UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Duration Media LLC
Petitioner,

v.

Rich Media Club LLC
Patent Owner.

Case IPR2023-00953
U.S. Patent 11,443,329

Filing Date: May 11, 2021
Issue Date: September 13, 2022
Title: System and Method for Creation, Distribution and Tracking of Advertising Via Electronic Networks

PATENT OWNER'S RESPONSE

PUBLIC VERSION

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I. Introduction and Summary of Arguments

The patent in this IPR teaches how to determine if an ad space falls within the viewable area of a user's web browser, and, if so, to fill that viewable ad space with a replacement ad. The patent's teachings on how to do this are extensive and include programming needed to add to the client-side application that achieves the intended result. EX1001. The company that invented the real-world solution would become the *first* company accredited by the Media Ratings Council to have a viable test for ad viewability. *E.g.*, EX2017, EX2027, EX2039, and EX2042. After this technical breakthrough was available through Rich Media Club's invention, a paradigm shift took place in the digital on-line advertising industry. Advertisers and publishers literally clamored for a change in the "currency" used to measure on-line ads: from *served* impressions to *viewable* impressions. *E.g.*, EX2027-EX2032; EX2038-EX2041.

In contrast to this actual, disclosed solution that changed the very nature of on-line advertising, the reference at the heart of this IPR (Badros) teaches nothing. Without explaining *how* to conduct a test for viewability, Badros states: "For instance, impression module 38 may determine whether an ad on a web page of a user's browser is actually visible to the user." EX1003, 12:35-38. Asked in his deposition to explain *how* Badros teaches to make the viewability determination, Smedley testified that there is no such disclosure, but that an undergraduate *could*

program a system upon reading that sentence. EX2050, 141:4-22. That is the sum total of the evidence provided by the Petitioner against the weight of what actually led to the adoption of the viewable impression: RMC's invention.

As demonstrated by objective contemporaneous evidence of what actually happened and confirmed by Patent Owner's witnesses Edwards and Sherwood, Smedley's unsupported testimony is wrong. EX2027 and EX2045. The patent is not obvious over the references submitted with the Petition and a Final Written Decision should issue confirming the finding of non-obviousness.

II. Overview of U.S. Patent 11,443,329

U.S. Patent No. 11,443,329 ("the '329 Patent") issued from a family of applications invented by and assigned to the Patent Owner, Rich Media Club. The '329 Patent issued from a continuation-in-part application that added new matter with a filing date of April 4, 2009 (EX1001). The new matter added in 2009 related in part to Rich Media Club's invention of a method to determine if an advertisement on a web page had come within (or was approaching), the viewable portion of a user's webpage in a browser (sometimes referred to as the "viewport"). The ability for publishers to know, for the first time, whether an ad was actually "in view" would ultimately transform the entire internet advertising ecosystem.

The ’329 Patent expressly discloses computer code needed to implement the viewability test (columns 65-66), and the viewability test is expressly claimed in claims 1 and 6 including in “(b) in response to a determination that the predefined area that is used to display the advertisement has been in view within the visible area of the browser window for a predefined period of time.” EX1001, claims 1 and 6. The remaining parts of the claims – and the dependent claims – relate to actions taken after the ad space has been determined to be “in view.” Claims 1 and 6, for example, claim that the ad displayed in the viewable space is replaced with a different ad after the initial ad has run for a predefined period of time. Dependent claims 2 and 7, for example, require that be the replacement ad be selected as the result of an auction, and claims 3 and 8 require that the ad auction be conducted in real time. Claims 4 and 9 require the replacement occur periodically.

III. Petitioner’s Witness Smedley Admits Badros Does Not Teach a Viewability Test as Claimed

The Petition relies solely on Badros for a fundamental part of claims 1 and 6 as follows:

> Secondly, even though Krassner doesn’t disclose “*a determination that the predefined area that is used to display the advertisement has been in view within the visible area of the browser window for a predefined period of time*” Badros does (e.g., “Some embodiments may apply time-multiplexing criteria for a plurality of documents based on the time during which a document is actually viewable on the user’s screen.”

> Ex-1003, 11:22–24; "may determine whether a document (e.g., a document containing a link) is actually visible to a user and it may track the time duration during which the document is actually visible to the user." *Id.* at 12:37–40). *See also*, Ex-1009, ¶¶ 67–68.

Paper 1 at 23 (emphasis in original; EX1009 is Smedley's Declaration).

Despite the Petition, during his deposition, Smedley repeatedly, even emphatically, testified that he does ***not*** believe Badros teaches to "make a determination that the predefined area that is used to display the advertisement has been in view within the visible area of the browser window for a predefined period of time." He repeated this position even when warned that if he was of that opinion it would be fatal to the Petition. He stood his ground, testifying:

> Q. That's exactly my question. Is it your testimony that you do not know whether Badros teaches to make a determination that the predefined area that is used to display the advertisement has been in view within the visible area of the browser window for a predefined period of time?
>
> A. ***That's not something that I have given an opinion on***.
>
> Q. My question is, as you sit here today, is it your opinion that Badros teaches that or not?
>
> A. ***That's not something I've given an opinion on here, and I can't formulate that sort of opinion as we sit here.*** I'd have to – ***it's something I haven't done***, so I'd have to sit down and analyze what he's proposed carefully and it would take longer than we have to sit here today.

Q. How long is it going to take you?

A. I don't know.

Q. Well, I actually need an answer to that question because I need to know whether Badros teaches that or not because if it doesn't teach it, I don't see how Badros can invalidate, how your opinion can support the petition.

MR. GREENLEAF: Objection, asked and answered.

A. Is there a question there?

Q. The question is, you do not have an opinion about whether Badros teaches to make determination that the predefined area that is used to display the advertisement has been in view within the visible area of the browser window for a predefined period of time?

A. ***That's not something I've given an opinion on and it's not something I'm able to give an opinion on as we sit here today.***

EX2050, 50:22-52:19 (emphasis added). This testimony is unequivocal. Smedley was unwilling to support the Petition with an opinion that Badros teaches this part of the patent claim. Petitioner's own expert stated ***three times*** that he did not form the opinion that Badros teaches a viewability test. He provided the sworn testimony even after being advised that if he did not believe that Badros taught the element, the Petition must fail. He insisted, however, not only that he had given no such opinion, ***but that he could not do so***. This is fatal to the Petition.

The admission by Petitioner's witness that Badros does not teach a viewability test should result in a Final Written Decision upholding the claims in

light of the references submitted with the Petition. *See, e.g.*, *Card-Monroe Corp. v. Tuftco Corp.*, 270 F. Supp. 3d 967, 1000 (E.D. Tenn. 2017) (*citing ActiveVideo Networks, Inc. v. Verizon Communications, Inc.*, 694 F.3d 1312, 1329 (Fed. Cir. 2012) for the proposition that "where an expert fails to explain how a prior-art reference describes every limitation in a claim, no reasonable jury could conclude that the reference anticipates the claim").

Based on these admissions that the Petition's prior art does not disclose the claim elements, Petitioner should withdraw its Petition but has not done so. In its Reply, the Petitioner will doubtless attempt to backpedal Smedley's admissions and backfill them. Indeed, the Petitioner *tried* to do this during Smedley's deposition on re-direct, but even here the Petitioner never asked Smedley specifically about the claim element language on which he testified three times he had no opinion. EX2050, 179-81. New evidence or a new opinion from Smedley on Reply would not only flout the IPR rules (*e.g.*, 35 U.S.C. § 312(a)(3)), it would also not be credible in light of how Smedley has already testified.

IV. Petitioner's Witness Smedley Is Unqualified to Express Any Opinion in the Field of Internet Advertising

In addition to the admissions that Badros does not teach a viewability test, Smedley admitted that lacks even a basic knowledge of the internet advertising industry or its history. At deposition, Smedley admitted he lack familiarity with "second print ads," (the ads claimed in claims 1 and 6), the Interactive Advertising

Bureau (IAB), or the Media Ratings Council (MRC). EX2050, 30:19-32:7. As explained below, the IAB is the most prominent trade association of companies focused on internet advertising. The MRC is the industry's self-regulatory body that creates and administers measurement and other standards used across many advertising media, including the internet.

He was so confident is his *lack* of knowledge that tried to cut off questions about it, insisting he would give "the same answer for every acronym" about which he was asked. EX2050, 32:10-33:5 (no idea what 3MS, 4As, DSPs or SSPs means in the context of internet advertising). He never worked in the online advertising industry and did not recall even having any graduate students that worked in the field of online advertising. EX2050, 121. He considered it to "fair to say" that he was not an expert in the history of the development of online advertising and specifically with the history of moving from a served impression standard to a viewable impression standard. EX2050, 121:21-122:1. In short, he is unqualified to express any opinion specific to internet advertising. His admitted lack of knowledge also calls into question his interpretation of references, particularly Badros.

In contrast to Smedley, Patent Owner's expert Robert Sherwood has extensive experience in internet advertising and is qualified to explain how one of ordinary skill would have interpreted a reference like Badros. EX2045, ¶¶ 6-24.

V. Level of Ordinary Skill in the Art

In the absence of a Patent Owner's Preliminary Response, the Institution Decision temporarily adopted Petitioner's definition of the level of skill in the art. Paper 9 at 10. That definition was "a bachelor's degree in computer science, computer engineering or electrical (or similar) engineering with about three years of experience in computer science, computer engineering and electrical engineering." *Id*.

The fundamental problem with the definition is that it fails to require experience with internet advertising, which is the entire subject of the '329 patent and the Krassner and Badros references. EX2045, ¶ 44. Advertising is also at issue in the Harkins reference, albeit on printed credit card receipts.

