

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

THE NIELSEN COMPANY (US), LLC,)	
)	
Plaintiff,)	
)	C.A. No. _____
v.)	
)	JURY TRIAL DEMANDED
TVISION INSIGHTS, INC.,)	
)	
Defendant.)	

COMPLAINT FOR PATENT INFRINGEMENT

The Nielsen Company (US), LLC (“Nielsen” or “Plaintiff”), for its Complaint against Defendant TVision Insights, Inc. (“TVision” or “Defendant”), alleges as follows:

NATURE OF THE ACTION

1. This is an action for patent infringement brought against Defendant for infringement of United States Patent Nos. 11,798,030 (“the ‘030 Patent”).

PARTIES

2. Plaintiff The Nielsen Company (US), LLC is organized and exists under the laws of the State of Delaware.

3. According to public records, Defendant TVision Insights, Inc. is organized and exists under the laws of the State of Delaware.

JURISDICTION AND VENUE

4. This is an action for patent infringement arising under the Patent Act, 35 U.S.C. §§ 1 *et seq.* This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

5. This Court has personal jurisdiction over Defendant because Defendant is a Delaware corporation, and on information and belief, regularly transacts business in Delaware.

Defendant has a registered agent in Delaware: The Corporation Trust Company, 1209 Orange Street, Wilmington, DE 19801.

6. Venue is proper pursuant to 28 U.S.C. § 1400(b) because Defendant resides in this District.

FACTUAL BACKGROUND

7. Founded in 1923 by Arthur C. Nielsen, Nielsen is the media industry's leading data and analytics company. As people watch and listen to media content, Nielsen fuels the industry by providing an accurate understanding of audience metrics.

8. Measuring across all channels and platforms – from traditional linear television to streaming TV to social media and on-line video/audio platforms – Nielsen helps its clients and partners optimize the value of their marketing investments and growth strategies. Nielsen offers measurement and analytics services in nearly 60 countries.

9. Nielsen is a leading innovator in the field of audience measurement and has been awarded numerous patents for its inventions in the field, including the '030 Patent. Nielsen's audience measurement innovations have been a key to enabling its industry-leading measurement and analytics products and services. Nielsen has invested millions of dollars in its audience measurement inventions.

10. One of the unique features of Nielsen's product and service offerings is its leveraging of panel measurement technologies. Media panels consist of people who have allowed Nielsen into their homes to enable first-hand measurement, via audience measurement devices, of their media consumption activities on an ongoing basis. More specifically, a cornerstone of Nielsen's media data and analytics business has been its investment in media panels and the related technology to measure panelists' media consumption and to analyze the

data collected from those panelists. These media panels allow for a true understanding of, not just who is consuming media, but when, why, where, and how much – a truth set. On-boarding panelists to the Nielsen audience measurement panel and properly configuring their in-home meters are key parts of building and maintaining this accurate truth set. The '030 patent describes and claims an innovative way of setting up these meters.

THE ASSERTED PATENT

11. The '030 Patent, entitled “Methods and Apparatus for Wireless Communication with an Audience Measurement Device,” was duly and legally issued on October 24, 2023. A true and correct copy of the '030 Patent is attached hereto as Exhibit A.

12. The '030 Patent issued from U.S. Patent Application No. 18/331,442, which was filed on June 8, 2023. The '030 patent's ultimate continuation parent is U.S. Patent Application No. 15/192,683, now U.S. Patent 11,087,358, filed on June 24, 2016. The '030 Patent's priority date is at least as early as June 24, 2016.

13. Nielsen is the assignee and owner of all right, title, and interest in the '030 Patent. The '030 Patent is valid and enforceable.

14. The '030 Patent is directed to, among other things, systems, methods, and apparatuses for pairing a mobile device to an audience measurement meter (“AMM” or “meter”), receiving at the AMM configuration information from the mobile device, and using the AMM to generate and transmit media identification data and presence data. (*See, e.g.*, Ex. A, '030 Patent, Claims 1-3, 6-8, and 11-13.) The specification explains that the invention can be used to “facilitate configuration of the meter such as, for example, an instruction to configure the meter to communicate using a WiFi network provided by the example gateway 140, an instruction to store one or more panelist identifiers in a memory of the meter 114, an instruction to use a

specified combination of audio sensors (e.g., microphones) to monitor for media, etc.” (See Ex. A, ‘030 Patent, 6:63-7:3.) In addition to configuration, the ‘030 Patent is directed to identifying media content using a fingerprint and to generating presence data indicative of which panelist is present in the room with the television: “Signature-based media monitoring generally involves determining (e.g., generating and/or collecting) signature(s) representative of a media signal (e.g., an audio signal and/or a video signal) output by a monitored media device and comparing the monitored signature(s) to one or more reference signatures corresponding to known (e.g., reference) media sources.” (See Ex. A, ‘030 Patent, 10:5-11.) Moreover, “[t]o generate exposure data for the media, identification(s) of media to which the audience is exposed are correlated with people data (e.g., presence information) collected by the meter 114.” (See Ex. A, ‘030 Patent, 5:24-27.)

