

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Duration Media LLC
Petitioner,

v.

Rich Media Club LLC
Patent Owner.

US Patent No. 11,741,482
Case TBD

Ex-1082

DECLARATION OF DR. MICHELE MADANSKY

1) Materials Considered

1. I have considered the following documents in preparing my declaration:

Ex. No.	Description
1001	U.S. Patent No. 11,741,482 (“’482 Patent”)
1002	U.S. Patent No. 8,135,616 (“Callaghan”)
1003	U.S. Publication No. 2007/0265923 (appl. no. 11/803,779) (“Krassner”)
1005	International Publication No. WO2006138400A1 (“Badros”)
1006	U.S. Publication No. 20050177401 (“Koeppel”) (’953 IPR Ex-1025)
1011	Declaration of Trevor Smedley, Ph.D.
1012	C.V. of Trevor Smedley, Ph.D.
1018	International Publication No. WO2007089082A1 (“Seo”)
1017	Duration Media Response to ROG 2 (from ’953 IPR Ex-20561026)
1019	Screenshot of publicly available Assassin’s Creed Webpage source code
1020	U.S. Patent No. 6,477,575 (“Koeppel ’575”)
1021	MRC’s Viewable Impression Advisory (Nov. 14, 2012) (’953 IPR Ex-2018)
1022	Press - Duration Media (’953 IPR Ex-2022)
1023	Patent Information - Duration Media (’953 IPR Ex-2023)
1024	David Cohen - Curious Thoughts from Curious Minds: This Could Change Everything - David Cohen – MediaBizBloggers (’953 IPR Ex-2024)
1025	U.S. Patent No. 6,477,575 (“Koeppel ’575”)
1026	Smedley Deposition Exhibit - Media Ratings Council Accreditation Letter (April 13, 2010) (’953 IPR Ex-2017)
1027	Declaration of Igor Tchibirev #2 (Under Seal) (’953 IPR Ex-2026)
1028	Declaration of Alan Edwards (’953 IPR Ex-2027)
1029	Smedley Deposition Exhibit - IAB Annual Report 2013 (’953 IPR Ex-2028)
1030	Smedley Deposition Exhibit - Measurementnow.net homepage from Internet Archive 7-21-12 (’953 IPR Ex-2029)
1031	Smedley Deposition Exhibit - Measurementnow.net FAQs from Internet Archive 7-22-12 (’953 IPR Ex-2023)

1032	Smedley Deposition Exhibit - Measurementnow.net Who's Involved from Internet Archive 7-22-12 ('953 IPR Ex-2031)
1033	Smedley Deposition Exhibit - Measurementnow.net Benefits from Internet Archive 7-22-12 ('953 IPR Ex-2032)
1034	IAB - Our Story ('953 IPR Ex-2033)
1035	Media Rating Council homepage ('953 IPR Ex-2034)
1036	Smedley Deposition Exhibit - Volunteer Landing ('953 IPR Ex-2035)
1037	Smedley Deposition Exhibit - Think with Google – See How Viewability is Measured ('953 IPR Ex-2036)
1038	Smedley Deposition Exhibit - Google Active View reporting metrics ('953 IPR Ex-2037)
1039	MRC's Update to Viewable Impression Advisory (June 12, 2013) ('953 IPR Ex-2038)
1040	MRC Accredited Viewability Verification Disclosure ('953 IPR Ex-2039)
1041	MRC Viewable Impression Advisory Update, November 2013 ('953 IPR Ex-2040)
1042	MRC Lifts Viewable Impression Advisory for Display Advertising (March 31, 2014) ('953 IPR Ex-2041)
1043	RealVu Revolutionizes Internet Advertising Measurement With the Viewable Impression ('953 IPR Ex-2042)
1044	Expert Declaration of Robert J. Sherwood (Under Seal) ('953 IPR Ex-2045)
1045	Deposition Transcript of Trevor Smedley 10-25-23 ('953 IPR Ex-2050)
1046	IAB 2004 Ad Guidelines ('953 IPR Ex-2053)
1047	Screenshots - Viewability Panel - IAB Ad Ops Summit ('953 IPR Ex-2054)
1048	MRC Accreditation Renewal Press Release ('953 IPR Ex-2057)
1049	Lume – Display Ad Tech Landscape ('953 IPR Ex-2058)
1050	DoubleVerify Aims to Police the Online Advertising World ('953 IPR Ex-2059)
1051	David Evans - The Online Advertising Industry: Economics, Evolution, and Privacy ('953 IPR Ex-2060)
1052	Harvard Business Review - The Dark Underbelly of Online Advertising ('953 IPR Ex-2061)
1053	Patent Owner Response "POR" ('953 IPR, Paper 35)
1054	Igor Deposition transcript ('953 IPR Ex-1020)