Smedley's proposed definition is also overbroad. It covers someone like himself with no experience in internet advertising. It covers, for example, someone whose entire career was spent designing integrated circuits. Using the 2009 filing date of the CIP as the invention date, the field of internet advertising had matured to be a multi-billion dollar industry. A search on Google patents suggests that, by the filing date of the CIP, more than 100,000 patent applications had been filed relating to "online advertising" or "internet advertising." EX2045 ¶ 45. To define a skilled artisan without reference to any experience in internet advertising invites

the kind of errors evident in the Petition because the artisan would not bring any knowledge of terms of art or other understandings when reviewing the prior art.

Smedley's proposed definition also lacks a proper factual analysis. He opined that to determine the proper definition of a "POSA," he should have considered several factors, including "the educational level of the inventor." EX1009, ¶ 11. At his deposition, he insisted he did consider "all the factors," but also testified as follows:

> Q. What educational level of the inventor did you consider?
> A. I don't recall.
> Q. Do you know what the educational level of any of the inventors of the '329 patent is?
> A. I don't recall.
> Q. As you sit here today, do you have an understanding of what the educational level of any of the inventors of the '329 patent is?
> A. In order to do that, I would have to recall that information, which I don't.

EX2050, 173:5-16. Smedley did not consider the educational level of the inventors (or any of the other factors for that matter); there is no evidence he investigated them in the list of materials he considered. EX1009, ¶ 35.

Smedley testified about the level of ordinary skill in the art in another IPR, *Bumble Trading, Inc. v. Match.com* (No. IPR2019-01000). EX2012. In that case, Smedley testified for the Patent Owner, and concluded that the level of ordinary

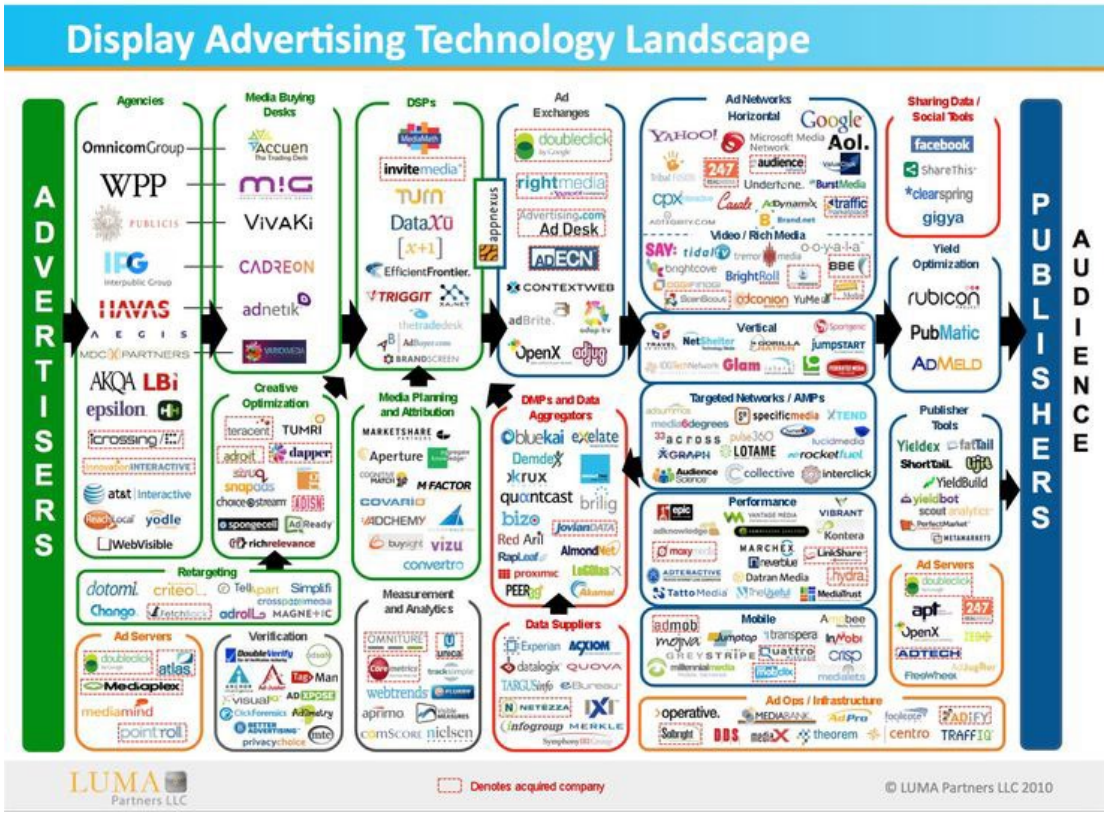
skill required an undergraduate degree but no practical experience. EX2012, ¶ 26. He was unable to explain, however, why the person of ordinary skill in the Match.com case needed no practical experience, while the POSA in the case needed three years of generalized experience. EX2050, 173-78. He was unable to explain how the application of any of the factors were different in the two cases. *Id*.[1]

In contrast to the "analysis" Smedley could not recall – or did not do – Sherwood's declaration provides a detailed analysis of each of the four factors to be considered in determining the definition of the person of ordinary skill in the art. EX2045, ¶¶ 48-54. For example, Sherwood notes that the first factor concerns "the types of problems encountered by those working ***in the field*** and prior art

[1] Smedley agreed on one point, however. The POSA definition he supports in this case (for the Petitioner) would result in it being more likely to find an invention obvious that the POSA definition he sponsored in the *Match.com* case when he testified for the patent owner. EX2050, 178:11-22. Given his inability to explain *any* basis for the different definitions other than the side of the case on which he was testifying, the Board can further discount his opinion in this case because it appears driven by the desired outcome rather than bona fide analysis.

solutions thereto." EX2045, ¶ 49. The relevant field, of course, is not computer programming writ large, it's the field of internet advertising. EX2045, ¶ 49.

Applying the second factor, the technology in the field of internet advertising was sophisticated in 2009, requiring those working in the field to navigate a complex set of companies and technologies to deliver a single ad to a display. Sherwood includes a copy of an infographic of display advertising ecosystem to demonstrate just how sophisticated and complicated the process of delivering and ad had become at the time of the invention:



EX2058; EX2045, ¶ 50. He also considers the educational level of those working in the field (again, the field of internet advertising), and the experience of the

inventors based primarily on their background provided on the LinkedIn website. EX2045, ¶¶ 51-53.

Based on reviewing the factors – including demonstrating that he actually considered them – Sherwood's proposed definition is both grounded in the law and makes more sense. The person of ordinary skill would be expected to have a basic working knowledge of computer programming (such as an undergraduate degree in computer science or at least four years of practical computer programming experience) and sufficient exposure to the way internet advertising works to be able to understand basic terms of art and techniques in the industry. The specific proposed definition is: The person of ordinary skill in the art would have a bachelor's degree in computer science or a similar major involving computer programming (or at least four years of practical computer programming experience) and at least two years of experience (in or out of college) in the field of internet advertising. EX2045, ¶ 54.

The Patent Owner is aware that one consequence of adopting the Patent Owner's proposed definition of ordinary skill is that it would render Smedley unqualified to render opinions in this case as he lacks the requisite experience in internet advertising. As explained below, however, it is precisely because of his lack of knowledge with the internet advertising industry that Smedley repeatedly misinterprets the "scope and content of the prior art." He does not know how

someone ***with experience in internet advertising*** would understand Krassner, Badros, or the '329 patent. He is not, therefore, in a position to opine how the patents would be understood by one of ordinary skill. His opinion should be discounted, ignored altogether, or stricken because he is not qualified to render opinions about in a field he knows nothing about.

VI. Summary of References Cited in the Petition

A. Krassner (Exhibit 1002) Is a 102(e) Reference Commonly Owned by Patent Owner; It Is Subject to the Safe Harbor of 103(c), Consequently Cannot Be Used as Obviousness Reference, and Ground 1 Must Fail

Petitioner argued that Krassner was a 102(b) reference. It is not, as the Board readily concluded. Paper 9 at 11. Determining that it could be a 102(e) reference, however, the Board cautioned that, because it appeared to be commonly owned, it could be subject to the safe harbor provision of 103(c). Paper 9 at 12-13. Perhaps for this reason, the Board essentially ignored Krassner and Ground 1 of the Petition, instead focusing on Ground 2 (which does not rely on Krassner) and instituting the IPR on the basis of Ground 2. Paper 9 at 14-19.

As demonstrated by the face of the patents, USPTO assignment records, and the Second Declaration of Igor Tchibirev, the Krassner reference and the '329 Patent were in fact commonly owned by the Patent Owner, Rich Media Club, LLC. *Compare* EX1001 *with* EX1002 (both listing "Rich Media Club, LLC" as the Assignee); *see also* EX2026 (Second Tchibirev Declaration); EX2015-EX2016

(assignment records). As such, Krassner falls within the "safe harbor" of 103(c) and cannot be used as invalidating reference. Ground 1 necessarily fails.

B. Badros (Exhibit 1003) Neither Claims Nor Teaches a "Viewable Impression"

U.S. Patent 7,725,502 (Badros) has a June 2005 application date. It is assigned to Google, the company that has dominated advertising on the internet since the medium was created. As its title implies, Badros is directed to "time-multiplexing documents based on preferences or relatedness." EX1003 (title). Badros describes how a "plurality of selected documents are caused to be displayed at an output device in a *predetermined* sequence according to the time-multiplexing criteria." EX1003 (abstract; emphasis added).

Badros includes discussion of what it calls an "impression module" on the server used to deliver content to end users. EX1003, Fig 2. Badros states "impression module 38 may determine whether an ad on a web page of a user's browser is actually visible to the user." EX1003. At the time Badros was filed, however, the standard for determining whether an ad had been made "visible to the user" was whether the ad had been served from the server. *E.g.*, EX2023, EX2027, ¶¶ 9-10; EX2045, ¶ 68; EX2053.

