialized content items containing two data elements, which specify an application and identify a product, respectively. (Section V(C), *supra*; EX-1034 [0029], [0005], cl. 1.) When a user selects this specialized content item, the system transmits a request containing the first data element to a server to install the specified application and launches the application with the second data element (the product) as an input, such that the first content

displayed by the application relates to the product. (EX-1034 Abstract, cl. 1, Fig. 2, [0055]-[0063].)

Khanna notes that this method allows publishers or advertisers to create content items that “deeplink” or “mak[e] a hyperlink that points to a specific content (e.g., a webpage or image) on a destination website, instead of that website’s main or home page.” (EX-1034 [0030]; *see also id.* [0063].) For example, when users select the specialized content item, they are redirected to the product’s landing page in a shopping application. (EX-1034 [0026]-[0027], [0045]-[0046].) The ’074 patent explicitly criticizes this prior art method, explaining that it is “time-consuming and burdensome” and “results in many users leaving the purchase before the transaction is completed.” (EX-1001 1:26-37.)

Unlike the ’074 patent, which specifically claims transitioning from rendering a web browser application to rendering a messaging application, Khanna does not disclose a messaging application. (*Compare* EX-1001 cls. 1, 8, 16, 23 *with* EX-1034.) One of the many advantages of the ’074 patent’s novel technology was that by transitioning from a first application (e.g., a browser) to a messaging application, there was no need for the user to have first installed a vendor-specific application. (EX-1001 19:40-61.) Khanna lacks this advantage, because Khanna does not contemplate transitioning to a messaging application.

Thus, Khanna's teachings are limited to specialized content items that allow deeplinking from a webpage to a product's web-based landing page. (EX-2001 ¶¶107-111.) Accordingly, Khanna does not disclose a URL that deeplinks to a messaging application, causes a mobile device to transition to a messaging application, or auto-populates a custom message in the messaging application. And Petitioner does not address how Khanna's teachings might be modified to achieve a different kind of deeplink. Furthermore, modifying Khanna's method to achieve Petitioner's proposed result—i.e., transitioning to a messaging application—would nullify the advantages Khanna sought to achieve by linking directly to an advertiser's specialized application. (EX-2001 ¶¶78, 112; EX-1034 [0015].)

There is a distinction between combining known prior art elements A and B when each would have been expected to contribute its own known properties to the final product (obvious) and combining prior art elements to achieve a new, unexpected benefit (non-obvious). *See In re Omeprazole*, 536 F.3d 1361 (Fed. Cir. 2008); *Crocs, Inc. v. U.S. Int'l Trade Comm'n*, 598 F.3d 1294 (Fed. Cir. 2010). Here, Petitioner does not rely on Khanna to contribute its own known properties to Agrawal—rather, Petitioner attempts to rely on a greatly modified version of Khanna's techniques while failing to acknowledge the necessary modifications or whether they could be accomplished. Again, this lack of specific motivation to

combine demonstrates Petitioner's reliance on hindsight bias and its use of the '074 patent as a roadmap to impermissibly reconstruct the claimed invention. *See KSR*, 550 U.S. at 418; Bolt, 64 EMORY LAW J. at 1158.

Even if Petitioner's generalized discussion of motivation to combine were appropriate (which it is not), Petitioner's generalized reasons still do not explain why a POSITA would have been motivated to modify the prior art teachings to result in a URI that deeplinks to and causes a mobile device to automatically switch from rendering a web browser to rendering a messaging application. (*See* Section VI(A), *supra*.)

Accordingly, Petitioner fails to show that a combination of the prior art would render obvious this limitation or why and how a POSITA would modify the prior art teachings.

ii. The cited combination of Agrawal's and Oliver's teachings does not render obvious this limitation.

Petitioner's single-sentence argument based on Oliver is unsupported and insufficient to meet Petitioner's burden. Petitioner throws out an alternative argument, concluding that "[i]t would further have been obvious to cause a user click on an advertising link in Agrawal...to switch from rendering the web browser application to rendering a text messaging application, as taught by Oliver, for the reasons provided above under the section entitled 'Rationale (Motivation) for the

Combination'." (Petition 44.) Petitioner's expert merely repeats the same single sentence assertion. (EX-1002 ¶147.)

As previously discussed above, Petitioner fails to articulate sufficient general motivation to combine Agrawal's and Oliver's teachings (Section VI(A), *supra*), and Petitioner's lack of limitation-specific analysis or explanation does not remedy this deficiency.