15. With regard to configuration of the meter, the specification explains that “the example meter 114 is configured using an example configuration device 117. The configuration device 117 of the illustrated example of FIG. 1 is implemented by a mobile device (e.g., a smartphone, an Apple iPad, etc.). ... In examples disclosed herein, the configuration device 117 communicates with the meter 114 using a Bluetooth Low Energy (BLE) protocol.” (See Ex. A, ‘030 Patent, 6:4-11.) In this configuration process, “the configuration device 117 receives the advertised connection, and determines a pairing key based off of the seed value. The configuration device 117 then transmits a connection request to the meter 114 to initialize and/or establish a connection between the meter 114 and the configuration device 117.” (See Ex. A, ‘030 Patent, 19:28-33.) And once the mobile device and AMM are connected, the mobile device provides wireless network configuration information to the AMM, including WiFi network names and passwords, that the meter uses to connect to the panelist’s WiFi network: “the user

has entered a 'ConfigureWiFi' command which, when executed by the meter 114, configures the meter 114 to communicate with a WiFi network identified by a Service Set Identifier (SSID) that is provided as a parameter to the command (e.g., 'MyWiFi')." (See Ex. A, '030 Patent, 15:32-37.)

16. The '030 Patent also describes identifying media content: "The example media identifier 230 of the illustrated example of FIG. 2 analyzes audio received via the audio sensor 202 and identifies the media being presented." (See Ex. A, '030 Patent, 9:20-23.) Using one technique to do this, "the media identifier 230 may utilize signature-based media identification techniques. ... [F]ingerprint or signature-based media monitoring techniques generally use one or more inherent characteristics of the monitored media during a monitoring time interval to generate a substantially unique proxy for the media. Such a proxy is referred to as a signature or fingerprint, and can take any form (e.g., a series of digital values, a waveform, etc.) representative of any aspect(s) of the media signal(s) (e.g., the audio and/or video signals forming the media presentation being monitored). ... Signature-based media monitoring generally involves determining (e.g., generating and/or collecting) signature(s) representative of a media signal (e.g., an audio signal and/or a video signal) output by a monitored media device and comparing the monitored signature(s) to one or more reference signatures corresponding to known (e.g., reference) media sources." (See Ex. A, '030 Patent, 9:51-10:11.)

17. The '030 patent also explains that the invention captures viewer presence data: "The example people identifier 270 of the illustrated example of FIG. 2 determines audience identification data representative of the identities of the audience member(s) (e.g., panelists) present in the media presentation environment 102. ... The people identifier 270 provides the audience identification data to the audience measurement data controller such that the audience measurement data can be correlated with the media identification data to facilitate an

identification of which media was presented to which audience member.” (*See* Ex. A, ‘030 Patent, 13:54-14:6.)

18. The ‘030 patent also describes communicating with a central site using the wireless connection: “Using configuration information (*e.g.*, a name of a WiFi network, credentials for accessing the WiFi network, etc.) received from the configuration device (*e.g.*, via an instruction to be executed at the meter 114), the meter 114 of the illustrated example communicates with a remotely located central facility 190 of the audience measurement entity.” (*See* Ex. A, ‘030 Patent, 7:8-13.) The meter communicates the media content and the presence information to the central facility: “The example network communicator 260 of the illustrated example of FIG. 2 transmits audience measurement information provided by the audience measurement data controller 250 (*e.g.*, data stored in the data store 255) to the central facility 190 of the audience measurement entity.” (*See* Ex. A, ‘030 Patent, 14:7-11.)

19. The declaration of Paul Martin (“Martin Decl.”), attached hereto as Exhibit B, is hereby incorporated by reference into this Complaint.

20. The ‘030 Patent describes the invention in claiming specific improvements to a meter. (Ex. B, Martin Decl., ¶ 21.) The claims of the ‘030 Patent require the meter to connect to a mobile device over a short-range wireless protocol, to receive configuration information from the mobile device, to use that information to connect to a wireless network, to create a fingerprint of media from its audio, to generate presence data indicating whether a panelist is present, and to transmit the media identification and presence data over the wireless network to a central facility. (*Id.*) Dependent claims describe the wireless network as WiFi and the short-range wireless protocol as Bluetooth. (*Id.*) The claims focus on improving technical functionality in audience measurement technology itself, not on economic or other tasks for which a computer is used in

its ordinary capacity. (*Id.*) The claims therefore recite an improved audience measurement meter and method for producing a certain result in a certain way and do not recite solely the result or effect produced. (*Id.*)

21. Prior art systems did not perform the tasks described in the '030 Patent specification and claims. (Ex. B, Martin Decl., ¶ 22.) Prior art systems did not use the specific connection protocol described and claimed to provide configuration information to a meter that allows that meter to connect to a wireless network and thereby upload collected media identification and presence data to a central server, where the media identification is done using a fingerprint of the content's audio. (*Id.*) In contrast to the prior art, the improved system of the invention utilizes a mobile device to collect configuration information and sends that information over a short-range wireless protocol to the meter. (*Id.*) The configuration information allows the meter to connect to the panelist's wireless network. (*Id.*) Then the inventive system identifies media content using fingerprints and identifies the presence of a panelist and uploads that data over the wireless network. (*Id.*)