One of skill in the art would have understood the discussion of viewability in Badros as referring to a served impression in general or as one that had been served to a viewer or an "above the fold," "good," or "high probability" impression with a

higher likelihood of falling within the viewable portion of a webpage. EX2045, ¶ 74.

Contrary to assertions in the Petition, Badros never explains *how* to determine if the ad was literally viewable, there's no evidence that anyone had actually demonstrated viewable ad technology in 2005, and this feature was not included in the issued claims of the patent. The lack of express teaching on how to run a viewability test was confirmed by Petitioner's witness Smedley during his deposition:

> Q. So do you agree with me that Krassner does not teach how to do the viewability test?
> A. Yeah.
> Q. Just like Badros doesn't teach how to do its viewability test?
> MR. GREENLEAF: Objection, vague.
> A. Yeah, that's not a difficult thing to do, so...

EX2050, 148:9-16. Like Badros itself, Smedley also does not discuss in his declaration how to do the viewability test based on Badros. As discussed above, during his deposition, Smedley attempted to fill this hole by opining without support that an undergraduate could implement the viewability test. EX2050. But Smedley declined to explain even the smallest detail on how it would be done with today's technology (let alone with the technology in 2005) and he did not even know whether the code necessary is server-side or client-side. EX2050, 141-143.

The extreme nature of Smedley's position was exposed when he explained his view that Krassner *also* teaches one of ordinary skill how to do a test for viewability "because it talks about inventory of views and bartering for views." EX2050, 147:25-148:8. But he agreed that, like Badros, Krassner "does not teach how to do the viewability test." EX2050, 148:9-16. This is another example of where Smedley's lack of experience with internet advertising renders him not just wrong, but unqualified to render opinions about what the prior art would mean to those of ordinary skill. People with actual experience in internet advertising (Edwards and Sherwood) credibly testified their understanding that those of skill would have interpreted Krassner's "viewed inventory" as referring to *served* impressions (something more like a page view) because there was no such thing as a confirmed viewable impression when Krassner was filed. EX2027, EX2045, ¶¶ 61-73.

Thus, consistent with Petitioner's witness's testimony, Badros does not teach this element. And Smedley's *ipse dixit* testimony that an undergraduate could have made this in 2005 is without basis and not credible.

The great weight of evidence instead confirms that it was Rich Media Club, not Badros/Google, that created the first real system capable of confirming that an internet ad was viewable on a user's browser. *See* Section VII below.

C. Harkins (Exhibit 1004) Is Non-Analogous Art Focused on Printing Ads on Credit Card Receipts

U.S. Patent Application 2008/0221982 (Harkins) is directed to ad placement on the paper receipt issued to a credit card user at a merchant. It has nothing to do with advertising on the internet. EX1004. It does not concern or discuss whether an advertisement is viewable on the internet. It contains no discussion or teaching of how to do a test for viewability. Ground 2 of the Petition relies on Harkins for an element it admits Badros does not teach in dependent claims 3 and 8: the running of a real-time auction to replace an ad. Paper 1 at 42. As explained below, the portion of Harkins relied upon by the Petitioner does not contain the word or concept of a "real time" auction and the use of Harkins for the supposed disclosure necessarily fails.

VII. Factual Background Regarding the Development of the Viewable Impression

A. Pre-2009 Internet Advertising Was Based on Ad Impressions Regardless of Viewability (Also Known as "Served Impressions")

Well in to the 2010's, one way of charging for ads on the internet was the "CPM" (cost per thousand) of served impressions. Charging for internet ads based on served impressions, however, was known to be problematic for the reason fundamental to this case: a served ad impression may well never be viewed by a user. For example, the ad could appear in the "run of site" portion of a web page that a user never scrolled into view. This problem was well known in the industry,

as explained by Google itself. Google filled a patent application on March 30, 2005 listing two of three inventors who are the same as the three Badros inventors (Mssrs. Badros and Ranganath). EX2010 ("March Badros"). In the background of the invention, Google/Badros explained the status of on-line advertising as of March 30, 2005:

> For example, human judgment is often used to determine the price paid for ***pay-per-impression ads*** (e.g., often based on the type of audience attracted to a Website as well and the ***likelihood*** that the ad will reach its intended audience). Generally, ad impressions commanding the highest price have been those ***thought to have a high likelihood of being seen*** by the audience targeted by the advertiser. As an example, many contracts between advertisers and Web publishers require ads to be "***above the fold***" or on the screen ***seen*** by users with computers set to standard screen sizes (e.g. 640×690 or 800×600, etc). More specifically, ad systems for large publishers typically define advertiser "channels" which are either (A) high price "above the fold" inventory, or (B) lower price "***run of site***" inventory. The "run of site" inventory is either "below the fold" or on Web pages where the user is likely not to interact with an ad (e.g., a Website login page). Often, when advertisers buy ad placements from large publishers, they are shown the places their ads will run and a direct sales force negotiates a price based on the inventory viewed. The current state of the art requires a person on behalf of the Web publisher to classify the placements into "good" vs. "ok" channels, and a person on behalf of the advertiser to

> judge and negotiate a price. Thus, advertisers may have to negotiate and specify different prices for different channels.

EX2010, ¶ 8; *see also* ¶ 9. And they described "viewability" in terms of "probabilities" rather than something that could be verified:

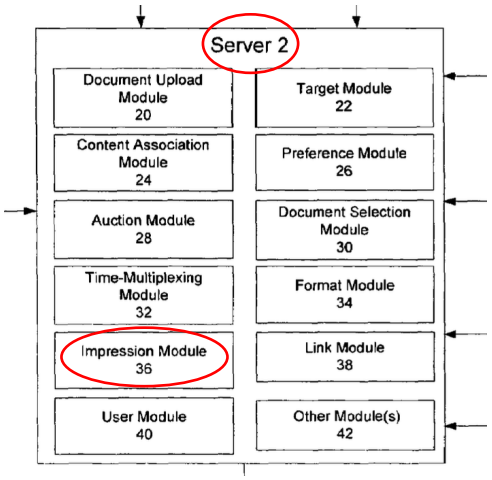
> Embodiments consistent with the present invention may adjust a price for an ad impression ***using a probability that the ad will be viewed*** or otherwise sensed or perceived, or using one or more factors on which such a probability may be based. The price, probability, and/or factor(s) may be adjusted using events occurring after the impression of the ad.

EX2010, ¶ 12. The overlapping inventors in Badros explained this same concept, using the language of "more prominent" versus "less-prominent" ads. EX1003, 3:42-49.

B. Badros Did Not Teach How to Test for Viewability and It's Server-Side Approach Could Not Work

As explained above, both Smedley and Sherwood agree that Badros does not expressly teach how to do a test for viewability. EX2050, 148:9-16; EX2045, ¶ 60.

But the disclosure in Badros is actually more problematic than merely not explaining how it would implement the viewability test. Badros explains that the "impression module" supposedly running the viewability test is one of several such modules that reside on "Server 2." *E.g.*, EX1003 at Fig. 1:



Badros described each module as operating on the server-side of a web-based server-client architecture. *E.g.*, EX1003, 6:25-24:

> Server 2 may include various modules for providing functionality associated with documents, including document upload module 20, target module 22, content association module 24, preference module 26, auction module 28, document selection module 30, time-multiplexing module 32, document format module 34, link module 36, impression module 38, user module 40, and other module 42. The modules may function separately or in various combinations. While the modules are shown within a single server 2, the modules may also operate among several servers.[2]

[2] The specification and drawing in figure 1 are inconsistent in numbering. Figure 1 identifies the "link module" as 38 (the specification sometimes says 36 and sometimes 38) and the "impression module" as 36 (the specification sometimes says 36 and sometimes 38). For consistency, Patent Owner will refer to the

But real-life systems, such as those used by both the Patent Owner and Petitioner, place code on a user's computer/browser (client side) to determine whether an ad is within the viewport of a browser. EX2026, ¶ 14. Neither Badros nor the Petition nor Smedley point to ***any*** system that can run a viewability test from a server, and at least Tchibirev is not aware of any such system. *Id.* To the extent Badros is incorrectly interpreted as teaching a viewability test in the portions relied upon by the Petition, there is no explanation of how that would work.

C. Rich Media Club Invented the First Viewability Test Based on a Client-Side Solution And Demonstrated the Working Solution to Industry Executives

In 2008, Rich Media Club developed a bona fide test for ad viewability. EX2027, ¶ 13. On April 4, 2009, Rich Media Club filed a continuation-in-part patent application that included new matter explaining the viewability test it had developed. EX1011 (identifying new matter in the CIP application). Following the invention of this technology, RMC established a related company, RealVu, Inc. ("RealVu"). EX2025, ¶ 4; EX2027, ¶ 2. RMC licensed its patents to RealVu and RealVu was the industry-facing entity used to sell the viewable ad space to

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impression module as "36 or 38," it being understood that the "link module" is not relied upon in the Petition.

advertisers and publishers. *Id.* The company began demonstrating its technology to industry executives.

One such meeting was with David Cohen, who is now the Chief Executive Officer of the IAB. At the time of the meeting, Mr. Cohen was the Chair of the American Association of Advertising Agencies' (the "4As") Interactive Marketing Committee and the co-chair of "Project Reinvention." EX2024 and EX2027, ¶ 17. Following the meeting, Mr. Cohen wrote a blog post describing his reaction to seeing RealVu's live demonstration of its technology:

> Have you ever had a meeting with a potential business partner the rocked your world? Something that called into question everything you believed to be true? I recently had one of those meetings and wanted to share it.
>
> We certainly don't need any more Wall Street Journal articles on "Invisible Ads" or trade publications exposing the dangers of ad networks, click fraud, below the fold placements, etc. So, you can understand my dilemma after I met with RealVu last week. Part of me wanted to forget that the meeting ever happened. The other part of me thought that this little known Salt Lake City startup could change everything.
>
> It would appear that (among other things) RealVu has developed a technology that allows them to identify when an online ad is "within the viewable area" of a user's screen, and for what duration. So, for ads that are run on a particular Web site that require a user to scroll "below

the fold," their ad never gets requested until the user has scrolled to that part of the page. Makes sense, right? Pretty innocuous you say?