1055	Alan Edwards Deposition Transcript ('953 IPR Ex-1021)
1056	Robert Sherwood Deposition Transcript ('953 IPR Ex-1022)
1057	US Patent No. 6,317,782 ("Himmel") (titled "Method and apparatus for detecting actual viewing of electronic advertisements," priority 1998) ('953 IPR Ex-1028)
1058	US pub. no. 20080222503 ("Sandige") (titled "Rendering of two-dimensional markup messages," priority 2007) ('953 IPR Ex-1029)
1059	US pub. no. 20060155615 ("Loo") (titled "Object placement within computer generated multidimensional environments," priority 2005) ('953 IPR Ex-1030)
1060	Overview of Viewability and Active View - Google Ad Manager Help ('953 IPR Ex-1033)
1061	US Patent No. 5,778,372 ("Cordell") ('953 IPR Ex-1034)
1062	US Patent No. 6,327,619 ("Blumenau") (titled "Metering of internet content using a control," priority 1998) ('953 IPR Ex-1035)
1063	ComScore v. MOAT complaint ('953 IPR Ex-1036)
1064	Audience 2.0_ Time - Alenty - Web 2.0 Marketing ('953 IPR Ex-1038)
1065	Alenty analyzes the visibility of advertisements on the Internet ('953 IPR Ex-1039)
1066	AppNexus Buys Paris-Based Viewability Firm Alenty ('953 IPR Ex-1040)
1067	Ad Viewability Debate Disrupts the Marketplace
1068	Need the list of Auditors for MRC accreditation. Adops ('953 IPR Ex-1042)
1069	Moat Accreditation ('953 IPR Ex-1043)
1070	DoubleVerify Accreditation ('953 IPR Ex-1044)
1071	Integral Ad Science Accreditation ('953 IPR Ex-1045)
1072	Viewability Has Arrived_ What You Need To Know To See Through This Sea Change ('953 IPR Ex-1046)
1073	C.V. of Dr. Michele Madansky ('953 IPR Ex-1047)
1074	MRC Announces Changes to Accreditation Statuses of Comscore Digital Measurement Products ('953 IPR Ex-1048)
1075	Ad Formats: from concept to award winning ('953 IPR Ex-1049)
1076	DoubleVerify Raises \$10 Million in Series B Funding DoubleVerify ('953 IPR Ex-1050)
1077	IAB_ Internet_ Advertising_ Revenue_ Report_ Full_ Year_ 2021 ('953 IPR Ex-1051)

1078	Programmatic Ad Revenues Totaled \$10.1 Billion in 2014, According to First-Ever IAB Programmatic Revenue Report ('953 IPR Ex-1052)
1079	3MS Initiative Releases Five-Part Digital Marketing Measurement Solution ('953 IPR Ex-1054)
1080	A History Of Programmatic And The Era Of Control _ AdExchanger ('953 IPR Ex-1055)
1081	MRC-Viewable-Ad-Impression-Measurement-Guideline ('953 IPR Ex-1056)
1083	The Decade of Display That Wasn't 2007 – 2017 ('953 IPR Ex-1023)

2) Background

2. I am a marketing research consultant working primarily with digital brands and have been involved in the online advertising industry since its inception. In 1995 I became the first Interactive Generalist for BBDO, a major full-service advertising agency. At the time BBDO had a partnership with CompuServe, and I educated clients about interactive marketing including advertising on CD Roms, closed platforms like AOL and CompuServe as well as the World Wide Web. My PhD dissertation, “Traditional Ads in an Interactive Environment,” was the first PhD dissertation focused on online advertising. I continued to work in online advertising at Grey Advertising with digital advertising until 2003.