22. Integrating wireless configuration using a mobile device with using a fingerprint to identify content and with creating presence data is an important improvement over the prior art. (Ex. B, Martin Decl., ¶ 23.) Meters, such as those described in the '030 Patent, generally have an extremely limited user input capability, making installation and configuration difficult without specialized equipment. (*Id.*) For a meter to work in a panelist's home, the meter must be able to access and utilize the panelist's wireless network. (*Id.*) A meter must be able to provide an audience measurement entity with the content and presence data it generates from monitoring the panelists' activity. (*Id.*) One convenient way to do that is to upload the data from the meter to the audience measurement entity's servers using the panelist household's WiFi network. (*Id.*)

But generally, WiFi networks are secured and not accessible without a password. (*Id.*) Moreover, in many homes, more than one WiFi network is available, whether from the panelist's WiFi equipment or from his or her neighbors' WiFi equipment. (*Id.*) Without a user interface and with limited input capability, however, meters are hard to configure to connect to the correct WiFi network. (*Id.*)

23. The '030 Patent solves this problem by using a mobile device with a user interface and input capability to transmit information to a meter to allow that meter to connect to a WiFi network. (Ex. B, Martin Decl., ¶ 24.) This solution, however, creates other problems because the mobile device must connect to the meter. (*Id.*) Attempting to connect a mobile device to a meter with no user interface can confuse the mobile device user about whether they are connecting to the meter or some other Bluetooth compatible device. (*Id.*) And the connection between the meter and the mobile device must be secure. (*Id.*) Consequently, the specification of the '030 Patent explains that the processor "computes the pairing key by generating a hash of the seed value" (Ex. A, '030 Patent, 19:11-12), thereby ensuring secure connection between the mobile device and the meter. (Ex. B, Martin Decl., ¶ 24.) The '030 Patent describes and claims generating a hash value from this seed value to pair the mobile device with the meter. (*Id.*) This solves the problem of how to accurately and securely connect the mobile device to the meter. (*Id.*)

24. The '030 Patent's innovation combines this process of pairing and connecting the mobile device and the meter with a process for the meter to connect to a wireless network using configuration information received via the connection to the mobile device. (Ex. B, Martin Decl., ¶ 25.) This innovation solves the problem of connecting a meter to a panelist's wireless network. And the '030 Patent's innovation then combines these processes with generating an audio

fingerprint for media, with generating presence data, and with transmitting presence data and an identifier of the media over the wireless network with which the mobile device having facilitated that connection. (*Id.*) The claimed combination solves the problem of transmitting the data the meter generates to a central location for processing by facilitating the connection between the meter and the panelist's WiFi network and by facilitating the connection between the mobile device and the meter. (*Id.*) The claimed combination also allows a panelist to configure the meter themselves using their own mobile device, without requiring personnel from the audience measurement entity to visit the panelist's house.

25. The priority date of the '030 Patent is at least as early as June 24, 2016, which is the filing date of the ultimate parent application from which the '030 Patent is a continuation. (*See* Ex. A, '030 Patent, Face.)

26. As of that date, it was not well-understood, routine, or conventional among those of skill in the art to use a short-range wireless connection to a mobile device to configure a meter to connect to a wireless network and then for that meter to identify media content using an audio fingerprint, to capture presence data, and to transmit a media identifier and the presence data using the wireless network to a central facility, as claimed in all claims of the '030 Patent. (Ex. B, Martin Decl., ¶ 27; *see e.g.*, Ex. A, '030 Patent, Claims 1-3, 6-8, and 11-13.)

27. The claims of the '030 Patent recite the use of a particular way to connect a meter and a mobile device: "wherein establishing the wireless connection comprises pairing the audience measurement meter with the mobile device, and wherein pairing the audience measurement meter with the mobile device comprises generating a hash value using a seed value." (Ex. A, '030 Patent, Claim 1, 6, and 11; Ex. B, Martin Decl., ¶ 28.) Connecting the meter and the mobile device could be done in numerous ways that would not require these specific

features. (*Id.*) For example, instead of the recited process, the meter could be connected to the television (or provided with a small screen) so a code could be shown to the user for entry into the mobile device. (*Id.*) Or the mobile user could press buttons on a remote control or on the meter a number of times and in the order designated by the mobile device app to provide the meter a number shown on the mobile device screen. (*Id.*) Another common method to connect devices at the time involved having the mobile device create a temporary wireless network with a name known to the meter and for the meter to connect to that network. (*Id.*) By incorporating a specific technique for connecting a meter and a mobile device, the claims are limited to a specific technical way of configuring a meter and therefore do not preempt approaches that use other techniques. (*Id.*)