On average, across all placements that they have tracked – fully 50% of online ads are never viewed because they are outside of the user's viewable area. *Say what?*

Now, keep in mind this is a combination of all properties. Some long tail sites are poorly constructed and they may indeed have questionable motives, but this does include Top 100 properties as well. The number of ads that we are paying for that go unseen floored me.

In addition to making sure that an advertiser is only charged for an ad that is viewed by a user, they are able to see how long the ad is viewed before it leaves the viewable area (another tab is opened in the browser, user scrolls down the page, etc.).

It is not inconceivable that this kind of data will drive the industry towards an entirely new buying mechanic. Only paying for the amount of time that an ad is viewed, and obviously not paying for ads that are not viewed at all. This may very well translate into a decrease in efficiency (or an increase in CPM), but it will be a far more accurate representation of true ad delivery. We are supposed to be the most measurable and accountable medium, right?

RealVu has reportedly signed a deal with MSNBC.com to start working with them to provide their service to advertisers. They also have been working with some of the leading industry bodies like the IAB and the Media Rating Council (MRC) to revisit some of the very foundations of our industry, like what qualifies as an ad impression.

I have no doubt that this will not be the last time we hear about this company nor the last time we discuss the potential to revise the

> currency of Internet display advertising. Might this be the catalyst the industry needs to galvanize around a new standard metric? Engagement, iGRPs, Brand minutes, involvement score – take your pick. The possibilities are as varied as they are exciting.
>
> At the end of the day, if this new potential standard makes the business of doing business easier and more transparent, I believe it will be a giant step forward for the industry. It will set a new bar for accountability – one that will influence all communications channels, including the 800 lb. gorilla in your living room.
>
> Remember folks, you heard it here first.
>
> This could change everything.

EX2027, ¶¶ 18-19 (quoting EX2024 - *Curious Thoughts from Curious Minds: This Could Change Everything* - David Cohen - MediaBizBloggers|MediaVillage (emphasis in original blog post)). Similar meetings would take place with others, including Google, Microsoft, MSNBC, other publishers, verification and measurement companies, and ad agencies. EX2027, ¶ 31-32. The Board can review some of the reactions of these executives from their meetings with RealVu in a recording from an industry conference in that took place in 2011. A panel discussion is available on YouTube at the following url: https://www.youtube.com/watch?v=c5SS27qVhkw. And a screenshot from the video, with a transcript supplied by YouTube has been submitted as Exhibit 2054. *See also* EX2027, ¶ 33-34.

D. The Internet Advertising Industry Adopts the Viewable Impression Standard After RealVu's Invention and MRC Accreditation

The RMC/RealVu invention was indeed the "catalyst the industry needs to galvanize around a new standard metric." Just months after David Cohen's blog post, the Media Ratings Council would grant accreditation to RealVu's solution, triggering a sea change in the metric used to measure ad delivery on the internet. EX2017 (accreditation letter); EX2039 (RealVu was the first company accredited). Industry executives contributed the following quotations in a press release RealVu issued on June 7, 2010, as preserved by the Reuter's news site archived by the Internet Archive (EX2042):

Executive	**Title**	**Quote**
David Cohen	EVP, US Director of Digital Communications at Universal McCann	"We find ourselves at a very interesting inflection point in our digital evolution. Increasing complexity coupled with a heightened focus on accountability makes the idea of purchasing a Viewable Impression a very seductive concept. We remain convinced that the Viewable Impression adds a greater degree of precision and accountability in digital viewership measurement. It also changes many of the fundamental tenets of our industry. It really could change everything."

Executive	**Title**	**Quote**
Kyoo Kim	VP of sales of the MSNBC Digital Network	"Before today, advertisers and publishers have had a hard time determining the true value of an impression since it has been hard to determine whether the user actually sees the ads or not. Hence, clicks became the default for accountability, even for brand advertising. With an actual Viewable Impression metric, the impression becomes 100 percent accountable. With this methodology, an ad view simply cannot be recorded unless that ad appears in a viewable window to the consumer. MSNBC believes that premium publishers can now use this technology to bring accountability and value to advertisers by running their brand messages in trusted environments where they know they will be actually seen."
Greg Stuart	Former CEO of Interactive Advertising Bureau (IAB)(the organization responsible for developing the global impression measurement for Internet	"In 2004, we made some tough decisions in setting the Global Ad Impression guidelines for the Internet that honestly revolutionized overall Media Measurement and not only made Online the best measured media ever but also gave it a strategic advantage versus the other media. However, it appears we missed a major factor by not accounting for

Executive	**Title**	**Quote**
	Advertising)	whether an ad has the potential to be viewed on the screen because the technology to do so did not exist. I would strongly urge the Online media industry to continue to push to be the best measured media, especially in light of the new age of marketing accountability, and to investigate the adoption of the Viewable impression as the new and improved standard."
George Ivie	MRC Executive Director/CEO	"At the MRC, our mission is to accredit audience measurement services that are valid, reliable and effective. After an extensive audit by an independent CPA firm to assess compliance with the MRC Standards for Media Rating Research and the IAB's Ad Impression Measurement Guidelines, the Viewable Impression metric was granted accreditation, becoming the first metric of its kind to earn accreditation by the MRC."

The excitement evident from RealVu's now *accredited* solution stands in stark contrast to *any* evidence that Google supposedly invented a viewability test (Badros) five years early. The Petition cites no such evidence and Patent Owner is not aware of any.

The evidence of the sea change in the internet advertising industry as a direct result of RealVu's demonstrated test for viewability is overwhelming. As a matter of historical fact, soon after the MRC accredited RealVu's solution, the internet advertising industry began to push for a change in the way internet ads were accounted for, an effort led in part by the IAB.[3]

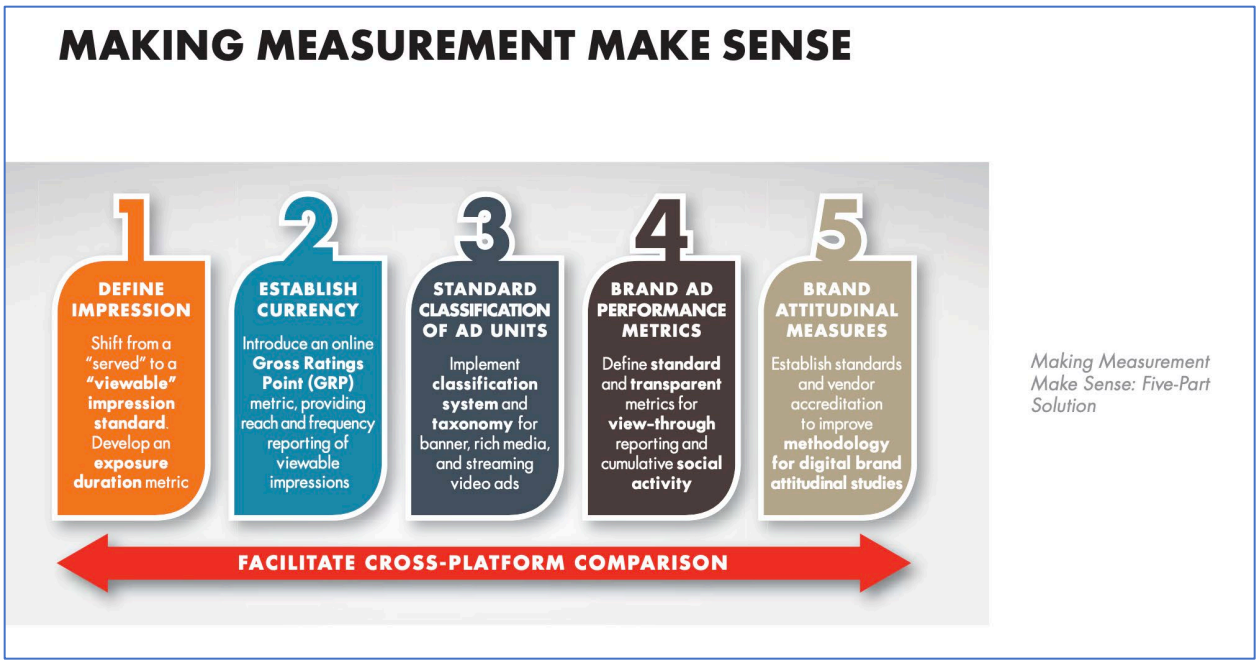
The need to create and standardize the viewable impression standard was so strongly felt that major industry organizations – the IAB, the 4As, and the

[3] The IAB "comprises more than 700 leading media companies, brands, agencies, and the technology firms responsible for selling, delivering, and optimizing digital ad marketing campaigns. The trade group fields critical research on interactive advertising, while also educating brands, agencies, and the wider business community on the importance of digital marketing. In affiliation with the IAB Tech Lab, IAB develops technical standards and solutions." EX2033; see also EX2027 (Edwards). The Board can see for itself the prominence of the IAB by examining the membership list on pages 22 and 23 of the IAB 2013 Annual Report (EX2028). Consistent with his general lack of knowledge about internet advertising, Petitioner's witness Smedley did not recall having heard of the IAB and did not know what it does (EX2050, 61:25-62:4), and while he did not dispute its prominence, he did not concede it either (EX2050, 62:5-64:19).