3. From 2003-2007 I served as VP Global Market Research at Yahoo. In that capacity I supported research to support all aspects of Yahoo’s business including product and ad sales. As a consultant for the past 16 years I have worked with dozens of online publishers supporting their advertising sales teams, including measuring the impact of online advertising. My full resume is attached.

3) The person of ordinary skill in the art (“POSA”)

4. I agree with Dr. Smedley that the person of ordinary skill in the art does not need advertising experience. As discussed in this declaration and Dr. Smedley’s two declarations, the prior art clearly distinguished between served and viewed impressions. Even if the POSA did require advertising experience, it is my opinion

that Dr. Smedley accurately characterized Badros and other prior art as disclosing viewability tests¹. The concept of viewable impressions was understood before 2005.

5. In the online advertising industry during the time period from 2005-2009, there was a clear understanding of the difference between served impressions and viewable impressions. People understood that not all ads that were served were viewable for several reasons including users not scrolling to the part of the page where the ad was displayed or due to a technical issue which prevented the ad from loading properly.

6. Yahoo had pricing sheets for different ad units, and they varied based on placements on a page. For example, an ad that was on the top or the top right part of a webpage would almost always be viewed if the webpage loaded. Some of the ads lower down on the page might not have been viewed if users did not scroll far enough down on the page.

7. Ad units in more prominent positions would warrant higher CPMs (cost per thousand impressions) than those which were considered ‘below the fold’ (or

¹ I understand that the Patent Owner defined a viewability test as follows: “(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.” Ex-1053, 3.

only viewable if somebody scrolled down). The ecosystem righted itself based on supply and demand, and Yahoo and other publishers had teams that focused on pricing specific ad units/placements.

8. The most valuable inventory was on the Yahoo homepage, and Yahoo started offering “home page takeovers” where advertisers could create custom ads for movie premieres, new product launches or other marquis events (Chaibi: Ex-1075). Badros references this in his patent “Large ad spaces at the top of a page typically command a higher price from advertisers due to their increased likelihood of attracting the users attention and communicating an advertiser’s message.” (source: Ex-1005).

9. Widespread discussion of viewability as an industry hot-button did not arise until 2014 (source: Ex-1067), but anybody in the industry already understood since before 2005 that viewability could be measured.

4) Prior Art in Viewability Measurement

10. The concept of a viewable impression would have been well known to any POSA who was involved in online advertising at the time. The discrepancy between served impressions and viewable impressions was well understood (sites don’t load properly or the users don’t scroll far enough down the screen to see the ad).

11. Alenty was a company that had a prior-art viewability product on the market. The founders discuss having used online panels to measure ‘visibility’ prior to 2007 and with the rise of Web 2.0, “The time spent on content is the period during which the content is visible AND the user of the computer is active.” Ex-1064; A September 2008 press release’s headline read “Alenty offers a technology to measure the actual visibility of online banner ads” and states that it was being sold since the beginning of 2008, Ex-1065; A 2014 press release on the sale of Alenty to App Nexus notes that there are many players in the space, but notably does not include RealVu. “Paris-based Alenty was founded in 2007 by CEO Laurent Nicolas and CTO Nicolas Thomas. It claims to have been the first company to measure in-view impressions. Since then, its niche has been flooded with competitors, including comScore, Google, C3 Metrics, DoubleVerify and Integral Ad Science. In all, 11 viewability vendors have been accredited by the MRC.”; Ex-1066.

12. In fact, the Patent Owner’s so-called “viewability test” was well known for at least a decade prior to the 2009 priority date. US Patent No. 5,778,372 (“Cordell” - Ex-1061) (titled, “Remote Retrieval and Display Management of Electronic Document With Incorporated Images,” priority 1996), identified a way to measure whether an ad image was visible on a computer screen in order to serve another ad if the ad was not visible. The abstract refers to “downloading of embedded

images of the document by their incorporation in the currently visible portion of the electronic document.”

13. US Patent No. 6,327,619 B1 (“Blumenau” Ex-1062) (titled “Metering of Internet Content Using a Control”, priority 1998) is the basis for Nielsen Netrating popular online measurement service and sets up the concept of viewability and time that an ad was viewable. “The control 106 can also keep track of the exposure over time for each metered image. Accordingly, as the metered content is scrolled into or out of view, the control 106 maintains, for example, a counter of the on-screen exposure time of the metered content.” Ex-1062, 6:20-24. In 2012, ComScore asserted Blumenau against a defendant’s “Ad Viewability product.” Ex-1063, ¶30.