28. Other techniques for connecting a meter and mobile device, however, have disadvantages compared to the claimed approach. (Ex. B, Martin Decl., ¶ 29.) Users would likely find entering a code into the meter using buttons either on the meter or on a remote control difficult and may enter the code wrong, preventing the meter and the mobile device from connecting. The claimed approach avoids these problems by generating a value that ensures that the meter and mobile device connect to the expected device. (*Id.*) And having the mobile device create a network with a name known to the meter would require extra steps for the mobile device user and could confuse an unsophisticated user. (*Id.*) Moreover, having a mobile device create a wireless network known to the meter could disadvantageously cause the mobile device to disconnect from its current wireless network, potentially interrupting other concurrent uses of the mobile device such as listening to streaming music. (*Id.*) And the mobile device would need to have the ability to create a wireless network, in addition to the more common requirement of joining a wireless network as a client. (*Id.*)

29. Accordingly, the claimed approach of pairing the meter to the mobile device through the use of a seed value and hash value generated by the meter was not well-understood, routine, or conventional in the prior art. (Ex. B, Martin Decl., ¶ 30.)

30. In addition to requiring a particular way of establishing the wireless connection between the meter and the mobile device, the claims also recite “receiving, from the mobile device via the wireless connection, configuration information, the configuration information provided via the application” and the meter “connecting to a wireless network using the configuration information.” This combination of elements was not well-understood, routine, or conventional in the prior art at priority date. (Ex. B, Martin Decl., ¶ 31.) Indeed, using a mobile device to provide configuration information for a wireless network to another device was generally not well-understood, routine, or conventional in the prior art. (*Id.*) This is particularly true for the features in the claims, which include using a seed and hash to connect devices, as done, for example, in the Bluetooth standard, rather than using WiFi to connect devices for configuration purposes as was done in the prior art. (*Id.*)

31. Moreover, these elements recite a particular way of using the mobile device to provide configuration information to the meter and of configuring the meter to connect to a wireless network. (Ex. B, Martin Decl., ¶ 32.) Configuring a meter to connect to a wireless network, for example, could be done in other ways, such as by interacting directly with the meter (*e.g.*, by plugging the meter into a television input and using buttons on the meter to enter the wireless network and password using an on-screen keyboard) or by plugging a keyboard into the meter. (*Id.*) A variation of the former technique, for example, is often used by streaming devices. (*Id.*) In addition, rather than using the claimed technique, the meter could connect to the wireless network using protocols such as WiFi Protected Setup (WPS). (*Id.*) By incorporating a specific

technique for connecting a meter and a mobile device, the claims are limited to a specific technical way of configuring a meter and therefore do not preempt approaches that use other techniques. (*Id.*, ¶ 33.)

32. Other techniques for configuring a meter, however, have disadvantages compared to the claimed approach. (Ex. B, Martin Decl., ¶ 34.) Connecting the meter to a user interface device such as a television requires the meter to have an output compatible with most televisions or other presentation devices and to be able to generate a user interface. (*Id.*) Having the panelist enter a WiFi network name and password using buttons on the meter requires having such buttons on the meter and is more difficult for the panelist or installer to use than typing on a virtual keyboard on a mobile device. (*Id.*) Such mobile devices are readily available and accessible to most panelists and installers. (*Id.*) Moreover, users generally do not like entering text for which autocorrect cannot be used, such as WiFi names and passwords, using an on-screen keyboard and directional buttons. (*Id.*) Having a panelist or installer plug a keyboard into a meter requires that the meter have a compatible port and the panelist or installer have a keyboard that is compatible with the meter's port. (*Id.*) And using WiFi Protected Setup (WPS) requires that a panelist's wireless network have this functionality both available on their wireless network and enabled (and for the panelist to know how to use it), even though experts recommend disabling some forms of WPS. (*Id.*) The claimed approach avoids these problems by allowing the panelist or installer to use a mobile device to provide configuration information to the meter. (*Id.*)

33. As of the '030 Patent's priority date, the claimed combination of using a short-range wireless protocol, where the meter and the mobile device connect as recited in the claims, to provide configuration information to configure a meter to connect to a wireless network,

where the meter then identifies media content and presence data for transmission to a central facility was not well-understood, routine, or conventional among those of skill in the art. (Ex. B, Martin Decl., ¶ 35.)

THE INFRINGING APPARATUS AND METHOD

34. Defendant TVision is a data and analytics company that measures how people watch TV. (Ex. P, <https://www.tvisioninsights.com/about>.) TVision “started out by measuring attention on linear TV” (see Ex. C, Allison Schiff, *TVision Insights: ‘Ratings Only Tell Part of the Story’*, <https://www.adexchanger.com/tv-and-video/tvision-insights-ratings-only-tell-part-of-the-story/>), but has since become the “go-to-choice” for Nielsen’s measurement rivals, as reported by AdAge, by providing panel measurement data to them to compete directly with Nielsen’s products and service offerings. (See Ex. D, *TVision is the go-to-choice for Several Nielsen Rivals*, <https://www.tvisioninsights.com/resources/adage-mrc-panel-data>).