Association of National Advertisers (or ANA)– came together to form a coalition to move the industry from a served impression standard to a viewable impression standard. EX2027, ¶ 27; EX2028. The history is explained in detail in the 2013 Annual Report of the IAB, which provides this overview on page 1 of the report:

> In 2013, the Making Measurement Make Sense (3MS) initiative, founded by IAB, the Association of National Advertisers (ANA), the American Association of Advertising Agencies (4A's), and le by the Media Rating Council ended the year just months away from ***debuting revolutionary viewable impressions standards*** for transacting in display and video advertising. This new currency standard enables the first-ever common-ground measurements with television and other "traditional" media—without compromising the benefits of interactivity—and will be the foundation of the cross-platform Gross Rating Point.

EX2028, at 1(emphasis added). The IAB expounds on the initiative on pages 16 and 17, including this graphic on the Making Measurement Make Sense Five-Part Solution:



EX2028 at 16. The text explains the initiative as follows:

> To effectively, accountably, and intelligently build brands across screens, marketers need metrics and models that can produce apples-to-apples comparisons between traditional and digital media, and across digital media. This is the demand that the Making Measurement Make Sense (3MS) initiative intends to solve—not by producing a proprietary product but ***by revolutionizing the way digital media is measured, planned, and transacted across the industry***. The end goal is for interactive media to become a more valuable medium for everyone involved in brand advertising.
>
> **ON THE VERGE OF THE VIEWABLE IMPRESSION**
>
> Twenty-thirteen was an energetic and purposeful year for 3MS. It ended with the 3MS initiative ***at the threshold of an historic innovation***. The first-ever, non-proprietary viewable impression standard was nearly ready to become a staple in digital media transactions and the bedrock

> of a new currency. Shifting to a viewable impression from a served impression standard is the foundational objective of 3MS; it is the first of the Five Guiding Principles of Digital Measurement.
>
> The viewable impression is the key to making digital media measurement comparable to that of legacy media. ***In television, print, and radio the consumer always has the opportunity to see/hear the ad. This is not the case with digital media***. Foundational industry technologies have only measured if an ad has been served, not how fully it rendered on the screen or how long it was present. It is an essential innovation to producing a digital Gross Rating Point.
>
> The viewable impression standard is expected to be released in the first quarter of 2014. The Media Rating Council (MRC), the independent entity in charge of establishing and managing the process of developing, testing, and institutionalizing measurement standards with regards to this program, announced this intention in November. The release of the new standard will coincide with the lifting of the advisory the MRC issued against transacting on viewable impressions first in November 2012, and updated in June and November 2013. Once the MRC advisory is lifted, the industry will have a green light to plan, transact, and track performance using viewable impressions for display and video.

EX2028 at 16.

The MRC advisories discussed in the IAB 2013 Annual Report also actually happened. While the MRC had accredited RealVu's solution in 2010, there was concern that other solutions were not ready for commercial use despite the clear

need the industry expressed for viewability standards. On November 14, 2012, the MRC issued an advisory regarding the use of viewable impressions:

> Several vendors – including ad servers, verification services and third-party syndicated measurers – have developed solutions for determining whether served ads become viewable and to count ads based on viewable parameters. ***Based on large-scale tests of real advertiser campaigns as detailed within, while capabilities vary, the ability to consistently measure whether impressions are viewable is a challenge that must be overcome by most of the vendors before finalizing a new online advertising currency definition***. The number of impressions in a campaign for which viewability cannot be determined is often significant.

EX2018 (emphasis added). The advisory includes discussion of testing that MRC had conducted:

> *VIEWABLE IMPRESSION AGENCY PILOT TESTING SUMMARY*
>
> *BACKGROUND*
>
> In spring 2012, MRC, with the support of the entire ecosystem as represented by the member companies of the ANA, 4A's, and IAB, and the Board of Directors of the MRC, took on the leadership of efforts to transition digital display advertising to a viewable impression transactional currency. The proposed criteria or standard for viewability, recommended by the industry leaders who participated in Making Measurement Make Sense (3MS), is at least 50% of pixels in view for a minimum of one second.

The 3MS initiative envisions viewable impressions as the foundational element in the development of transparent and consistent metrics for display advertising. The intention of the 3MS initiative is to define metrics that work for brand advertisers and permit facile cross platform media planning, buying and evaluation. In addition, the 3MS leadership supports the expansion of the MRC into the foremost standards development institution for all media.

TESTING VIEWABILITY WITH REAL ADVERTISER FLIGHTS

MRC oversaw pilot tests of viewable impressions using real advertiser campaigns in live production environments that ran during May and June 2012. ***In total, twenty-two campaigns representing more than three billion served impressions[1[[1]Served impressions are the current industry standard, used for the selling and buying of digital display.] were examined***. Seventeen advertisers and twelve agencies were involved. The ad campaigns ran in a variety of environments and deployed inventory purchased both directly from publishers as well as from network sales channels. The only requirement that was imposed across all the campaigns, regardless of agency, advertiser brand or target audience, was that the agency ad servers used to serve the pilot campaigns be MRC accredited.

In addition, ***five viewability measurement vendors participated in the pilot tests. Each vendor was required to demonstrate in advance of its participation in the pilot its ability to measure or not measure viewability under seventeen different scenarios as defined by the MRC.***

EX2018 (emphasis added). The advisory reported the results of the MRC's testing:

> *PILOT RESULTS*
>
> Key findings that have broad implications for the recommended industry action items in this document include:
>
> - Viewable rates for the live campaigns in the test showed tremendous variability, ranging from a high of 78.6% to a low of 7.8%. **Viewable rates are calculated off of a base of impressions that could be measured for viewability**.
> - The ability to measure whether impressions are viewable or not is still extremely variable. ***The test campaigns showed a range of 0% to 77% of served impressions that were measured for viewability.***

EX2018 (emphasis added). The MRC issued two interim updates to the advisory, and finally lifted the advisory on March 31, 2014. EX2038; EX2040; and EX2041. Along the way, the MRC published a table of the status of its accreditation of service providers (EX2039), which confirms that RealVu was the first company accredited by the MRC and that Google's solution was not accredited until three years *after* RealVu's:

Page 1 of 2

MRC Accredited Viewable Impression and/or Ad Verification Vendors: Enhanced Description

For most current product information, click on the service's name to be re-directed to its web site.			
	RealVu	***comScore vCE (Validation only)***	***DoubleVerify***
Viewability Capabilities: Accreditation Status (Date Accredited by MRC)	**Accredited (April 2010)**	**Accredited (July 2012)**	**Accredited (February 2013)**
Technology Approach	**Page Geometry**	**Page Geometry**	**Page Geometry**
	No independent capability to measure	Can measure viewability for cross	Can measure viewability for cross

Page 2 of 2 **MRC Accredited Viewable Impression and/or Ad Verification Vendors: Enhanced Description**

For most current product information, click on the service's name to be re-directed to its web site.			
	Google Active View	***spider.io***	
Viewability Capabilities: Accreditation Status (Date Accredited by MRC)	**Accredited (April 2013)**	**Accredited (May 2013)**	
Technology Approach	**Page Geometry**	**Browser Optimization**	

"The Media Rating Counsel (MRC) is a not-for-profit industry self regulatory body, established in 1963 at the request of US Congress, that audits and accredits media measurement products and data sources across Digital, Out-of-Home, Print, Radio, Television, and cross-media products." EX2034. Among the MRC's objectives is to "secure for the media industry and related users measurement services that are ***valid, reliable and effective***." *Id.*

At least by 2012, efforts to supplement impression-based internet ad rates with rates based on viewability were underway in the industry. The need for the solution was so wide-spread and the solution so unclear that the MRC issued a "Viewable Impression Advisory" on November 12, 2012. EX2018. The advisory noted that a "cross ecosystem movement" was underway to "***transition*** from ***served*** to ***viewable*** ad impressions for online advertising transactions." EX2018. The MRC supported this transition, noting: "the MRC believes that online advertising impressions, particularly for brand advertising campaigns, should be viewable in order to be more comparable to other media which afford the 'Opportunity to See' as the basis of currency." *Id.* But the current state-of-the-art, even in 2012, was a mixed bag. As explained by the MRC:

> Several vendors – including ad servers, verification services and third-party syndicated measurers – have developed solutions for determining whether served ads become viewable and to count ads based on viewable parameters. Based on large-scale tests of real advertiser campaigns as detailed within, while capabilities vary, ***the ability to consistently measure whether impressions are viewable is a challenge that must be overcome*** by most of the vendors before finalizing a new online advertising currency definition. ***The number of impressions in a campaign for which viewability cannot be determined is often significant***.

EX2018 (emphasis added). It would take another 18 months for enough other companies to demonstrate their systems worked for the MRC to move forward with the viewable impression.

E. "Second Print" Ads Were Developed by Rich Media Club, Licensed to Duration, and Then Copied by Duration

As set forth in the '329 patent and explained in the declarations of Igor Tchibirev and Alan Edwards, Rich Media Club and its affiliated company, RealVu, developed a system that would: (1) determine whether a particular ad space on a web page was in view (or nearing being in view) on a user's browser; and (2) upon finding such an ad space, run a real-time auction to replace the viewable ad with a replacement ad. EX1001, EX2026, EX2027. The industry refers to these ads as "second print" because ad space is being reused to display a second advertisement after an initial advertisement has run for a predefined period of time. RealVu built

a successful business selling "second print" ads, [redacted]. EX2026, ¶ 6. As set forth in the Cooperation Agreement, RealVu provided the technology to Duration "to screen ads purchased in real time for viewability leading to a high conversion rate to viewable impressions." EX2009. RealVu had been doing that for years before entering the Cooperation Agreement, and because Duration had no technology of its own, it needed RealVu's technology to sell ad space that had been pre-screened for viewability. EX2025, ¶ 6. Duration's business of selling "second print" ads, or ads that would only appear in ad spaces that had been determined to be in the viewable portion of a user's internet browser was completely dependent on using RealVu's technology to do so. *Id.* RealVu's licensing of its technology to Duration included use of the invention described in the '329 patent, as demonstrated in claim charts showing how Duration's product practice the claimed invention. EX2047-EX2049.