Furthermore, the same incompatibilities discussed above would discourage a POSITA from implementing Oliver's method within the combination of prior art. (EX-2001 ¶¶113-117.) Agrawal's method of verifying advertising activity relies on the ability to collect and compare a first set of information (obtained, e.g., when a user accesses a webpage and generates "an advertisement query request") and a second set of information (obtained, e.g., when a user selects an advertising link and generates an "advertisement click request"). (EX-1005 5:29-6:67, Fig. 3.) Agrawal explains that such information is obtained via the user's web browser which, regardless of how precisely it is collected by the browser, is provided to a server via the Hyper Text Transfer Protocol (HTTP). (EX-1005 6:30-43, 6:14-18; EX-2001 ¶¶67-71.)

In contrast to Agrawal, Oliver's method for activating a passive entity in order to send an SMS message does not involve a web browser or server. (*See generally*

EX-1011; *e.g.*, *id.* cl. 1; Section V(A), *supra*; EX-2001 ¶¶70-72.) Oliver teaches that activation of a passive entity will open the SMS client on the mobile device—which does not involve the exchange of an HTTP request. (EX-1011 [0005]-[0006], [0026]-[0029]; EX-2001 ¶¶70-72.) That is, unlike Agrawal, which explicitly relies on web-based protocols to achieve its verification process, Oliver's process explicitly relies on distinct phone-based messaging protocols. (EX-2001 ¶¶73, 115.)

As a result of this distinction, a combination of Agrawal's and Oliver's teachings would necessarily render Agrawal's teachings non-functional and incapable of achieving the reference's explicit goal. (EX-2001 ¶116.) For example, if one were to implement Oliver's phone-based method of immediately generating an SMS message based on detecting user engagement, as Petitioner suggests, then based on Oliver's teachings, there would be no exchange of information with a web server. (EX-2001 ¶116.) Because Agrawal relies on an exchange of information with the server using web-based protocols, the resulting combination would not be capable of verifying the advertising activity—the very goal Agrawal's method was designed to achieve. (EX-1005 Title, Abstract, 1:62-2:3.) Furthermore, modifying Oliver to the extent necessary to support web-based protocols would entirely change the principle of Oliver's operation and require a substantial redesign of its disclosed method. (EX-2001 ¶116.) Thus, no POSITA would be motivated to implement

Oliver's teachings within Agrawal. *See In re Gordon*, 733 F.2d at 902; *In re Ratti*, 270 F.2d at 813.

Accordingly, Petitioner's combination of prior art does not disclose or render obvious this limitation, nor would a POSITA have been motivated to combine their teachings in the first place.

C. Grounds 1-2: The Combination of Oliver, Agrawal, and Khanna Does Not Render Obvious Any Dependent Claim

Because Petitioner has failed to establish that Ground 1 renders obvious all limitations of the independent claim, Petitioner cannot show that Ground 1 renders obvious any dependent claim. And because Ground 2 relies on Ground 1 as allegedly rendering obvious the independent claims, Ground 2 cannot succeed.

D. Other Limitations Not Addressed

At this preliminary stage, Patent Owner addresses those deficiencies which clearly show a lack of reasonable likelihood of the petition's success. Patent Owner's decision not to address certain limitations at this stage in no way reflects a lack of dispute.

VII. SECONDARY CONSIDERATIONS

When assessing obviousness of the claimed invention, objective evidence of secondary considerations pertaining to nonobviousness must be considered, including long-felt but unsolved needs, industry praise, commercial success, etc. *In*

re Huang, 100 F.3d 135, 139 (Fed. Cir. 1996). These indicia constitute “the most probative evidence of nonobviousness,” “crucial in avoiding the trap of hindsight when reviewing, what otherwise seems like, a combination of known elements.” *Leo Pharm. Products, Ltd. v. Rea*, 726 F.3d 1346, 1358 (Fed. Cir. 2013); *Pentec, Inc. v. Graphic Controls Corp.*, 776 F.2d 309, 315 (Fed. Cir. 1985). Such evidence “may often establish that an invention appearing to have been obvious in light of the prior art was not.” *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 699 F.3d 1340, 1349 (Fed. Cir. 2012).

A patentee is entitled to a presumption of nexus “when the patentee shows that the asserted objective evidence is tied to a specific product and that product embodies the claimed features, and is coextensive with them.” *Lectrosonics, Inc. v. Zaxcom, Inc.*, IPR2018-01129, Paper 33 at 32 (PTAB Jan. 24, 2020) (*precedential*). Even where this presumption is not established, nexus may be shown where “the evidence of secondary considerations is the direct result of the unique characteristics of the claimed invention.” *Id.* at 33.