35. TVision collects data from TV viewers who opt-in to be part of a panel. (See Ex. E, Join the TVision Panel, <https://www.mytvpanel.com/video> (at 00:50-03:16).) Defendant’s former President and COO, Luke McGuinness, has stated that “[w]e are like Nielsen in that we use a panel methodology.” (See Ex. C, Schiff, *TVision Insights: ‘Ratings Only Tell Part of the Story’*.) According to their website, TVision “gathers second-by-second data from a nationally representative panel of households who have signed on to help our industry understand how, what, and when they watch TV.” (Ex. R, <https://www.tvisioninsights.com/>.) As of a few years ago, Defendant’s panel included at least 5,000 homes (approximately 14,000 persons) in the United States. (Ex. C, Schiff, *TVision Insights: ‘Ratings Only Tell Part of the Story’*; also Ex. F, Alison Weissbrot, *4 Challenges the Industry Will Face as it Breaks Away from Nielsen*,

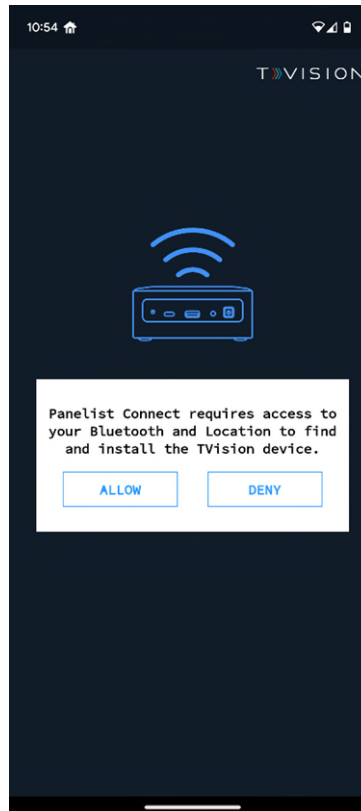
<https://www.campaignlive.com/article/4-challenges-industry-will-face-breaks-away-nielsen/1726140>.)

36. The TVision computing system contains front-end meters (and associated supporting hardware) located at the panelists' homes and a back-end computing system that receives viewing data and presence data from thousands of households and allows TVision's customers to obtain data and to generate reports from the data collected from panelists.

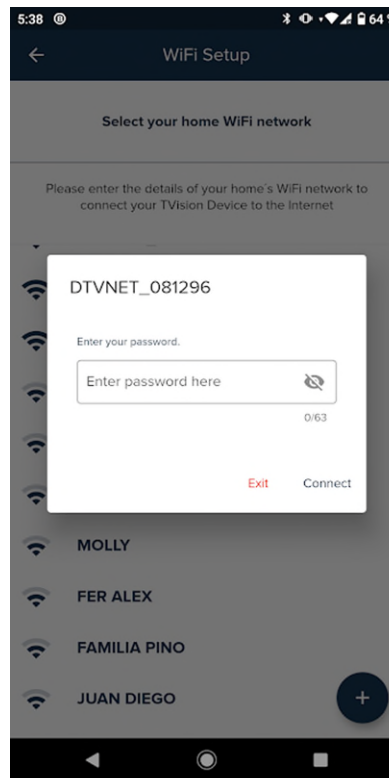
37. Each panelist household receives a TVision meter that monitors media content presented in the household. (See Ex. G, <https://www.tvisioninsights.com/resources/tvision-methodology-overview>; Ex. H, <https://www.mytvpanel.com/about>.) The TVision meter is a "mini-computer" having a housing, processor circuitry, memory, and software. (See Ex. E, TVision, "Join the TVision Panel" at 1:02-1:17.) The household TVision meter transmits viewing and presence data to a remote measurement engine, the TVision remote back-end computing system. (See Ex. I, <https://www.tvisioninsights.com/our-technology>; Ex. E, TVision, "Join the TVision Panel" at 1:39.) Because "TVision policy prohibits any audio and images from leaving the home," the TVision meter analyzes audio and image data without sending that data to the audience measurement entity (*i.e.*, the TVision remote, back-end computing system).

38. TVision's panelists independently install the meters in their households. (See Ex. I, <https://www.tvisioninsights.com/our-technology>.) The installation process is self-guided via a mobile application ("Panelist Connect"). (See Ex. J, <https://www.tvisioninsights.com/our-panel>; Ex. K, <https://play.google.com/store/apps/details?id=com.tvisioninsights.panapp>; Ex. L, <https://apps.apple.com/us/app/panelist-connect/id1550642625>.) As shown in the screen below, the Panelist Connect app requires access to a Bluetooth interface of the mobile device operating the Panelist Connect app. The Bluetooth interface of the mobile device is used to find and install

the TVision meter. As part of the installation process for the TVision meter, the panelist uses the Panelist Connect app to scan for a Bluetooth signal emitted by a Bluetooth interface of the TVision meter. The mobile device connects to the meter over Bluetooth.