14. US Patent No. 8,135,616 (“Callaghan” Ex-1002, priority 2008) discloses that “Embodiments are configured to provide browsing and other functionality that can be used to provide viewable data based in part on a current viewable space of a browser interface.” Ex-1002, Abstract. I have reviewed Callaghan and understand it to also disclose a viewability test.

15. US Patent No. 6,317,782 (“Himmel” Ex-1057) (titled “Method and apparatus for detecting actual viewing of electronic advertisements and transmitting the detected information,” priority 1998) describes using relational pixels to determine whether an ad is viewable on a computer screen for an online service provider. Figure 6 shows how you could measure whether an ad was “in-view” or

out of view based on the scrolling behavior of a user. The title of the patent is “Method and Apparatus for Detecting Actual Viewing of Electronic Advertisements and Transmitting the Detected Information.”

16. U.S. Publication No. 2005/0177401 (“Koeppel” Ex-1006) (titled “System and method for performing Web based in-view monitoring,” priority 2000) illustrates in Figures 9a, 9b and 9c how the coordinates of the ad displayed can be compared to the viewable pixels on the screen to measure whether the ad itself is viewable. “In order for the client side script to determine whether a component is in view to a user, detailed positional information is collected and stored in client side data store 160.” Ex-1006, ¶86. This is exactly the ‘geometry’ which Edwards cites in his deposition. “Determining whether a predefined area of an ad content display play that is used to display an advertisement is in view. Yeah, you need geometry there.” Ex-1055, 32:6-9.

17. By 2005, viewable time was well established. US Publication No. 2006/0155615 (“Loo” Ex-1059), “One common metric for measuring relative advertising effectiveness, known in the art for both physical and electronic advertising, is based on the amount of time an object and/or advertisement is displayed or exposed for “viewing” by a user. Ex-1059, ¶4.

18. Wild Tangent, an online gaming platform discussed viewability for in-game ads in their 2007 patent application. “A number of specific metrics may be

tracked for each textured/rendered message. Metrics may include, for example, information about the size of the message, a relative 3D alignment of the message to the viewing screen, the percentage and/or portion of the message that is visible, a time the message was visible, whether or not the message was visible to the user, and others. US Publication No. US 2008/0222503 A1 (“Sandige,” Priority 2007); also discloses a viewability test. *See e.g.*, Ex-1058, ¶64.

19. Based on the prior art and my experience during the 2005-2009 period, it is clear that being able to measure when an ad was viewable to web users, the percentage of the ad that was in view and the duration of time that the ad was in view was well established a decade prior to the ’482 patent.

5) Badros Viewability Test

20. Sherwood, in his expert report contends that “there is no disclosure in Badros about how to actually run a viewability test” (Ex-1044). On the contrary, Badros references viewable impressions “Impression module 38 may also determine more specific and accurate information about an impression. For instance, impression module 38 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 which the document is actually visible to the user” (Ex-1005, ¶69).

21. Sherwood further notes that “the prior art references deal almost exclusively with the concept of displaying and serving impressions rather than the

viewability of impressions.” (Ex-1044). Himmel and Koeppel both specifically measure the coordinates of the ads on the screen to ensure they are viewable. Blumenau’s method captures actual viewing and time spent viewing. Blumenau’s patent is applicable on a panel of known internet users, and clearly measures actual viewing by these end users. Therefore, the person of ordinary skill in the art would have understood that Badros was referring to viewable impressions, not just served impressions.

6) The Industry was not focused on viewability

22. By 2003, major brands were spending significant budgets on online advertising and wanted to ensure that these budgets were driving key business metrics. Yahoo leveraged (and pioneered) many techniques to show advertisers that their campaigns were making an impact. These included:

23. **Brand Lift Studies** - surveying Yahoo users who were exposed to a campaign and those with the same characteristics who were not exposed to the campaign to show that exposure increases brand awareness, purchase consideration and positive brand perceptions

24. **ROI Studies** - Yahoo built partnerships with research vendors to show that exposure to ads on Yahoo drove offline sales. Below are some of such partnerships that Yahoo had:

- Consumer Direct (Nielsen) - CPG products purchased in store

- comScore - Retail Direct - purchases at retailers
- JD Power - automotive
- IMS - Pharmaceuticals

25. **Marketing Mix Modeling** - Yahoo built a relationship with MMA (now part of IPSOS) to evaluate the relative ROI of Yahoo compared to other marketing investments (e.g., TV, print, PR). Marketing mix modeling has been used for over 40 years by CPG brands and retailers to help determine optimal budget allocations.