A. The Claimed Invention Satisfied a Long-Felt Need

Objective evidence that there was a recognized problem which existed in the prior art for a long period of time without a solution demonstrates long-felt need. *In*

re Gershon, 372 F.2d 535, 538-39 (CCPA 1967); *Newell Cos., Inc. v. Kenney Mfg. Co.*, 864 F.2d 757, 768 (Fed. Cir. 1988).

Before the claimed invention, the primary medium for direct marketing to customers was through emails. (EX-2034 1:15-31; EX-2035 [0021].) While SMS messaging was widely adopted and used throughout the world, direct marketing to customers through SMS was rarely used and sign-up rates were very low. (*See* EX-2012 1 (referring to Patent Owner's platform as helping "businesses create and scale ***a new revenue channel: mobile messaging***").)

As discussed above, known prior art methods suffered from user burden and time-consuming processes, e.g., the need for excessive user input through clicks or screen taps. (Section III, *supra*; EX-1001 1:26-42.) In the case of SMS messages, specifically, consumers had to manually enter their ten-digit phone number, wait to receive a text message, and then reply with the required key phrase (e.g., "Yes" or "Join"). There seemed to be no alternative to this prior art SMS signup process, particularly as "SMS marketing is highly regulated," with numerous legal and carrier restrictions. (EX-2013 12; *see also* EX-2014 2-4 (summarizing various regulatory roadblocks for automated SMS messaging).) For example, the Telephone Consumer Protection Act ("TCPA") placed strict regulatory requirements on automated

telephone messages (including SMS), e.g., by requiring affirmative consent. 47 U.S.C. § 227; EX-1001 6:53-57.

Thus, there was a long-felt need for an SMS signup solution, without the onerous friction presented by prior art solutions, that still complied with governing regulations. (EX-1001 1:26-42, 6:53-57, Title.) The inventors realized that if the friction could be removed, while also meeting regulatory requirements, the solution would become the direct-to-consumer marketing channel of the future, which, as will be discussed further below, Patent Owner's "two-tap" technology has become.

The inventors recognized this long-felt but unmet problem and were able to develop an elegant solution that greatly simplified the sign-up process, while satisfying demanding regulatory requirements. Specifically, the patented invention developed an SMS sign-up solution that improved the user process by (1) eliminating the need for manual phone number entry and (2) reducing the time and effort necessary for enrollment by removing a double opt-in's confirmatory message, while still complying with applicable regulations. The inventors' solution—claimed by the '074 patent and embodied in Patent Owner's "two-tap" technology—enabled an SMS sign-up solution in two simple taps: one tap to interact with a call-to-action button, which deeplinks from one application to a messaging

application with a recipient phone number and/or message body prefilled, and one tap to interact with the send button of the messaging application:

At the core of Attentive patent-pending technology is what the company calls the “two-tap” sign-up. The point of this novel feature is to allow brands to lay out the shortest possible path between piquing a user’s interest in the brand, to having them sign up for a regular flow of marketing texts.

(EX-2015 1.) An example of the “Two-Tap” Product is depicted below:



(EX-2016 3.) The patented two-tap solution resolved the problems present in the prior art, eliminating the need for manual entry and double opt-in and making SMS messaging signup extremely simple for users.

The inventors were the first to recognize that deeplinking technology could not only be used to transfer a user from one application to another, but that it could be used specifically to transfer a user to a messaging application and pre-populate a message as means for complying with regulatory requirements. The patented claims expressly contemplate and claim the means for doing so—i.e., displaying a promotional message associated with joining a subscription list, causing the mobile device to automatically transition to a messaging application and populate a custom text message, and delivering an installment of the subscription. (EX-1001 cls. 1, 8, 16, 23.)

The inventors' solution presented not only a user-friendly solution, but also the new gold standard for compliance with associated regulations.³ The restrictions put in place by the TCPA, telecom carriers, and best practices, such as double opt-in also served to teach away from the inventors' two-tap solution. (*E.g.*, EX-2014 4 (recommending double opt-in as a "best practice").) Simply put, the claimed invention enabled direct-to-consumer marketing through SMS messaging, as a result of the claimed technological advancements.

³ For example, a federal court in Florida validated Attentive's compliance features and templates, including its two-tap technology. (EX-2016 2.)

B. The Claimed Invention Received Industry Praise

Industry praise for an invention evidences nonobviousness where the industry praise is linked to the claimed invention.