39. As shown in the screens below, after establishing the Bluetooth connection, the mobile device obtains the panelist's WiFi network name and password from the panelist and sends that information to the TVision meter via the Bluetooth connection. (See Ex. H, <https://www.mytvpanel.com/about> (“You connect the TVision System to your home Internet network using an Ethernet cable or you connect it to your home's WiFi network using a phone or laptop to tell it the WiFi password.”).)



40. The TVision meter within a panelist’s household connects to the household’s internet network using an Ethernet cable or WiFi. (See Ex. H, <https://www.mytvpanel.com/about>.) When using WiFi, the TVision meter uses the configuration information obtained via the Bluetooth connection to connect. (See Ex. H, <https://www.mytvpanel.com/about> (“You connect the TVision System to your home Internet network using an Ethernet cable or you connect it to your home’s WiFi network using a phone or laptop to tell it the WiFi password.”); Ex. L, <https://apps.apple.com/us/app/panelist-connect/id1550642625> (“The app allows TVision Devices to be connected to your home WiFi network . . .”).)

41. The TVision meter monitors audio signals using a microphone array that collects audio signals output by the TV, which the TVision system uses to “identify the content that is playing through the TV.” (Ex. G, <https://www.tvisioninsights.com/resources/tvision-methodology-overview>.) The TVision meter uses audio fingerprinting to identify what program

or commercial is on the television. (Ex. G, <https://www.tvisioninsights.com/resources/tvision-methodology-overview> (“The microphone array on the device collects audio fingerprints that help to identify the content that is playing through the TV.”); Ex. H, <https://www.mytvpanel.com/about> (“Using technology similar to ‘Shazam,’ our identifier detects TV audio by searching for small digital or audio tags that are unique to each program or ad. We then match those tags to shows and commercials in our database, before sending back the matching program or commercial name to TVision.”); Ex. E, TVision, “Join the TVision Panel” at 1:48-2:00 (“Every TV program and advertisement has a unique audio fingerprint. The TVision technology scans for these unique audio fingerprints, kind of like Shazam, and is able to identify what is on the TV.”). Shazam works by generating “a digital fingerprint” of audio captured by a device. (See Ex. M, <https://www.shazam.com/company>.) To generate audio fingerprints, the TVision meter uses software provided by ACRCLOUD Limited (“ACRCLOUD”). (See Ex. N, <https://www.acrcloud.com/live-channel-detection/>; Ex. O, <https://www.acrcloud.com/advertising-big-data/>.)

42. The TVision meter generates presence data that specifies which individuals in the household are present in the panelist household while media is presented. (See Ex. G, <https://www.tvisioninsights.com/resources/tvision-methodology-overview> (“In panel homes, TVision monitors television sets and individuals near the television sets second-by-second to determine: Presence - the amount of time that a viewer is in the room during a piece of content.”).) The generated presence data is one or more anonymized identifiers, with each anonymized identifier corresponding to a panelist in the household. (See Ex. J, <https://www.tvisioninsights.com/our-panel>; Ex. H, <https://www.mytvpanel.com/about>; see also Ex. E, TVision, “Join the TVision Panel” at 1:26-1:38.) The TVision meter applies facial

recognition to images captured by the webcam to detect who is watching the TV. (*See* Ex. I, <https://www.tvisioninsights.com/our-technology>; *see also* Ex. H, <https://www.mytvpanel.com/about> (“[t]he system starts out in Training Mode, where it captures headshot images of your household members’ faces from forehead-to-chin, ear-to-ear. . . . The system uses those images to tell the viewers apart and map in their demographics from your household profile.”); *see also* Ex. Q, “Inderbir Sidhu – Measuring Audience Attention via Computer Vision & Deep Learning” at 5:32, available at <https://www.youtube.com/watch?v=xnFypL2JXPE> (depicting recognition based on facial features extracted from head pose information).) The TVision meter assigns each audience member a unique, anonymized ID. (*See* Ex. H, <https://www.mytvpanel.com/about>.) The presence data that the TVision meter transmits to the TVision back-end computing system is based on a match between the audience member in the image and a headshot image captured during training mode. (*See* Ex. E, TVision, “Join the TVision Panel” at 2:27 (“So what TVision collects is that a 34-year old female watched CNN . . .”).)

43. The TVision meter transmits viewing and presence data to the TVision back-end computing system using the household’s internet network. (*See* Ex. E, TVision, “Join the TVision Panel” at 1:39.) The TVision meter sends a media content identifier as well as the presence data to TVision’s back-end system via the WiFi network in the panelist household. (*See* Ex. I, <https://www.tvisioninsights.com/our-technology>; Ex. H, <https://www.mytvpanel.com/about> (“All viewership data is . . . stored in an . . . AWS Database.”).) TVision’s webpage explains that “[t]he microphone array on the device collects audio fingerprints that help to identify the content that is playing through the TV. These fingerprints are compared with program and ad databases, and logged as such. This data is

centrally maintained in TVision's event data storage. Individual viewing behavior is monitored with optical sensors in panel homes. The sensor signals are processed to identify the specific individuals who are in the room while the TV is on. ... This viewing and attention data is centrally maintained in TVision's event data storage." (Ex. G,

<https://www.tvisioninsights.com/resources/tvision-methodology-overview>)