[redacted] the time for renewing the Cooperation Agreement with Duration was approaching. [redacted]

Unbeknownst and undisclosed to RMC/RealVu, Duration was taking steps to simply copy the technology and patents it had been licensing from RMC/RealVu. [redacted] Instead of continuing to use RealVu's technology, it debuted its own copy of RealVu's second print system.

As set forth in the Igor Tchibirev declaration, "Duration Media copied virtually every aspect of the technology it had been purchasing from RealVu, including: (1) determining whether an ad space was in or near the viewable area of user's browser; (2) in the event viewable ad space was confirmed, invoking a real-time bidding auction to sell the viewable ad space; and (3) replacing the original ad with the ad that was sold using the auction." EX2025, ¶ 8. The similarities are detailed in Exhibits 2025, 2013, and 2014. The Board ordered Duration to explain this copying in an interrogatory, but Duration did not do so. It did not explain *at all* how it had copied the functions of the services it had been buying from RealVu; it only insisted that it did not copy RealVu's backend source code. EX2056, Response to Interrogatory No. 2.

Whether using the system it contracted RealVu to provide or the copy of that system it created, Duration's business, like RealVu's was commercially successful.

[redacted]

VIII. ARGUMENT

A. Ground 1 Fails Or is Redundant with Ground 2

The Board did not discuss Ground 1 in the institution decision. *See* Paper 9.

Petitioner cannot rely on Smedley to contest that Krassner and the '329 Patent are commonly owned. He testified he had no opinion on common ownership, could not opine based on the face of the patents, and would not form an opinion one even if presented with patent assignments. EX2050, 124:16-125:9 ("Q. I take it if I showed you the relevant assignments of Krassner and the '329 patent, that wouldn't put you in a position to opine as to whether they're commonly owned either, right? A. That's correct. Q. So you can't do it based on the face of the patents and you can't do it if I showed you the assignments of those two references to the same owner? A. I'm not sure what you're referring to when you say 'can't do it.' Q. You can't tell me whether reviewing those -- I can't give you the assignments and then you can render an opinion on common ownership? A. You giving me the assignments would not change the fact that I cannot give an opinion on common ownership as I sit here today.").

While maintaining he was not able to consider evidence of common ownership or opine on its impact on his opinions, Smedley admitted in his deposition that Ground 1 either failed or was redundant with Ground 2 if Krassner could not be considered as prior art. EX2050, 123-24. As explained above, as a 102(e) reference commonly owned with the '329 patent, the reference is subject to the safe harbor provision of 103(c). By Smedley's admission, Ground 1 eithers fails or is redundant with Ground 2.

B. Badros Does Not Enable a Viewability Test; Ground 2 Fails as to All Claims

Prior art must enable a skilled artisan to make and use the claimed invention in order to render a challenged claim obvious. *Raytheon Techs. Corp. v. Gen. Elec. Co.*, 993 F.3d 1374, 1380 (Fed. Cir. 2021). Enablement is a requirement in making an obviousness determination because, "if neither any item of prior art, nor the background knowledge of one with ordinary skill in the art, would enable one to arrive at an invention, that invention would not be obvious." *Id.* at 1381. (quoting *Minn. Mining & Mfg. Co. v. Blume,* 684 F.2d 1166, 1173 n.10 (6th Cir. 1982)). Prior art patents and publications "enjoy a presumption of enablement, and the patentee/applicant has the burden to prove nonenablement." *Apple Inc. v. Corephotonics, Ltd.*, 861 Fed. Appx. 443, 450 (Fed. Cir. 2021). The patentee can overcome the presumption by a preponderance of the evidence. *Amgen Inc. v. Hoechst Marion Roussel, Inc.,* 457 F.3d 1293, 1307 (Fed. Cir. 2006).

Here, *both* experts agree that Badros does not teach *how* to implement a viewability test. Smedley goes farther, three times admitting that he has no opinion on whether Badros teaches the element at all, let alone enables it. Sherwood opines that Badros does not enable a viewability test. EX2045, ¶ 68-69. And the great weight of the objective indicia of non-obviousness (discussed below) confirm that it was RealVu, not Badros/Google that invented the first viewability test.

The only "evidence" supporting enablement is Smedley's *ipse dixit* testimony that the mere words "actually visible to the user" in Badros or "viewed inventory" in Krassner would teach how to do a viewability test because one skilled in the art would know how to implement the test. First, The Board can and should ignore such unsupported testimony. 37 C.F.R. § 42.65(a) ("Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight."); *Unirac, Inc. v. Ecofasten Solar, LLC*, No. IPR2021-00532, 2021 WL 3116853, at *8 (P.T.A.B. July 22, 2021) ("A reasonable likelihood of unpatentability must be shown by evidence, not *ipse dixit*. As discussed above, such conclusory testimony without sufficient explanation is not persuasive.").

Moreover Sherwood – and history – contradict Smedley's unsupported testimony. The Patent Owner has demonstrated by overwhelming evidence (and

certainly more than a preponderance) that a reference like Badros (or Krassner) that does not disclose how to run a viewability test does would not enable the skilled artisan to practice the test before RMC's invention in 2009.

C. Harkins Does Not Teach a Real-Time Auction; Ground 2 Fails as to Claims 3 and 8

Claims 3 and 8 require the replacement of the viewable ad based on a replacement auction conducted in real time. The Petition admits that "Badros doesn't disclose this limitation explicitly," but argues that the limitation is taught in in two sentences from paragraph 76 of Harkins. Paper 1 at 42.

Harkins is non-analogous art focused on printing ads on credit card receipts. EX2045, ¶ 76. It does not address viewable ads in web browsers in any manner. It does not address ads displayed on user's display screens. And it also does not use the word "real time" or otherwise discuss a real-time auction to replace an ad *after* there has been a determination that the ad is within view. The two sentences relied upon in the Petition are: "a new auction for advertising in the run period subsequent to the run period of the previously-ended auction may be initiated. However, virtually any form of new auction may be initiated without departing from the scope of the present invention." Paper 1 at 42, citing EX1004, ¶ 76.

The first sentence from Harkins discloses only serial auctions – run a new auction after the run period of the previous auction is over. Harkins explains that a previous bidder may have won the ability to print ads on credit card receipts for a

specified period of time (*e.g.*, ¶ 35 criteria may include "a time period during which the advertisements will be printed."). The quoted sentence simply states that a new auction can be run when the previous time period to print ads has expired.

There is no teaching in Harkins about running the new auction in real-time at all, and certainly no teaching about displaying the winning ad as required in claim 2 (on which claim 3 depends). And because it is non-analogous art directed to a wholly different system of advertising, there could even be substantial delays between the running of the auction and the displaying of the ads (that is, the *opposite* of real-time). For example, the first advertiser could run ads for a week on credit card receipts at a bank, expiring at midnight Sunday. Harkins teaches to run a new auction when the initial ad period expires. But the banks might not open until Monday morning (or Tuesday, if there is a holiday), so the no new ads will print for hours or even days after the new auction was completed. That's not a real-time auction and there is no explanation of how a real time auction would work in Harkins.

The second sentence in Harkins is just boilerplate. Saying "any form of auction" obviously does not include an express teaching about a real-time auction.

Simply put, there is no teaching in Badros or Harkins about a real-time auction run to replace an ad. *See* Ex2045, ¶ 77. And certainly no teaching to run a

real-time auction after a determination that the ad space is viewable on a web browser. By a preponderance of the evidence, claims 3 and 8 remain non-obvious.

D. The Objective Evidence of Non-Obviousness Is Compelling

As set forth in *Volvo Penta of the Am's. v. Brunswick Corp.*: "Objective evidence of nonobviousness includes: (1) commercial success, (2) copying, (3) industry praise, (4) skepticism, (5) long-felt but unsolved need, and (6) failure of others." No. 2022-1765, at *15 (Fed. Cir. Aug. 24, 2023) (*citing Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling U.S., Inc.*, 699 F.3d 1340, 1349-56, (Fed. Cir. 2012)).[4]

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[4] Smedley had a similar but longer list in his declaration:

> Such secondary considerations include: (a) commercial success of a product due to the merits of the claimed invention; (b) a long-felt, but unmet need for the invention; (c) failure of others to find the solution provided by the claimed invention; (d) deliberate copying of the invention by others; (e) unexpected results achieved by the invention; (f) praise of the invention by others skilled in the art; (g) the taking of licenses under the patent by others and (h) the patentee proceeded contrary to the accepted wisdom of the prior art. Secondary considerations are relevant where there is a connection, or nexus, between the evidence and the claimed invention.

EX1009, ¶26.

As stressed in *Volvo Penta*, a finding of obviousness is based on properly "considering the totality of the evidence of obviousness, including the teachings of the combined refences in relation to secondary considerations." *Volvo Penta*, at *20 (*quoting Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124 (Fed. Cir. 2000) ("The ultimate determination of whether an invention would have been obvious is a legal conclusion based on the totality of the evidence.")). All involved in this IPR, the Petitioner, the Patent Owner, and the Board should be considering the purported teachings of Badros and Harkins in light of record evidence of objective indicia of non-obviousness. This is something Smedley did not do – and refused to do at his deposition. Similarly, the Petition nowhere discusses any of the objective indicia. This was a fundamental flaw in the Petition and Smedley's analysis because the burden of properly demonstrating obviousness, including in relation to secondary consideration, rests with the Petitioner. *See, e.g., Volvo Penta* at *15 (Volvo Penta "argues that the Board, in its analysis, improperly shifted the burden to Volvo Penta, forcing it to show that the claims would not have been obvious, rather than considering the evidence of secondary considerations as part of the totality of the record. Even were the Board's assignment of weight to various factors and its overall summation not overly vague, Volvo Penta further argues that they are not supported by substantial evidence. We agree with Volvo Penta that the Board's analysis of objective indicia

of nonobviousness, including its assignments of weight to different considerations, was overly vague and ambiguous."). The complete failure of the Petition to properly consider *any* objective indicia was improper.