26. The majority of brand advertisers were purchasing advertising based on a CPM basis (cost per thousand impressions). These brand lift and ROI studies were sufficient for advertisers to determine whether they should continue to advertise on Yahoo.

27. Direct Advertisers were also optimizing their campaigns based on readily available metrics. Ad agencies developed dashboards for their clients that looked at clickthrough rates and conversions (online sales, registrations, etc.). Ad placements would be optimized based on underperforming placements (low clickthroughs, low conversion rates). If a particular ad placement - e.g., Yahoo Finance bottom of the page was underperforming, the clients would not renew that specific ad placement.

28. Although the concept of a ‘viewable impression’ was understood, Yahoo (and other publishers) did not need to measure viewability because advertisers were measuring the return on investment from their online advertising campaigns and were able to adjust pricing and placements based on performance.

7) Industry Interest in Viewability was Not Based on RealVu

29. The patent owner’s response contends that the industry interest in viewability was directly brought about based on RealVu’s development of a viewability measurement. “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” POR, 28. Not only was viewability a known concept, but there were many other industry factors that drove the interest in viewability. RealVu’s timing with MRC accreditation was fortunate for them, but by no means caused the industry shift to viewability measurement.

30. The rise of programmatic advertising was the biggest factor that impacted the interest in viewability. Programmatic ads are purchased through demand side platforms (DSPs) where advertisers or their agencies can specify where they want ads to run (e.g., beauty sites, news sites, characteristics of users they want

to reach and desired CPM or Cost Per Click). This differs from direct purchasing of online ad inventory from a yahoo sales rep and New York Time sales rep. When purchasing directly, advertisers knew where their ads were being placed (including where on the page they would run). With programmatic advertising, advertisers could have their ads served on 1,000s of ‘long tail’ sites and they could not guarantee where they were placed.

31. Ex-1083 (page 1) explains that even premium publishers were leveraging programmatic ad sales to sell their lower quality inventory. “The unsold inventory was cheap and became easy to buy. Nobody really knew or cared why this crappy inventory was being purchased.” Ex-1080 also references some of the problems with ads that were served on ‘long-tail’ websites (e.g., Inqwire, Hula, Smiley Central). Demand Side Platforms really started in 2011-2012 and “To be doing programmatic at the time was synonymous with buying remnant inventory at a discount versus traditional insertion-order (IO) buys.” (Ex-1080, 2).

32. In 2014 programmatic advertising represented “approximately 52 percent of display-related advertising in 2014 (\$19.6 billion)” (Ex-1078). By 2021 programmatic advertising grew to 89% of non-search ad revenue (Ex-1077). It was this growth from 2011 to 2014 in programmatic advertising buys (where advertisers did not have as much control over their ad placements) that drove the industry to talk about viewability. This puts into context RMC’s reported revenue over an

approximately 10-year period and how it was a miniscule fraction of total advertising revenue. Ex-1044, ¶93.

33. A few of the major players in viewability (Oracle MOAT (Ex-1069), DoubleVerify (Ex-1070), Integral Ad Science (Ex-1071)) did not receive MRC accreditation until much later (2013-2016) but were commercially successful even before they were accredited.

34. This is consistent with Mr. Sherwood's testimony, which only reported revenue for RealVu after 2015. Ex-1044, ¶ 93. Accordingly, there was no long-felt need for a viewability test until programmatic advertising became more prevalent.