44. The TVision back-end computing system includes a remote measurement engine that "remotely manages and supports thousands of in-home devices." (See Ex. I, <https://www.tvisioninsights.com/our-technology>.) TVision describes its platform as "a SaaS platform ... powered by proprietary hardware, software, and advanced data models. ... The end result is our industry's only single-source platform for understanding how people really watch both linear and CTV. Our SaaS reporting allows marketers and media sellers to leverage the powerful data our technology collects." (See Ex. I, <https://www.tvisioninsights.com/our-technology>.) TVision "gathers second-by-second data from a nationally representative panel of households who have signed on to help our industry understand how, what, and when they watch TV." (Ex. R, <https://www.tvisioninsights.com/>.) TVision captures and reports on "[w]hat program or ad is playing on the TV," "[w]hich individuals are in in the room," and "[i]f they're paying attention to the TV." (*Id.*)

45. The TVision remote measurement engine aggregates and analyzes this reported viewing data, including media identification data and presence data, from thousands of panelist's households to generate metrics. The metrics include viewers per viewing household (VPVH) which "represents the average number of viewers present in the home when the TV is on with the content tuned." (See Ex. S, TVision, Spring 2022 Co-Viewing Report, p. 8, available at <https://www.tvisioninsights.com/hubfs/TVision-CTV-Co-Viewing-Report-2022.pdf>.)

46. TVision licenses and offers to license data that it collects and analyzes. TVision has been and is licensing its data to several Nielsen competitors. (*See* Ex. F, Weissbrot, *4 Challenges the Industry Will Face as it Breaks Away from Nielsen*, <https://www.campaignlive.com/article/4-challenges-industry-will-face-breaks-away-nielsen/1726140>.) According to the press, TVision has licensed its data to VideoAmp, iSpot, Xandr, and 605. (*See* Ex. D, *TVision is the go-to-choice for Several Nielsen Rivals*, <https://www.tvisioninsights.com/resources/adage-mrc-panel-data>). AdAge reported that TVision is “the go-to-choice for several Nielsen rivals.” (*Id.*)

47. TVision uses an apparatus (“the Infringing Apparatus”) and employs a method (“the Infringing Method”) as components of its audience measurement products and services.

48. The Infringing Apparatus includes TVision’s meters and its remote, backend computing systems that allow it to connect the meter and a mobile device, configure the meter using a mobile device to allow it to connect to a wireless network, and to collect, to aggregate and to report data about its panelists’ TV watching, including what those panelists are watching and who in the household is watching. The Infringing Method includes the steps of connecting the meter and a mobile device, configuring the meter with a mobile device to allow it to connect to a wireless network, and collecting, compiling, and analyzing the collected data using TVision’s meter and its remote, backend computing systems and other computer systems and apparatuses to generate attention metrics/ engagement level ratings.

49. TVision’s Infringing Apparatus and performance of the Infringing Method allow companies such as VideoAmp and iSpot to compete with Nielsen and develop alternative currencies.

50. “VideoAmp along with a few other companies have had their profile raised as a possible replacement in measuring cross-platform audiences, audience deduplication and determining business outcomes among other attributes.” (Ex. T, <https://videoamp.com/press/four-questions-for-michael-parkes-president-videoamp/>.) “VideoAmp today announced that Horizon Media, the largest U.S. media agency according to Ad Age Data Center 2023, will be utilizing VideoAmp as a currency for the 2023-24 Upfront season.” (Ex. U, <https://videoamp.com/press/videoamp-announces-alternative-currency-agreement-with-horizon-media/>.) TVision supplies panel data to VideoAmp, and VideoAmp combines that data with its own census data to produce its competing currency. (Ex. V, <https://videoamp.com/press/tvision-launches-person-based-advanced-audience-projections/>) (“TVision said the companies it works with can combine its Advanced Audience Projections with their own census data to project individual behaviors across similar homes, allowing them to more precisely target campaigns.”).)

51. Similarly, TVision provides data that enables iSpot to sell an alternative currency. (Ex. W, <https://www.tvisioninsights.com/resources/tvisionandispottv>) (“TVision is proud to partner with iSpot.tv to provide person-level calibration data from the TVision panel and support iSpot.tv's development of an alternative currency for TV.”).

52. By making, using, offering to sell, and selling the Infringing Apparatus and performing the Infringing Method, TVision is infringing the ‘030 Patent as further described below, including in the claim charts attached hereto as Exhibit X, which are hereby incorporated by reference into this Complaint.

53. By this lawsuit, Nielsen seeks to enjoin TVision from any further unauthorized use of Nielsen’s patented technology, and it seeks to recover damages, including lost profits,

increased damages, reasonable attorneys' fees, and other such relief as the Court deems just and proper for TVision's violation of federal law.