Patent Owner released its embodying two-tap technology in 2017. This platform for completing messaging-based enrollments initiated from a website on a mobile device received significant industry praise. In 2018, Patent Owner was named “Mobile Marketing Company” of the year by Digital Marketing News (“DMN”). (EX-2017 5.) In 2019, DMN awarded named inventor and co-founder, Brian Long, its 40UNDER40 Award, including for his achievement in creating “a new revenue channel: mobile messaging.” (EX-2012 1.) In 2021, Patent Owner was awarded Glossy’s “Best Use of SMS,” including for its use of “an easy opt-in system and device-agnostic sign-up creatives” that prioritized “convenience and automation.” (EX-2018 8.) In 2023, The Tech Tribune ranked Patent Owner #10 “Best Tech Startup[] in NYC,” including for “reinventing business-to-consumer communications” as a result of its “SMS-first software platform.” (EX-2019 11.) Customers of Patent Owner’s “two-tap” sign-up specifically recognized the platform’s “[o]ne click opt-in” as the “Gold Standard, often imitated.” (EX-2020 11 (Nov. 10, 2023 review), 12 (Dec. 13, 2022 review).)

Other praise for Patent Owner's software includes: Businesswire's "#6 World's Best Software" (EX-2021 1); LinkedIn's #8 U.S. Startup (EX-2022 1-2); Forbes's #14 "Cloud 100" (EX-2023 7); and G2's #63 Fastest Growing Products (EX-2024 8).

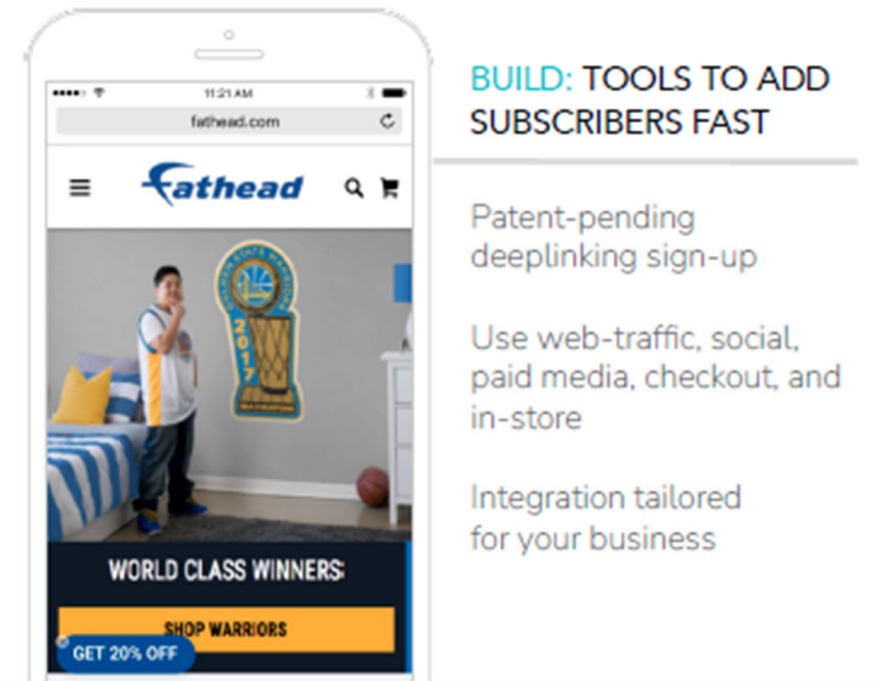
C. Patent Owner's "Two-Tap" Product Enjoys Substantial Commercial Success as a Result of the Significant Benefits the Claimed Invention Provides Over the Prior Art

A patentee demonstrates commercial success by showing significant sales of the patented product in a relevant market and nexus between the patented invention and the commercial success. *J.T. Eaton & Co. v. Atlantic Paste & Glue Co.*, 106 F.3d 1563 (Fed. Cir. 1997); *Ormco Corp. v. Align Technology, Inc.*, 463 F.3d 1299, 1311-12 (Fed. Cir. 2006). Advertising the benefits of the claimed invention links the invention to commercial success. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1579 (Fed. Cir. 1997); *Wm. Wrigley Jr. Co. v. Cadbury Adams USA LLC*, 683 F.3d 1356, 1369 (Fed. Cir. 2012). Also, statements that a product was successful due to the patented features support a finding of nexus. *See Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc.*, 711 F.3d 1348, 1368 (Fed. Cir. 2013).