Smedley Only Claimed to Consider the Objective Indicia When in Fact He Did Not. Importantly, the Petitioner was aware of the legal requirement of considering the objective indicia of non-obviousness when it filed the petition. As stated by Petitioner's witness Smedley, EX1009 ¶ 26. But Smedley's declaration does contain any statements or opinions about any of the objective indicia, a fact he confirmed at his deposition.

> Q. Which of the -- why don't you show me you report in this case, Exhibit 1009, where you describe consideration of any of the secondary considerations of non-obviousness
>
> A. I don't recall specifically if I have, if I did, where that would be. I'd have to search through to see whether it was there or not.
>
> Q. Well, take your time. Let me know where it is in your report.
>
> A. (Witness examines document) I don't see anywhere where I have given an opinion on secondary considerations.

EX2050, 20:7-18. Despite acknowledging that his report nowhere addresses his consideration of the objective indicia, in the very next question Smedley insists that he did consider them:

> Q. Is it your testimony that while you didn't give any opinion on objective evidence of non-obviousness, you did, however, consider it?
>
> A. Yes.

EX2050, 20:19-23. Exactly how Smedley considered the factors, however, is a mystery. He both avoided answering direct questions about his consideration and repeatedly testified he was unable to identify *any* investigation he did of any of the objective indicia, starting with long felt need:

> Q. Tell me what investigation you did to determine whether there was a long-felt but unmet need in the prior art that was satisfied by the claimed invention?
>
> A. I'm not sure I understand the question.
>
> Q. Well, that's one of the objective indicia of non-obviousness, right?
>
> A. Right.
>
> Q. You just said you considered objective indicia of non-obviousness in forming your opinions even though your report or your declaration doesn't mention them?
>
> A. Right.
>
> Q. And I'm asking you what you did to determine whether there was a long-felt but unmet need in the prior art that was satisfied by the claimed invention?
>
> A. I'm not sure how I could answer that type of question.
>
> Q. Let me make it easy for you. I don't think you did anything to investigate whether there was a long-felt but unmet need that was satisfied by the claimed invention. Is that right or am I wrong?

A. You might be wrong.

Q. Can you tell me what you did to investigate whether there was a long-felt but unmet need in the prior art?

A. So I wouldn't be able to answer that sort of question really about anything, like what specific things I did for some very specific fine-grained aspect of my analysis. It was, part of my analysis was considering the secondary considerations.

Q. And my question is how could you consider them if you didn't investigate them?

A. Well, I didn't say I didn't investigate them.

Q. Let's talk about what investigation you did do. Did you investigate whether there was a long-felt but unmet need in the prior art that was satisfied by the claimed invention?

A. As I said, I'm not going to be able to answer that type of question because I don't commit to memory every aspect of my analysis connected with each sort of fine-grained investigation that I do.

Q. As you sit here today, can you identify a single thing you did to investigate whether there was a long-felt but unmet need in the prior art that was satisfied by the claimed invention?

A. As I sit here today, I cannot identify that, no.

EX2050, 20:24-23:1. He repeated the same answer with regard to each one of the objective indicia: commercial success (*id*, 23:2-6); unexpected results (*id.*, 23:7-12); commercial praise (*id.,* 23:13-18); licensing (*id.*, 23:19-24); failure by others (*id.,* 23:25-24:8); surprise or disbelief (*id.,* 24:9-13); contrary to accepted wisdom (*id.*, 24:14-18); and copying (*id.*, 24:19-24). How he could consider factors about

which he has no recollection whatsoever is enigmatic. The Board can certainly draw an inference that Smedley did not ***properly*** consider the objective indicia, if he considered them at all.[5]

Long Felt Need, Failure by Others, Skepticism, and Commercial Praise All Weigh Significantly in Favor of Non-Obviousness. As a matter of historical fact, there is no evidence of an actual demonstration of an ad viewability test prior to the invention by Rich Media Club. As documented by the contemporaneous November 2009 blog post by David Cohen (EX2024), the reaction of internet advertising industry executive was not only one of surprise, but also of the profound impact the invention would have on the internet advertising industry.

And the RMC invention had precisely the impact Mr. Cohen foresaw. Again as a matter of historical fact, the online advertising industry coalesced

[5] Smedley's sworn testimony that he considered factors about which he has zero recollection undermines his entire testimony. If the Board concludes that his testimony about considering the factors was not credible, the Board can (and should) discount his testimony in other areas. *E.g., Oracle America, Inc. v. Google Inc.*, No. C 10-03561 WHA, at *5 (N.D. Cal. Apr. 30, 2012) (jury instruction that "a witness willfully false in one part of his or her testimony is to be distrusted in others").

around the need to replace served impressions with viewable impressions as the very measurement on which advertisers would be charged. The evidence of this historical fact is overwhelming and includes the 2013 IAB Annual Report (EX2028), advisories issued by the MRC (EX2038-EX2041), and historical webpages from the Making Measurement Make Sense initiative (EX2027, ¶ 28 & EX2029-EX2032). All of this evidence is objective, contemporaneous, reliable documents from third parties. And it all confirms both that the entire industry adopted the ad-viewability test at the heart of RMC's invention and did so only *after* RMC invented the ad-viewability test.

The evidence falls squarely within the key objective indicia. For example, the industry documentation of the need to replace the "served impression" with the "viewable impression" is quintessential "long felt need."[6] Upon learning that a

[6] Consistent with his general attitude of refusing to concede anything, Smedley refused to acknowledge that the industry's "revolutionary" shift to a viewable impression standard demonstrated a "felt need." It took pages of testimony even to get him to acknowledge that the Making Measurement Make Sense initiative took place and that the group's stated first goal was, in fact, to adopt a viewable impression standard. EX2050, 71-78. At the end of this part of his testimony, he declined to express an opinion with regard to felt need. EX2050 78:12-21.

viewable impression was technically possible, the industry came together to adopt it as a standard. The industry ***felt the need*** to change to a standard based on RMC's invention. This factor is of significant weight that the invention was not obvious.

The same documents demonstrate ***failure by others***. Against the backdrop of an industry pressing for a viewable impression standard – and engaging the MRC to oversee its adoption – the MRC had to issue an advisory against adopting the standard because of failure by others:

> Based on large-scale tests of real advertiser campaigns as detailed within, while capabilities vary, the ability to consistently measure whether impressions are viewable is a challenge that must be overcome by most of the vendors before finalizing a new online advertising currency definition.

EX2017. Two years after it accredited RealVu's solution, the MRC ran a test with five different vendors with 3 billion ad impressions, and found viewability test results that varied from 0 to 77%. *Id.* The MRC's independent, documented failure by others is weighs significantly in favor of finding that the invention was not obvious.

David Cohen's ***skepticism and surprise*** upon seeing RealVu operational viewability test is additional evidence that weighs significantly in favor of a finding of non-obviousness. He would not have expressed those opinions if

Badros/Google has actually presented a viewability test solution in 2005 instead of RealVu doing it in 2009.

And the industry recognition of RMC/RealVu's contribution includes other examples of ***commercial praise***, including George Ivie's recognition that "***RealVu essentially invented viewability***" EX2035. And when RealVu's accreditation was renewed, George Ivie was quoted as saying "RealVu was the ***first company*** to apply for and gain MRC accreditation for a viewability solution, and in so doing, it helped to ***revolutionize*** the direction of digital advertising. Its latest accreditation achievements demonstrate RealVu's continued commitment to industry leadership." EX2057. The IAB used similar language in its 2013 Annual Report, indicating that the change to a viewable impression standard was "revolutionary." EX2028. The industry credits RMC/RealVu with inventing a viable viewability test that led to a ***revolution*** in the way ads were accounted for. This commercial praise and industry recognition is yet another factor that should be given significant weight to find the invention non-obvious.

The claims at issue in this case use the viewability test as a necessary predicate to replacing a viewable ad with a new ad. The addition of the "ad replacement" element in the claims, however, does not lessen the relevance of these objective indicia of non-obviousness. It's literally impossible to *replace* a viewable ad with a new ad if no test for viewability exists. Petitioner relies on

Badros (and the two words "viewed inventory" from Krassner) to demonstrate that a viewability test existed in the prior art. This historical development of the viewable impression – the need for it, the fact that others failed to do it, the surprise at RealVu's solution, and the industry praise for RealVu – all demonstrate that RealVu's invention was not obvious.

Commercial Success, Licensing, and Copying. Here, there is a presumption of nexus because both the Petitioner's and the Patent Owner's services embody the claimed invention and are co-extensive with it. Patent Owner has submitted claim charts demonstrating how both its own service and the services provided by Duration are covered by the claimed inventions (and indeed, are coextensive with them). EX2046-EX2049. Independent of the presumption, the claim charts submitted by Patent Owner demonstrates the nexus between the claimed invention and these objective indicia.

Nexus and Commercial Success of RMC's products. RealVu's content rendering and control technology embodies the claimed invention and is coextensive with it. EX2026, EX2045, ¶ 94, EX2046, Since the time the solution was introduced, RealVu has generated [redacted] from its content rendering and control service – the same service Duration used when it entered its cooperation agreement with RealVu. EX2026.