COUNT I

INFRINGEMENT OF THE '030 PATENT

54. Nielsen repeats and re-alleges paragraphs 1-53 as if fully set forth herein.

55. TVision has infringed and continues to infringe, literally or under the doctrine of equivalents, at least claims 1-3, 6-8, and 11-13 of the '030 Patent ("the Asserted Claims") under 35 U.S.C. § 271(a) by making, using, selling and/or offering to sell in the United States, and/or importing into the United States, the Infringing Apparatus and by performing the Infringing Method in the United States.

56. TVision's activities are without license or permission from Nielsen.

57. The Infringing Apparatus and the Infringing Method include all elements of the Asserted Claims, either literally or equivalently, as shown in the claim charts incorporated by reference in this Complaint and attached hereto as Exhibit X.

58. TVision has knowledge of the '030 Patent as of the service date of the Complaint, and TVision is willfully and deliberately infringing the '030 Patent at least as of the service date of this Complaint.

59. Through the conduct alleged above, TVision has caused and will in the absence of an injunction continue to cause Nielsen to suffer damages, which in no event are less than a reasonable royalty, and which include, but are not limited to, lost sales and sales opportunities.

60. TVision has also irreparably harmed Nielsen. Unless and until TVision is enjoined by this Court from further infringement of the '030 Patent, Nielsen will continue to suffer irreparable injury for which it has no adequate remedy at law.

PRAYER FOR RELIEF

WHEREFORE, Nielsen prays for judgment against Defendant as follows:

- A. A judgment that Defendant has infringed the '030 Patent;
- B. A judgment that Defendant's infringement of the '030 Patent is willful;
- C. An order permanently enjoining Defendant and its officers, directors, agents, servants, employees, affiliates, and all others acting in privity or in concert with them, and their parents, subsidiaries, divisions, successors, and assigns, from further acts of infringement of the '030 Patent;
- D. An award of damages adequate to compensate Nielsen for Defendant's infringement of the '030 Patent, including increased damages up to three times the amount found or assessed, together with pre-judgment and post-judgment interest and costs, under 35 U.S.C. §§ 154(d) and 284.
- E. A judgment that this case is exceptional and an award of Nielsen's reasonable attorneys' fees, costs, and expenses under 35 U.S.C. § 285; and
- F. An award of such other and further relief as this Court may deem just and proper.

DEMAND FOR JURY TRIAL

Plaintiff hereby demands a trial by jury as to all issues so triable.

Respectfully submitted,

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Dated: November 22, 2023
11171790/14944.00008

*Attorneys for Plaintiff The Nielsen Company
(US), LLC*

Exhibits

Exhibit	Description
A	'030 patent
B	Martin Declaration
C	Allison Schiff, TVision Insights: 'Ratings Only Tell Part of the Story', https://www.adexchanger.com/tv-and-video/tvision-insights-ratings-only-tell-part-of-the-story/
D	TVision is the go-to-choice for Several Nielsen Rivals, https://www.tvisioninsights.com/resources/adage-mrc-panel-data
E	Join the TVision Panel, https://www.mytvpanel.com/video
F	Alison Weissbrot, 4 Challenges the Industry Will Face as it Breaks Away from Nielsen, https://www.campaignlive.com/article/4-challenges-industry-will-face-breaks-away-nielsen/1726140
G	https://www.tvisioninsights.com/resources/tvision-methodology-overview
H	https://www.mytvpanel.com/about
I	https://www.tvisioninsights.com/our-technology
J	https://www.tvisioninsights.com/our-panel
K	https://play.google.com/store/apps/details?id=com.tvisioninsights.panapp
L	https://apps.apple.com/us/app/panelist-connect/id1550642625
M	https://www.shazam.com/company
N	https://www.acrcloud.com/live-channel-detection/
O	https://www.acrcloud.com/advertising-big-data/
P	https://www.tvisioninsights.com/about
Q	"Inderbir Sidhu – Measuring Audience Attention via Computer Vision & Deep Learning," available at https://www.youtube.com/watch?v=xnFypL2JXPE
R	https://www.tvisioninsights.com/
S	TVision, Spring 2022 Co-Viewing Report, p. 8, available at https://www.tvisioninsights.com/hubfs/TVision-CTV-Co-Viewing-Report-2022.pdf
T	https://videoamp.com/press/four-questions-for-michael-parkes-president-videoamp/
U	https://videoamp.com/press/videoamp-announces-alternative-currency-agreement-with-horizon-media/
V	https://videoamp.com/press/tvision-launches-person-based-advanced-audience-projections/
W	https://www.tvisioninsights.com/resources/tvisionandispotty

Exhibit	Description
X	Claim charts
Y	LDV Capital, "Inderbir Sidhu, CTO of TVision: Next Generation Audience Measurement," September 15, 2021, available at https://www.youtube.com/watch?v=gTBepZo1HcM
Z	Matthias Casar et al., "A Survey on Bluetooth Low Energy security and privacy," Computer Networks 205 (2022) 108712, § 3.1.1.
AA	https://microchipdeveloper.com/wireless:ble-gap-security
BB	Matthew Bon, "A Basic Introduction to BLE 4.x Security," TechForum, October 25, 2016, available at https://forum.digikey.com/t/a-basic-introduction-to-ble-4-x-security/12501