8) Industry was Slow to Adapt

35. In 2011, several advertising industry organizations partnered to announce the 3MS Initiative (Making Measurement Make Sense). One of the goals was to "move from a 'served' impression standard to a 'viewable' impression standard." (Ex-1079, 1). This initiative took three years to come up with a definition for a viewable impression (Ex-1081). The MRC followed suit and in Nov 2012 issued a statement that the "MRC believes it is premature to transact on viewability in advance of a fuller understanding of the points detailed in the following paragraphs." (Ex-1039, 1) and in June 2013 issued another release "MRC believes it is still premature at this time to transact on viewability, although much progress has been made on the issues that led us to issue our original Advisory in November

2012.” (Ex-1039). The MRC did not lift the viewable impression advisory until June 2014 (Ex-1042). The fact that the industry was slow to come up with industry-wide definitions for what constituted a viewable impression was perhaps the largest factor impacting RealVu’s business. By the time the industry ratified a definition of a viewable impression and the MRC released their advisory, there were many other viewability measurement companies which had been accredited by the MRC (comScore vCE, DoubleVerify, Google Active View and spider.io) (source: Ex-1040), and several had much larger viable businesses.

9) MRC Accreditation was nice to have (at best)

36. On the agency side (at BBDO and Grey), I had never heard of the MRC or understood the significance that the MRC had played in auditing traditional media measurement. In the early days of online advertising there were many research vendors that were trying to measure online audiences (monthly unique visitors and pageviews) as well as the demographic composition of online publishers. Agencies like BBDO and Grey subscribed to audience measurement systems based on their methodology, sample sizes and pricing models, and did not consider MRC Accreditation when subscribing to tools like comScore Media Metrix, and Nielsen Netratings.

37. In fact, as of April 2022, comScore, one of the largest online measurement tools was on an “accreditation hiatus” with the MRC (source: Ex-

1074). MRC accreditation is a ‘nice to have’ for ad tech vendors, but by no means a necessity for publishers and agencies to adopt these technologies.

38. In speaking to many research vendors who have considered or gone through the MRC accreditation, they have mentioned how time consuming and costly the auditing and accreditation process is. A discussion on reddit related to the MRC under the title “Need the list of auditors for MRC accreditation” (Ex-1068) includes the following quotes:

- “The point of MRC Accreditation is to get the auditors paid. You won't find cost effective auditors, because it would kill one of their cash cows. What you should do is opt out of MRC accreditation in the first place.”
- “Couldn't agree more with this statement. We are going through the process now (and have been for more than 1.5 years) and I cannot express my disdain towards the audit team working on our accreditation. The entire engagement has been lethargic, unorganized (on their end), and overall a huge money pit.”
- “On top of this, you are required to get audited every year after you obtain accreditation and that annual cost is quite expensive as well.”
- “If you can prove your tech works - do not pay the mafia.”

39. In all of my full-time roles and as a consultant, I made recommendations based on the technology that would work best for my company or clients’ needs, and did not pay attention to MRC Accreditation. For new or unknown vendors, MRC Accreditation is a nice badge to put on sales collateral, but it by no means signifies that the product will be a leader in its category. For start-ups that are

bootstrapping their companies, MRC accreditation can feel like an unnecessary luxury. Once the technology has received more acceptance and funding, companies are more likely to pursue accreditation.

10) Summary

40. Being able to measure whether an online ad was viewable to a web user, as well as being able to measure the time that an ad was viewed was well established by the early 2000s. The industry was not focused on ‘viewability’ because there were other ways of optimizing campaigns based on performance metrics, branding metrics or return on investment. In 2004, 11 websites/organizations represented two-thirds of total industry revenue (source: Ex 2053).

41. As programmatic buying increased over time, the number of sites in a typical ad buy increased significantly and ad buyers did not have as much understanding as to where their ads were being placed. Ad viewability became an industry wide issue in 2012-2014 and the IAB aligned on a definition of viewable impressions in March 2014. (source: Ex-1072).

42. RealVu had gone through the accreditation process with the MRC earlier than other vendors, but this by no means meant that they had the best or only solution for measuring viewability. MOAT, DoubleVerify, comScore and others were able to make great in-roads to measuring viewability in the interim.

43. Although I did not cite directly to the following documents in my declaration, I did review and consider them when forming my opinions: Exs-1021-38, Ex-1041, Ex-1043, Exs-1045-56, Ex-1060, Ex-1073, and Ex-1076.

44. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Respectfully Submitted

/Michele Madansky/

Michele Madansky

Executed on: __May 16, 2024__