Nexus and Commercial Success of Duration's products. Whether it was using RealVu's content rendering and control product or its own copy of that product, Duration's products embody the claimed invention and are coextensive with it. EX2026, EX2045, ¶ 93-94, EX2047-EX2049. Since the time Duration started selling second print ads, first with RealVu's service and then with the one it copied, it has generated [redacted] from its second print business, at least [redacted] of which is solely attributable to U.S. activity. EX2055, Response to Interrogatory Number 1 (unverified).[7]

Nexus and Licensing by Duration of RMC's Solution. In 2018, Duration and RealVu entered into a Cooperation Agreement under which RealVu supplied the underlying technology Duration needed to offer its product to its customers. EX2025, EX2009. As set forth in the Cooperation Agreement, RealVu provided the technology to Duration "to screen ads purchased in real time for viewability leading to a high conversion rate to viewable impressions." EX2009, RMC000001. RealVu had been doing that for years before entering the Cooperation Agreement,

[7] Both of Duration's responses to the Board-approved interrogatories were unverified when they were produced. At 3:29 p.m. on the day the response is due, Duration indicated that the verifications would not happen in time for this filing.

and because Duration had no technology of its own, it needed RealVu's technology to sell ad space that had been pre-screened for viewability. EX2025, ¶ 6. Duration's business of selling "second print" ads, or ads that would only appear in ad spaces that had been determined to be in the viewable portion of a user's internet browser was completely dependent on using RealVu's technology to do so. *Id.* RealVu's licensing of its technology to Duration included use of the invention described in the '329 patent.

Nexus and Copying by Duration. After initially licensing RealVu's solution, Duration abruptly declined to renew the Cooperation Agreement it had previously indicated it would renew. EX2025, EX2026, EX2051, EX2052. As it turns out, while stringing RealVu along with the promised renewal, Duration had been copying the functionality of the services it had previously purchase from RealVu. EX2025. The result is a copied system.

After the Board directed Duration to answer an interrogatory about its copying, Duration predictably did not provide answers about copying the ***functionality*** of RealVu's system. It instead asserted that it did not copy RealVu's ***code***. But RealVu never accused Duration of copying the backend code; the issue is whether Duration copied RealVu's ***system*** of running a real-time auction to replace a viewable ad. This was demonstrated in the Tchibirev Declaration (EX2025) and its accompanying exhibits (EX2013 and EX2014), and the

interrogatory provided Duration an opportunity to explain how its system differed from RealVu. The Petitioner's decision to focus on code as opposed to features is an admission that the ***features*** between the two products are not different.

As the Federal Circuit explained in *Volvo Penta*, a determination of copying can be strong evidence of nonobviousness:

> Further, although copying is not alone dispositive of nonobviousness, we have usually considered a determination of copying to be "strong evidence of nonobviousness." *Panduit Corp. v. Dennison Mfg. Co.*, 774 F.2d 1082, 1099 (Fed. Cir. 1985)*, cert. granted, judgment vacated on other grounds*, 475 U.S. 809 (1986) ("That Dennison, a large corporation with many engineers on its staff, did not copy any prior art device, but found it necessary to copy the cable tie of the claims in suit, is equally strong evidence of nonobviousness."). Indeed, we have found that "[o]bjective considerations such as failure by others to solve the problem and copying may often be the most probative and cogent evidence of nonobviousness." *Advanced Display Sys. v. Kent State Univ.*, 212 F.3d 1272, 1285 (Fed. Cir. 2000) (cleaned up); *see also Windsurfing Int'l, Inc. v. AMF, Inc.*, 782 F.2d 995, 1000 (Fed. Cir. 1986), *cert. denied*, 477 U.S. 905 (1986) (reasoning that "copying the claimed invention, rather than one in the public domain, is indicative of non-obviousness"). In light of the Board's own findings that copying occurred, its assignment of only "some weight" was not supported by substantial evidence.

Volvo Penta, at *16 (Fed. Cir. Aug. 24, 2023).

On top of the demonstrated copying or RealVu's product, there is also the curious matter of Duration copying RealVu's patent. RealVu demonstrated Duration's plagiarism to such an extent that Duration made no attempt to deny it, instead making the unsupported lawyer argument that "such copying is not unusual." Paper 31. Duration also objected to the relevance of the plagiarized patent, on the theory that it's copying of products, not patents, that matters. As recognized in *Volvo Penta*, however, the Board found persuasive evidence of copying because "Brunswick's *own internal documents* indicate that the [Patent Owner's] Forward Drive Product guided Petitioner to design the [Petitioner's copied] Bravo Four S *in the first place*." *Volvo Penta*, at *15-16. In short, a party's documents describing its system are relevant evidence of copying. Here, Duration's patent describes its system, so much so that Duration lists the patent on its website to comply with the marking requirement. EX2022, EX2023. But Duration's patent also plagiarized Rich Media Club's, meaning that the evidence of copying of the patent also evidences copying of the product, and the patent is the only document available that describes how Duration's system works.[8]

[8] As of the date this Response was due, Duration Media has not produced any of its internal documents in parallel District Court actions. They may well show

E. Under the Totality of the Evidence, The Claims are Not Obvious

Volvo Penta explains that the way the Petitioner handled objective indicia – that is, by ignoring it completely – is improper. Proper obviousness analysis requires "considering the totality of the evidence of obviousness, including the teachings of the combined references *in relation to secondary considerations*." *Volvo Penta* at *20 (emphasis added). It is not correct to think of obviousness analysis as considering the teachings of the combined references, subject to rebuttal by the object indicia. It is the totality of the evidence – the teachings of the combined references and evidence of objective indicia of nonobviousness – that must be considered as a whole. That is why the Federal Circuit also determined that the Board failed to properly consider the *sum* of the objective indicia in *Volvo Penta*:

> Even if its assignment of weight to each individual factor was supported by substantial evidence ('some weight' for copying, industry praise, and commercial success; and 'very little weight' for skepticism, failure of others, and long-felt but unsolved need), it stands to reason that these individual weights would sum to a greater weight. The Board does not discuss the summation of the factors at all other than to say, without

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additional evidence that Duration Media deliberately copied RealVu's system as the preponderance of the currently available evidence demonstrates.

> explanation, that they collectively 'weigh[] somewhat in favor of nonobviousness.' *Id*. That is not sufficient to sustain its determination.

Volvo Penta at *19-20 *(citing Pers. Web*, 848 F.3d 987 at 993; *In re Nuvasive, Inc.*, 842 F.3d 1376, at 1385).

In this case, the totality of the evidence on obviousness is as follows:

- Badros includes a statement that "impression module 38 may determine whether an ad on a web page of a user's browser is actually visible to the user," but Badros does not teach *how* the test for viewability could be done in 2005.
- Petitioner's witness Smedley, who knows nothing about the internet advertising industry, does not explain how a viewability test could have been performed in 2009 in his declaration.
- Smedley also declined to explain how any aspect of a viewability test could have been performed in 2009 during his deposition.
- The sole "evidence" that Badros teaches how to do a viewability test is Smedley's unsupported assertion that one of skill in the art would know how to program a viewability test in 2005 simply upon reading the statement in Badros. This *ipse dixit* statement is insufficient to establish obviousness.

- Patent Owner's expert Sherwood, who does have experience in internet advertising, agrees that Badros does not teach how to do a viewability test and he disputes that one of ordinary skill would know who to program the test in 2005 upon reading Badros.
- Unlike Badros, the '329 patent has express teachings, including computer code, on how to program a viewability test.
- Unlike Badros/Google – and consistent with its disclosure of an actual viewability test – RealVu developed and demonstrated an operational system showing how its viewability test worked in 2009.
- When RealVu demonstrated its system to David Cohen, a respected ad industry executive who is now the President of the IAB, he reacted with surprise and predicted the invention "could change everything" as preserved in his contemporaneously written blog post.
- RealVu's system (not Google's) became the first one accredited by the MRC in March of 2010.
- While RealVu's system worked, the fact that other systems did not work lead the MRC is issue an advisory in 2012 against moving to a viewable impression standard despite industry-wide pressure to adopt one.
- Ad industry executives considered the viewable impression to be "revolutionary" even as late as 2013.

- The MRC's independent testing confirmed others failed to develop working systems more than 5-7 *after* the Badros reference.
- Google's viewable impression system would not be accredited by the MRC until 3 years *after* Rich Media Club's (and 8 years after Badros).
- Industry executives including George Ivie publicly credit RealVu with having invented the viewable impression.
- Replacing viewable ads with new ads based on real-time auctions was not taught by any reference of record.
- In an embodiment coextensive with claims 1, 2, 3, 6, 7 and 8, RealVu achieved commercial success with its real-time auction for replacement of viewable ads system, generating [redacted] in revenue.
- The Petitioner licensed RealVu's system to operate its own real-time auction for replacement of viewable ads system, a product that is also coextensive with claims 1, 2, 3, 6, 7 and 8.
- The Petitioner's products making using of the invention (whether licensed from RealVu or copying its product) that is coextensive with claims 1, 2, 3, 6, 7 and 8, was also commercially successful, generating [redacted] in revenue.
- Rather than continue to pay RealVu license fees, the Petitioner copied the functionality of the claims 1, 2, 3, 6, 7 and 8 in its own product.

- Petitioner also plagiarized the Patent Owner's patent to claim RealVu's invention as its own, another tacit admission that RealVu's invention was novel.

IX. Conclusion

Based on the totality of the evidence – the teachings of the references *in relation to* secondary considerations – the Board should conclude that none of the challenged claims are obvious.

Respectfully submitted,

Dated: December 6, 2023

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CERTIFICATE UNDER 37 CFR § 42.24(d)

Under the provisions of 37 CFR § 42.24(d), the undersigned hereby certifies that the word count for the foregoing Patent Owner's Preliminary Response totals 13,744 which is less than the 14,000 words allowed under 37 CFR § 42.24(b)(1).

Dated: December 6, 2023

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on December 6, 2023, a complete and correct copy of the foregoing PATENT OWNER'S RESPONSE and EXHIBITS was served via electronic mail on the following counsel of record for Petitioner:

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