As evidenced below, Patent Owner implemented the claimed invention of the '074 patent in its two-tap technology to meet the growing demand for improved user

experience and engagement when interacting with web-based advertisements using a mobile device. Patent Owner was founded in 2016; its first offering, which remains its primary offering, is its two-tap technology. The two-tap technology has resulted in significant commercial success not only for Patent Owner, but also for its customers. In addition to Patent Owner's own revenue, its two-tap technology has generated “**\$13+ billion in SMS revenue**” in 2022, alone, for its customers from the sending of “**21.8 billion text messages.**” (EX-2025 2.) Patent Owner's two-tap technology also yields significant return on investment for its customers, with them “making an average of \$55 dollars for every \$1 spent.” (EX-2027 3.) Patent Owner was also recently named to the Deloitte Fast 500 list, which highlighted Patent Owner's **1,259% growth rate** from 2019-2022. (EX-2026 1.) As a direct result of two-tap technology, Patent Owner has become “the #1 conversational marketing platform” (*id.*) and “[t]he biggest company in the space.” (EX-2027 3). There can be no doubt that Patent Owner's two-tap technology is extremely valuable and commercially successful.

Patent Owner advertised its implementation of the '074 patent (and its benefits) in its two-tap technology:



(EX-2036 13.) Patent Owner marketed its patented technology as “[p]owered by Attentive [d]eeplinking” and “[e]asily integrated with existing ad solutions and partners.” (*Id.* 14, 17.)



(EX-2028 3.) Additionally, Patent Owner virtually marks its two-tap technology as practicing the challenged claims. (EX-2029 1.)

Moreover, the extensive promotion by Patent Owner of the improved user experience and enrollment results underscores how such technology drives demand and commercial success of such products. For example, Patent Owner boasts that its embodying product yields significantly higher click-through rates and return on investment:



Drive incremental revenue with:

Text Message Marketing

- ✓ Collect email and SMS subscribers together
- ✓ 50%+ of top 1,000 online retailers use text
- ✓ 30%+ CTRs and 25x+ ROI
- ✓ 10x more revenue per message vs. email

(EX-2037 1.) When Patent Owner implemented its two-tap sign-up technology on Instagram, it boasted of its immediate success. (EX-2030 2.)

Other industry leaders have similarly commented on the importance of Patent Owner's two-tap technology—specifically, the user experience and ease of use in completing enrollments in promotional activities. For example, Sacra's corporate report on Patent Owner states the following:

Attentive is a SMS platform that creates personalized messages by leveraging consumer behavior data. Its main feature is “two-tap” sign-up, which lets brands minimize the path between catching a user's interest and convincing them to agree to a regular flow of marketing

texts. First, the user notices something on a brand's website that causes them to click on a call to action to opt in. Via Attentive's tech, the user's text message app automatically displays a pre-written sign-up request, which gets sent to the brand's designated phone number.

(EX-2013 5.) Sama Labs recognized the invention's simplicity as the key to profitability:

Another is with Attentive's patent-pending "two-tap" method on mobile websites. A user taps the pop-up on a brand's mobile site to sign up for SMS. Then, a message giving the brand permission to opt the user in is pre-populated in the user's native text messaging app. The user simply presses send and is opted in to begin receiving messages. Simplicity is key – that's what makes SMS Marketing so profitable.

(EX-2031 2-3; *see also* EX-2032 2; EX-2015 1.) "Attentive has made a big achievement which is worth appreciating." (EX-2033 1.)

This evidence shows that the patented, improved method for enrolling users from web-based advertisements and the ability to minimize taps which Patent Owner implemented in its two-tap technology was a substantial factor in the commercial success of the embodying product. It has been well-recognized in the industry that user engagement (i.e., experience and ease-of-use) is critical to obtaining enrollment in promotional activities. (EX-1001 1:30-52.) Patent Owner implemented the claimed invention to accomplish the very objectives of that invention—to improve

user experience and engagement when interacting with web-based advertisements using a mobile device. (EX-2001 ¶¶119-126.)

* * *

Accordingly, Patent Owner's two-tap technology, which implemented the patented method, was commercially successful and received widespread industry praise as a direct result of the claimed invention. The evidence supporting these secondary considerations constitutes strong objective evidence that the claims are nonobvious and confirms Petitioner's reliance on hindsight in constructing its deficient grounds.

VIII. CONCLUSION

Accordingly, the Board should decline to institute the petition.

Date: February 22, 2023

Respectfully submitted,

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CERTIFICATION OF WORD COUNT

The undersigned hereby certifies that the portions of the above-captioned PATENT OWNER'S PRELIMINARY RESPONSE specified in 37 C.F.R. § 42.24 includes 13,541 words and therefore complies with the 14,000-word limit set forth in 37 C.F.R. § 42.24. This word count was prepared using Microsoft Word 365 v.2022.

Date: February 22, 2023

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing **PATENT OWNER'S PRELIMINARY RESPONSE** and all supporting **EXHIBITS 2001-2042** were served by filing the documents through the Patent Trial and Appeal Case Tracking System (P-TACTS) and courtesy copies were also served via electronic mail, in their entireties on the following:

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